TABLE OF CONTENTS

SERIES	DESCRIPTION
953B	1-Phase
PPB	PPB: +105°C, High Voltage Pulse Radial Lead Snubber
PPR	PPR: +105°C, High Voltage Pulse Radial Lead Snubber
PSB_RSB	PSB_RSB: +100°C, 2,4,6 Radial Lead, High Current/Low ESR
160	160: +125°C, Metallized, General Purpose
168-185	168/185: +125°C, Metallized, General Purpose, for Automatic Insertion
171	171: +105°C, General Purpose/Small Box
225p	225P: +85°C, Film/Foil, General Purpose and Audio, Guitar Toning
418p	418P: +125°C, High dv/dt Dipped/Orange Drop
425m	425M: +85°C, Metallized, General Purpose
715p	715P: +105°C, High dv/dt Dipped/Orange Drop
715p717p	715P/717P: +85°C, High dv/dt Dipped/Orange Drop
716p	716P: +85°C,+125°C, High dv/dt Dipped/Orange Drop
716p	716P: +85°C,+125°C, High dv/dt Dipped/Orange Drop
718p719p	718P/719P: +105°C, Film/Foil, High Current
725m	725M: + 85°C, Metallized, High Current
778p779p	778P/779: +105°C, AC Rated/Dipped/Orange Drop
953B	1-Phase
DME	DME: +125°C, Metallized, Miniature Size
DMM	DMM: +125°C, General Purpose/Dipped
DMT	DMT: +125°C, Film/Foil, General Purpose and High Peak Current
DPFF	DPFF: +125°C, High dV/dt/Dipped
DPP	DPP: +105°C, High dV/dt/Dipped
DPPM	DPPM: +105°C, High dV/dt/Self Healing/Dipped
MMR	MMR: +105°C, Small Size Epoxy Dipped Metallized Polyester Radial Lead
MPR	MPR : +105°C, Metallized Polypropylene Epoxy Dipped Radial Lead
MSR	MSR: +125°C, Metallized Polyester Epoxy Dipped Radial lead
MTB	MTB: +105°C, Metallized Polyester Radial Lead Box
PHB	PHB: +100°C, Metallized Polypropylene, High Frequency Radial Lead Box
PPB	PPB: +105°C, High Voltage Pulse Radial Lead Snubber
PPR	PPR: +105°C, High Voltage Pulse Radial Lead Snubber
PSB_RSB	PSB_RSB: +100°C, 2,4,6 Radial Lead, High Current/Low ESR
RA-Angstor	RA: +125°C, Radial PET

This is the table of contents for a custom generated catalog and may not contain all of the products available. Please refer to our website for our full parametric search of products.

Type 953B, Metallized Polypropylene Film Capacitors

AC Rated, Radial Leaded Box, UL 810 Fail Safe, Rated 10,000 AFC



Type 953B radial leaded metallized polypropyene capacitors are designed for UPS systems and other AC output filtering applications. With an integrated fused metallization pattern, this product features UL 810 recognition for fail-safe operation at temperatures up to 85 °C.

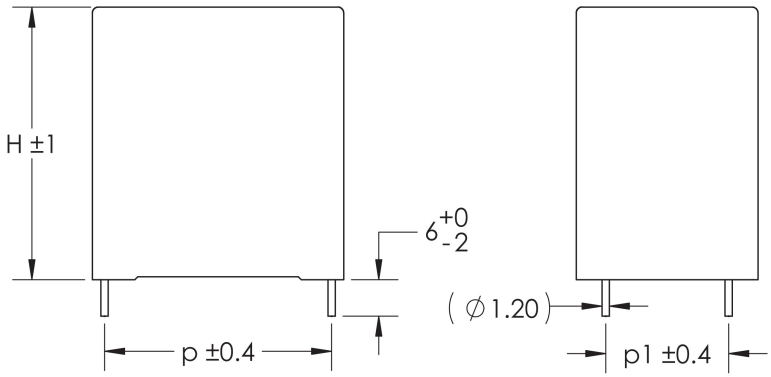
Highlights

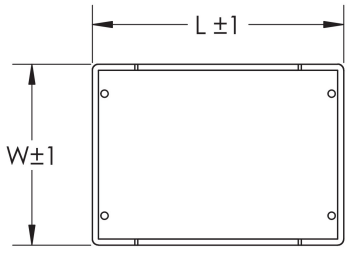
– Fuse protection
– UL 810 recognized
– Low dissipation factor
– Self healing

Specifications

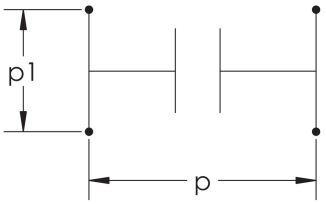
Capacitance Range	2.5 µF to 50 µF
Capacitance Tolerance	±10 % (±5% optional)
Rated Voltage	160 Vac, 250 Vac, 275 Vac
Operating Temperature Range	–40 °C to 85 °C
IEC Climatic Category	40/85/56 (test conditions 40 °C, 93% RH, rated voltage, 1000 hours)
Sevice Life Objective	10,000 h at rated voltage and 85 °C
Protection	UL 810 file number E71645
RoHS Compliant	

Dimensions





Construction Details	
Case Material	Plastic UL 94V-0
Resin Material	Dry Resin UL 94V-0
Terminal Material	Tin Plated Copper



Type 953B, Metallized Polypropylene Film Capacitors

AC Rated, Radial Leaded Box, UL 810 Fail Safe, Rated 10,000 AFC

Part Numbering System

953B	X	W	2P5	K	SF	-F
Series	Voltage Code I = 160 Vdc Q = 250 Vdc X = 275 Vdc	Cap Decimal P = 0. W = No Decimal Point	Cap Rating in µF 2P5 = 2.5 µF 8 = 8 µF 25 = 25 µF	Tolerance K = ±10% J = ±5%	Metallization Type SF = Segmented Fused	RoHs Compliant

Case Code	W	H	L	p	p1	d
A	20	40	41.5	37.5	10.2	1.2
B	28	37	41.5	37.5	10.2	1.2
C	24	44	41.5	37.5	10.2	1.2
D	30	45	41.5	37.5	20.3	1.2
E	30	45	57.5	52.5	20.3	1.2
F	35	50	57.5	52.5	20.3	1.2

Ratings

Part Number	Cap 1 kHz (µF)	Typ. ESR 10 kHz (mΩ)	Typ. ESL (nH)	Ipeak (A)	dV/dt (V/µs)	Rth (°C/W)	Irms 10 kHz 85°C (A)	Case Code
160 VAC								
953BIW10KSF-F	10	9	30	285	29	16	8.0	A
953BIW16KSF-F	16	7	30	475	30	14	9.3	B
953BIW17P5KSF-F	17.5	7	30	570	33	13	9.6	C
953BIW25KSF-F	25	6	30	760	30	12	10.4	D
953BIW38KSF-F	38	7	38	760	20	9	11.3	E
953BIW50KSF-F	50	6	38	1045	21	8	12.2	F
250 VAC								
953BQW4P5KSF-F	4.5	12	30	190	42	16	7.1	A
953BQW7KSF-F	7	9	30	285	41	14	8.3	B
953BQW7P5KSF-F	7.5	9	30	380	51	13	8.7	C
953BQW10KSF-F	10	8	30	475	48	12	9.0	D
953BQW16P5KSF-F	16.5	8	38	475	29	9	10.3	E
953BQW22KSF-F	22	7	38	665	30	8	11.3	F
275 VAC								
953BXW2P5KSF-F	2.5	14	30	190	76	16	6.4	A
953BXW3P5KSF-F	3.5	11	30	190	54	14	7.4	B
953BXW4KSF-F	4	11	30	285	71	13	7.9	C
953BXW6KSF-F	6	8	30	380	63	12	9.0	D
953BXW9KSF-F	9	10	38	380	42	9	9.5	E
953BXW12KSF-F	12	8	38	475	40	8	10.5	F

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PPB

Polypropylene Film Capacitors

Radial Leaded for Power Semiconductor Circuits



FEATURES	High Pulse Currents - High voltage
APPLICATIONS	Power Semiconductor Circuits – SCR Commutation Ballast controls – Switching Power Supplies

Operating Temperature Range	**-55°C to +105°C**							
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional							
AC voltage (50/60 Hz)	**WVDC**	**250**	**400**	**630**	**1000**	**1600**	**2000**	
	VAC	160	200	400	630	650	700	
	For T>+85°C , The voltage (DC/AC)must be decreased by (1.5/2.25)% per °C							
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤0.1uF**	**0.1uF<C≤1uF**	**C>1uF**				
	1	0.05%	0.04%	0.05%				
	10	0.05%	0.06%	-				
	100	0.16%	-	-				
Insulation Resistance @25°C (<70% RH)for 1 minute at 100VDC applied	**Capacitance**		**Insulation Resistance**					
	≤0.33µF		100000 MΩ					
	>0.33µF		30000 MΩxµF					
Self Inductance	<1 nano-Henry per mm of lead spacing							
Capacitance Drift Factor	<0.5% after 2 years at 40°C							
Load Life	**2000 Hours, +85C with 125% of rated voltage**							
	Capacitance Change	≤1% of initially measured value						
	Dissipation Factor	≤0.001 at 10kHz and 25°C for C≤1uF ≤0.001 at 1kHz and 25°C for C>1uF						
	Insulation Resistance	≥50% of maximum specified value						
Reliability (0.5xRated Voltage, 40°C) 1 FIT=1 failure/1 billion component hours	2 Fit, VDC≤400 WVDC 1 Fit, VDC>400 WVDC							
	Capacitance Change	≤10% of initially measured value						
	Dissipation Factor	≤200% of initially specified value						
	Insulation Resistance	≥50% of maximum specified value						
Damp Heat test	**56 days at40°C with 90 to 95%RH, +40°C and no voltage applied**							
	Capacitance Change	≤5% of initially measured value						
	Dissipation Factor	≤0.005 at 1kHz and 25°C						
	Insulation Resistance	≥50% of maximum specified value						
Self Inductance	<1 nano-Henry per mm of lead spacing							
Capacitance Drift Factor	<0.5% after 2 years at 40°C							
Capacitance Temperature Coefficient	-200 ppm/°C, ±100ppm/°C							
Dielectric Strength	**Terminal to Terminal**					**Terminal to case**		
	160% of rated VDC or 150% VAC applied for 2 Seconds and 25°C					3kVAC @ 50/60 Hz applied between terminals and case for 60 seconds at 25°C		
Dielectric	Polypropylene							
Construction	Metallized film							
Plastic Case and Epoxy Resin	Flame Retardant materials (UL 94V-0)							
Leads	Lead free tinned copper leads							

Special Order Options

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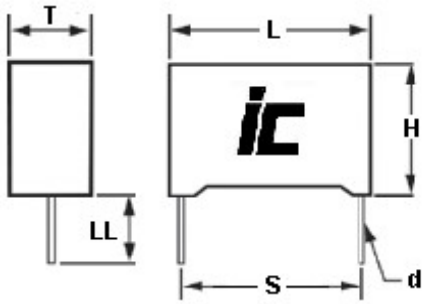
Asia
Phone: 852-2793-0931
Email: cdeasia@cde.com

PPB

Polypropylene Film Capacitors

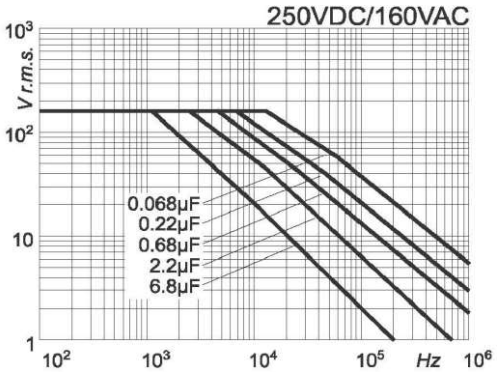
Radial Leaded for Power Semiconductor Circuits

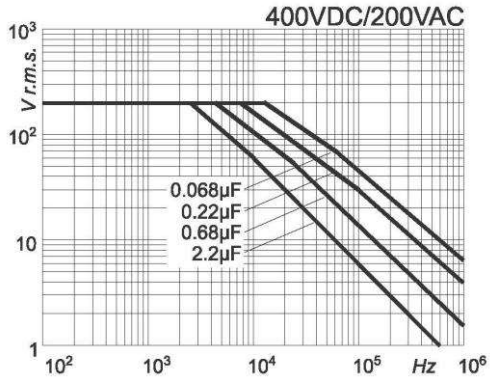


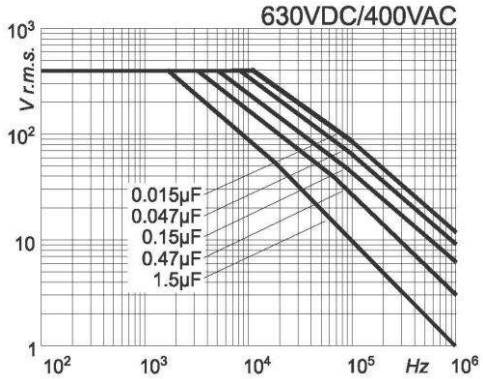


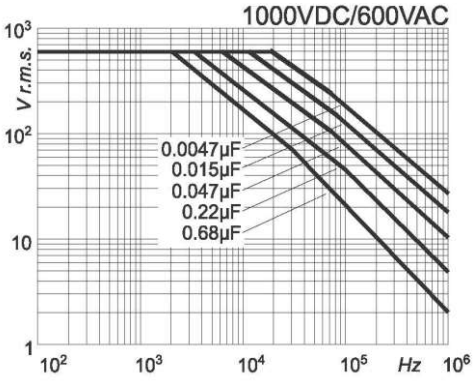
L	18	26.5	32	42.5
S	15	22.5	27.5	37.5
d	0.8	0.8	0.8	1.0
LL	5.0±1.0	5.0±1.0	30±5.0	30±5.0

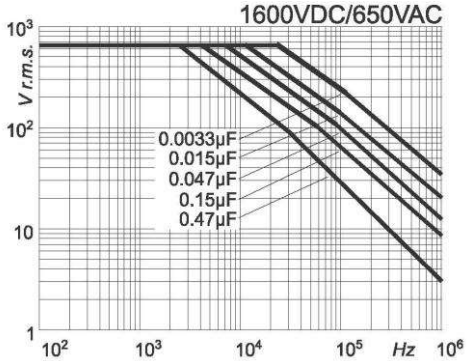
Permissible (sinusoidal) AC voltage versus frequency for a temperature rise of 10°C
Not for across the line applications

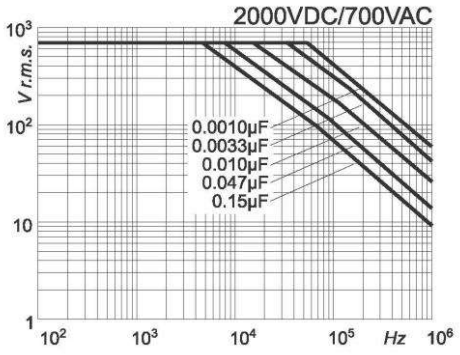












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PPB

High Voltage Pulse Radial Lead Snubber

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
250	0.047	473PPB250K	560	18x11x5	15	0.8
250	0.068	683PPB250K	560	18x12x6	15	0.8
250	0.1	104PPB250K	560	18x13.5x7.5	15	0.8
250	0.15	154PPB250K	560	18x14.5x8.5	15	0.8
250	0.22	224PPB250KB	560	18x16x10	15	0.8
250	0.22	224PPB250K	320	26.5x15x6	22.5	0.8
250	0.33	334PPB250K	320	26.5x17x8.5	22.5	0.8
250	0.47	474PPB250K	320	26.5x18.5x10	22.5	0.8
250	0.68	684PPB250KB	320	26.5x20x11	22.5	0.8
250	0.68	684PPB250K	240	32x20x11	27.5	0.8
250	1	105PPB250KG	320	26.5x22x13	22.5	0.8
250	1	105PPB250K	240	32x20x11	27.5	0.8
250	1.5	155PPB250K	240	32x24.5x15	27.5	0.8
250	2.2	225PPB250K	240	32x28x14	27.5	0.8
250	2.2	225PPB250KB	170	42.5x28x17	37.5	1
250	3.3	335PPB250K	170	42.5x30x22	37.5	1
250	4.7	475PPB250K	170	42.5x30x22	37.5	1
250	6.8	685PPB250K	170	42.5x37x28	37.5	1
400	0.033	333PPB400K	910	18x11x5	15	0.8
400	0.047	473PPB400K	910	18x12x6	15	0.8
400	0.068	683PPB400K	910	18x13.5x7.5	15	0.8
400	0.1	104PPB400K	910	18x14.5x8.5	15	0.8
400	0.15	154PPB400KE	910	18x16x10	15	0.8
400	0.15	154PPB400K	520	26.5x16x7	22.5	0.8
400	0.22	224PPB400K	520	26.5x18.5x10	22.5	0.8
400	0.33	334PPB400K	520	26.5x20x11	22.5	0.8
400	0.33	334PPB400KH	400	32x17x9	27.5	0.8
400	0.47	474PPB400KG	520	26.5x22x13	22.5	0.8
400	0.47	474PPB400K	400	32x22x13	27.5	0.8
400	0.68	684PPB400K	400	32x24.5x15	27.5	0.8
400	1	105PPB400KB	400	32x33x18	27.5	1
400	1	105PPB400K	280	42.5x28x17	37.5	1
400	1.5	155PPB400K	280	42.5x28x17	37.5	1
400	2.2	225PPB400K	280	42.5x30x22	37.5	1
400	3.3	335PPB400K	280	42.5x37x28	37.5	1
630	0.0047	472PPB630K	3300	18x11x5	15	0.8
630	0.0068	682PPB630K	3300	18x11x5	15	0.8
630	0.01	103PPB630K	3300	18x11x5	15	0.8
630	0.015	153PPB630K	3300	18x11x5	15	0.8
630	0.022	223PPB630K	3300	18x12x6	15	0.8
630	0.033	333PPB630K	3300	18x13.5x7.5	15	0.8
630	0.047	473PPB630KB	3300	18x16x10	15	0.8
630	0.047	473PPB630K	2050	26.5x15x6	22.5	0.8
630	0.068	683PPB630K	2050	26.5x16x7	22.5	0.8
630	0.1	104PPB630K	2050	26.5x17x8.5	22.5	0.8
630	0.15	154PPB630KG	1500	26.5x20x11	22.5	0.8
630	0.15	154PPB630K	1500	32x20x11	27.5	0.8
630	0.22	224PPB630K	1500	32x22x13	27.5	0.8
630	0.33	334PPB630K	1500	32x24.5x15	27.5	0.8
630	0.47	474PPB630KB	1500	32x33x18	27.5	1
630	0.47	474PPB630K	950	42.5x28x16	37.5	1
630	0.68	684PPB630K	950	42.5x28x17	37.5	1
630	1	105PPB630K	950	42.5x30x22	37.5	1
630	1.5	155PPB630K	950	42.5x37x28	37.5	1
1000	0.0033	332PPB102K	5500	18x11x5	15	0.8
1000	0.0047	472PPB102K	5500	18x11x5	15	0.8
1000	0.0068	682PPB102K	5500	18x11x5	15	0.8

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
1000	0.01	103PPB102KE	6200	18x12x6	15	0.8
1000	0.01	103PPB102K	2500	26.5x15x6	22.5	0.8
1000	0.015	153PPB102KB	5500	18x13.5x7.5	15	0.8
1000	0.015	153PPB102K	2600	26.5x15x6	22.5	0.8
1000	0.022	223PPB102KB	5500	18x14.5x8.5	15	0.8
1000	0.022	223PPB102K	2600	26.5x15x6	22.5	0.8
1000	0.033	333PPB102K	2600	26.5x16x7	22.5	0.8
1000	0.047	473PPB102K	2600	26.5x17x8.5	22.5	0.8
1000	0.068	683PPB102K	2600	26.5x18.5x10	22.5	0.8
1000	0.1	104PPB102KG	2600	26.5x22x13	22.5	0.8
1000	0.1	104PPB102K	1850	32x20x11	27.5	0.8
1000	0.15	154PPB102K	1850	32x22x13	27.5	0.8
1000	0.22	224PPB102K	1850	32x28x14	27.5	0.8
1000	0.33	334PPB102KB	1850	32x33x18	27.5	1
1000	0.33	334PPB102K	1200	42.5x28.5x16	37.5	1
1000	0.47	474PPB102K	1200	42.5x30x22	37.5	1
1000	0.68	684PPB102K	1200	42.5x37x28	37.5	1
1000	1	105PPB102K	1200	42.5x37x28	37.5	1
1600	0.0022	222PPB162K	7500	18x11x5	15	0.8
1600	0.0033	332PPB162K	7500	18x12x6	15	0.8
1600	0.0047	472PPB162K	7500	18x13.5x7.5	15	0.8
1600	0.0068	682PPB162K	7500	18x14.5x8.5	15	0.8
1600	0.01	103PPB162KB	7500	18x16x10	15	0.8
1600	0.01	103PPB162K	3800	26.5x15.5x6	22.5	0.8
1600	0.015	153PPB162K	3800	26.5x16x7	22.5	0.8
1600	0.022	223PPB162K	3800	26.5x17x8.5	22.5	0.8
1600	0.033	333PPB162K	3800	26.5x18.5x10	22.5	0.8
1600	0.047	473PPB162KG	3800	26.5x22x13	22.5	0.8
1600	0.047	473PPB162K	2700	32x20x11	27.5	0.8
1600	0.068	683PPB162K	2700	32x22x13	27.5	0.8
1600	0.1	104PPB162K	2700	32x28x14	27.5	0.8
1600	0.15	154PPB162KB	2700	32x33x18	27.5	1
1600	0.15	154PPB162K	1700	42.5x28x17	37.5	1
1600	0.22	224PPB162K	1700	42.5x28x17	37.5	1
1600	0.33	334PPB162K	1700	42.5x30x22	37.5	1
1600	0.47	474PPB162K	1700	42.5x37x28	37.5	1
2000	0.001	102PPB202KE	9000	18x11x5	15	0.8
2000	0.001	102PPB202K	6200	26.5x15x6	22.5	0.8
2000	0.0015	152PPB202KE	9000	18x11x5	15	0.8
2000	0.0022	222PPB202KE	9000	18x12x6	15	0.8
2000	0.0033	332PPB202KB	9000	18x13.5x7.5	15	0.8
2000	0.0033	332PPB202K4	6200	26.5x15x6	22.5	0.8
2000	0.0047	72PPB202KB	9000	18x14.5x8.5	15	0.8
2000	0.0047	472PPB202K	6200	26.5x15x6	22.5	0.8
2000	0.0068	682PPB202KB	9000	18x16x10	15	0.8
2000	0.0068	682PPB202K	6200	26.5x15x6	22.5	0.8
2000	0.01	103PPB202K	6200	26.5x17x8.5	22.5	0.8
2000	0.015	153PPB202K	6200	26.5x18.5x10	22.5	0.8
2000	0.022	223PPB202KG	6200	26.5x22x13	22.5	0.8
2000	0.022	223PPB202K	4200	32x20x11	27.5	0.8
2000	0.033	333PPB202K	4200	32x22x13	27.5	0.8
2000	0.047	473PPB202K	4200	32x24.5x15	27.5	0.8
2000	0.068	683PPB202K	4200	32x28x14	27.5	0.8
2000	0.1	104PPB202KB	4200	32x33x18	27.5	1
2000	0.1	104PPB202K	2600	42.5x28x17	37.5	1
2000	0.15	154PPB202K	2600	42.5x30x22	37.5	1
2000	0.22	224PPB202K	2600	42.5x37x28	37.5	1

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PPR

Polypropylene Film Capacitors

Small Size for High Pulse Current Applications



FEATURES	High Pulse Currents - High voltage
APPLICATIONS	Power Semiconductor Circuits – SCR Commutation – Ballasts Controls – Switching Power Supplies

Operating Temperature Range	**-55°C to +105°C**					
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional					
AC voltage (50/60 Hz)	**WVDC**	**630**	**1000**	**1600**	**2000**	
	VAC	400	630	650	700	
	DC: For T>+85°C , The voltage must be decreased by 1.5% per °C AC: For T> +75°C, The voltage must be decreased by 1.75% per °C					
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤0.1uF**	**0.1uF<C≤1uF**	**C>1uF**		
	1	0.04%	0.04%	0.05%		
	10	0.05%	0.06%	-		
	100	0.16%	-	-		
Insulation Resistance @25°C (<70% RH)for 1 minute at 100VDC applied	**Capacitance**	**Insulation Resistance**				
	≤0.33µF	100000 MΩ				
	>0.33µF	30000 MΩxµF				
Self Inductance	<1 nano-Henry per mm of lead spacing					
Capacitance Drift Factor	<0.5% after 2 years at 40°C					
Load Life	**2000 Hours, +85C with 125% of rated voltage**					
	Capacitance Change	≤1% of initially measured value				
	Dissipation Factor	≤0.001 at 10kHz and 25°C for C≤1uF ≤0.001 at 1kHz and 25°C for C>1uF				
	Insulation Resistance	≥50% of maximum specified value				
Reliability (0.5xRated Voltage, 40°C) 1 FIT=1 failure/1 billion component hours	1 Fit					
	Capacitance Change	≤10% of initially measured value				
	Dissipation Factor	≤200% of initially specified value				
	Insulation Resistance	≥50% of maximum specified value				
Damp Heat test	**56 days at40°C with 90 to 95%RH, +40°C and no voltage applied**					
	Capacitance Change	≤5% of initially measured value				
	Dissipation Factor	≤0.005 at 1kHz and 25°C				
	Insulation Resistance	≥50% of maximum specified value				
Self Inductance	<1 nano-Henry per mm of lead spacing					
Capacitance Drift Factor	<0.5% after 2 years at 40°C					
Capacitance Temperature Coefficient	-200 ppm/°C, ±100ppm/°C					
Dielectric Strength	**Terminal to Terminal**					
	160% of rated VDC applied for 2 Seconds and 25°C					
Dielectric	Polypropylene					
Construction	Metallized film					
Coating	Flame Retardant plastic box (UL 94V-1) with epoxy resin fill (UL94V0)					
Leads	Lead free tinned copper leads					

Special Order Options

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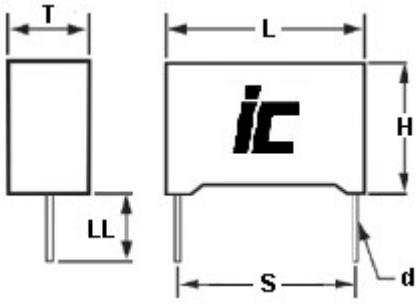
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PPR

Polypropylene Film Capacitors

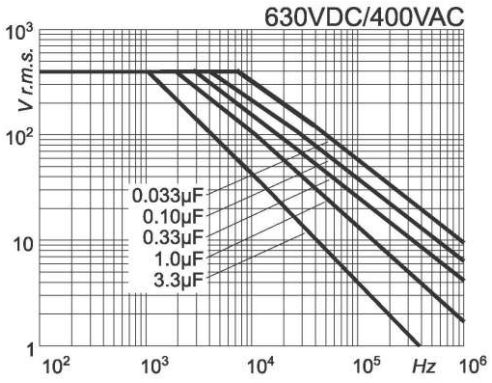
Small Size for High Pulse Current Applications

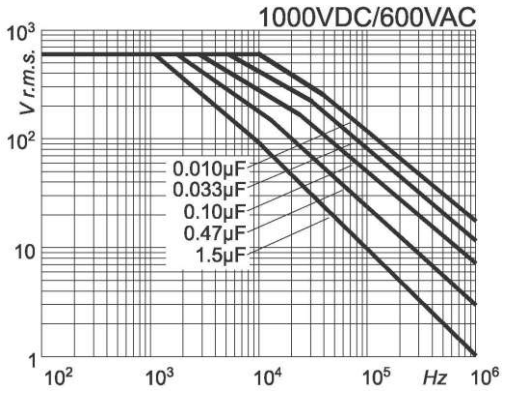


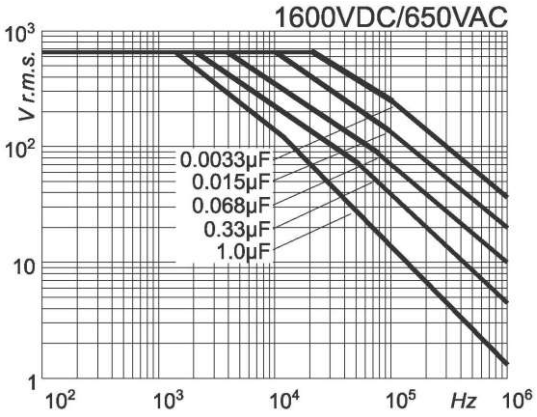


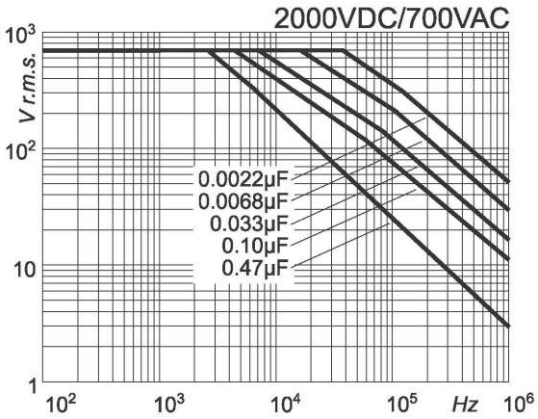
L	18	26.5	32	42.5
S	15	22.5	27.5	37.5
d	0.8	0.8	0.8	1.2
LL	5.0±1.0	5.0±1.0	30±5.0	30±5.0

Permissible (sinusoidal) AC voltage versus frequency for a temperature rise of 10°C
Not for across the line applications









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PPR

High Voltage Pulse Radial Lead Snubber

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
630	0.022	223PPR630KE	2500	18x11x5	15	0.8
630	0.033	333PPR630KE	2500	18x12x6	15	0.8
630	0.047	473PPR630KE	2500	18x13.5x7.5	15	0.8
630	0.068	683PPR630KE	2500	18x14.5x8.5	15	0.8
630	0.068	683PPR630KG	1500	26.5x15x6	22.5	0.8
630	0.1	104PPR630KE	2500	18x16x10	15	0.8
630	0.1	104PPR630KG	1500	26.5x15x6	22.5	0.8
630	0.15	154PPR630KG	1500	26.5x17x8.5	22.5	0.8
630	0.15	154PPR630KH	900	32x17x9	27.5	0.8
630	0.22	224PPR630KG	1500	26.5x18.5x10	22.5	0.8
630	0.22	224PPR630KH	900	32x17x9	27.5	0.8
630	0.33	334PPR630KG	1500	26.5x22x12	22.5	0.8
630	0.33	334PPR630KH	900	32x20x11	27.5	0.8
630	0.47	474PPR630KH	900	32x22x13	27.5	0.8
630	0.68	684PPR630KH	900	32x24.5x15	27.5	0.8
630	1	105PPR630KH	900	32x33x18	27.5	0.8
630	1	105PPR630KJ	450	42.5x28x17	37.5	1
630	1.5	155PPR630KH	900	32x37x22	27.5	0.8
630	1.5	155PPR630KJ	450	42.5x30x22	37.5	1
630	2.2	225PPR630KJ	450	42.5x37x28	37.5	1
630	3.3	335PPR630KJ	450	42.5x45x30	37.5	1
630	3.9	395PPR630KJ	450	42.5x45x30	37.5	1
1000	0.01	103PPR102KE	3300	18x11x5	15	0.8
1000	0.015	153PPR102KE	3300	18x12x6	15	0.8
1000	0.022	223PPR102KE	3300	18x13.5x7.5	15	0.8
1000	0.033	333PPR102KE	3300	18x14.5x8.5	15	0.8
1000	0.033	333PPR102KG	2100	26.5x15x6	22.5	0.8
1000	0.047	473PPR102KG	2100	26.5x16x7	22.5	0.8
1000	0.068	683PPR102KG	2100	26.5x17x8.5	22.5	0.8
1000	0.1	104PPR102KG	2100	26.5x18.5x10	22.5	0.8
1000	0.1	104PPR102KH	1000	32x17x9	27.5	0.8
1000	0.15	154PPR102KG	2100	26.5x22x13	22.5	0.8
1000	0.15	154PPR102KH	1000	32x20x11	27.5	0.8
1000	0.22	224PPR102KH	1000	32x22x13	27.5	0.8
1000	0.33	334PPR102KH	1000	32x28x14	27.5	0.8
1000	0.47	474PPR102KH	1000	32x33x18	27.5	0.8
1000	0.68	684PPR102KH	1000	32x37x22	27.5	0.8
1000	0.68	684PPR102KJ	500	42.5x30x22	37.5	1
1000	1	105PPR102KJ	500	42.5x37x28	37.5	1
1000	1.5	155PPR102KJ	500	42.5x37x28	37.5	1
1000	1.8	185PPR102KJ	500	42.5x45x30	37.5	1
1600	0.0033	332PPR162KE	6000	18x11x5	15	0.8
1600	0.0047	472PPR162KE	6000	18x11x5	15	0.8

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
1600	0.0068	682PPR162KE	6000	18x11x5	15	0.8
1600	0.01	103PPR162KE	6000	18x12x6	15	0.8
1600	0.015	153PPR162KE	6000	18x13.5x7.5	15	0.8
1600	0.022	223PPR162KE	6000	18x14.5x8.5	15	0.8
1600	0.022	223PPR162KG	3000	26.5x15x6	22.5	0.8
1600	0.033	333PPR162KG	3000	26.5x16x7	22.5	0.8
1600	0.047	473PPR162KG	3000	26.5x18.5x10	22.5	0.8
1600	0.047	473PPR162KH	2000	32x17x9	27.5	0.8
1600	0.068	683PPR162KG	3000	26.5x20x11	22.5	0.8
1600	0.068	683PPR162KH	2000	32x17x9	27.5	0.8
1600	0.1	104PPR162KG	3000	26.5x22x13	22.5	0.8
1600	0.1	104PPR162KH	2000	32x20x11	27.5	0.8
1600	0.15	154PPR162KH	2000	32x24.5x15	27.5	0.8
1600	0.22	224PPR162KH	2000	32x33x18	27.5	0.8
1600	0.33	334PPR162KH	2000	32x33x18	27.5	0.8
1600	0.33	334PPR162KJ	1200	42.5x28x17	37.5	1
1600	0.47	474PPR162KH	2000	32x37x22	27.5	0.8
1600	0.47	474PPR162KJ	1200	42.5x30x22	37.5	1
1600	0.68	684PPR162KJ	1200	42.5x37x28	37.5	1
1600	1	105PPR162KJ	1200	42.5x45x30	37.5	1
2000	0.0022	222PPR202KE	7000	18x11x5	15	0.8
2000	0.0033	332PPR202KE	7000	18x12x6	15	0.8
2000	0.0047	472PPR202KE	7000	18x13.5x7.5	15	0.8
2000	0.0068	682PPR202KE	7000	18x13.5x7.5	15	0.8
2000	0.01	103PPR202KE	7000	18x16x10	15	0.8
2000	0.01	103PPR202KG	3500	26.5x15x6	22.5	0.8
2000	0.015	153PPR202KG	3500	26.5x16x7	22.5	0.8
2000	0.022	223PPR202KG	3500	26.5x17x8.5	22.5	0.8
2000	0.022	223PPR202KH	2300	32x17x9	27.5	0.8
2000	0.033	333PPR202KG	3500	26.5x18.5x10	22.5	0.8
2000	0.033	333PPR202KH	2300	32x17x9	27.5	0.8
2000	0.047	473PPR202KG	3500	26.5x22x13	22.5	0.8
2000	0.047	473PPR202KH	2300	32x20x11	27.5	0.8
2000	0.068	683PPR202KH	2300	32x22x13	27.5	0.8
2000	0.1	104PPR202KH	2300	32x28x14	27.5	0.8
2000	0.15	154PPR202KH	2300	32x33x18	27.5	0.8
2000	0.15	154PPR202KJ	1500	42.5x28x17	37.5	1
2000	0.22	224PPR202KH	2300	32x37x22	27.5	0.8
2000	0.22	224PPR202KJ	1500	42.5x30x22	37.5	1
2000	0.33	334PPR202KJ	1500	42.5x37x28	37.5	1
2000	0.47	474PPR202KJ	1500	42.5x37x28	37.5	1
2000	0.56	564PPR202KJ	1500	42.5x45x30	37.5	1

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PSB/RSB

Metallized Polypropylene Film Capacitors

Radial Leaded with Double Sided Electrodes



FEATURES — Power Semiconductor Module Protection - High Pulse and rms Current – Multiple Leads

APPLICATIONS — Power Semiconductor Circuits – Resonant Circuits – Induction Heaters – Switching Power Supplies

Operating Temperature Range	**PSB: -40°C to +100°C, observing voltage and current derating RSB: -40°C to +85°C**								
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional								
Non-Recurrent SVDC	**WVDC**	**700**	**850**	**1000**	**1200**	**1500**	**2000**	**2500**	**3000**
	VAC (RSB)	1100	1300 (1200)	1550 (1300)	1750 (1600)	2200	2600 (2400)	3300	4000 (3500)
AC voltage (50/60 Hz)	**WVDC**	**700**	**850**	**1000**	**1200**	**1500**	**2000**	**2500**	**3000**
	VAC	380/420	500	575	630	650	700	725	750
	For T>+85°C , The voltage (DC/AC)must be decreased by (1.5/2.5)% per °C								
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤1uF**	**C>1uF**						
	1	0.05%	0.06%						
Insulation Resistance @25°C (<70% RH)for 1 minute at 100VDC applied	**Insulation Resistance**								
	30000 MΩxuF (not to exceed 30GΩ)								
Self Inductance	<1 nano-Henry per mm of lead spacing								
Capacitance Drift Factor	<0.5% after 2 years at 40°C								
Life Expectancy	100000 Hours @WVDC 30000 Hours @ VAC								
	Capacitance Change	≤3% of initially measured value							
Failure quota	300/ Billion component hours								
Damp Heat test	**56 days at40°C with 90 to 95%RH, +40°C and no voltage applied**								
	Capacitance Change	≤2% of initially measured value							
	Dissipation Factor	≤0.001 at 1kHz and 25°C							
	Insulation Resistance	≥50% of maximum specified value							
Self Inductance	<1 nano-Henry per mm of lead spacing								
Capacitance Drift Factor	<0.5% after 2 years at 40°C								
Capacitance Temperature Coefficient	-200 ppm/°C, ±100ppm/°C								
Dielectric Strength	**Terminal to Terminal**						**Terminal to case**		
	160% of rated VDC or 150% VAC applied for 2 Seconds and 25°C						3kVAC @ 50/60 Hz applied between terminals and case for 60 seconds at 25°C		
Dielectric	Polypropylene								
Construction	Double Metallized film with internal series connections								
Coating	Flame Retardant plastic box with epoxy resin (UL94V-0)								
Leads	Lead free tinned copper leads								

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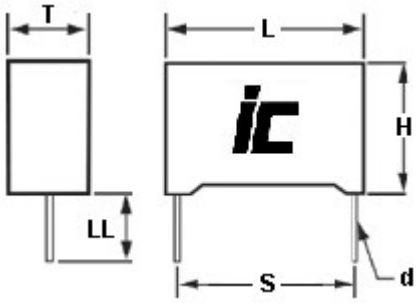
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PSB/RSB

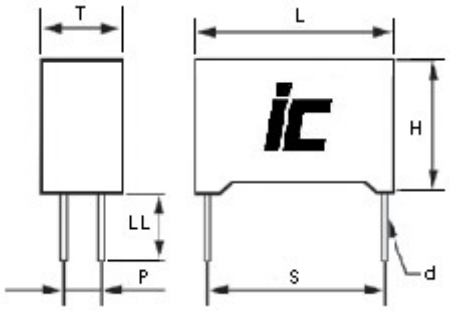
Metallized Polypropylene Film Capacitors

Radial Leaded with Double Sided Electrodes

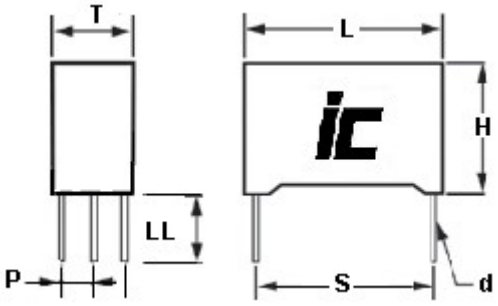




WVDC	ALL	≤850	850<v<2000		2500		ALL	ALL
L	27.5	32	32	32	32	32	42.5	57.5
H	ALL	20	22,24.5	>24.5	33	>33	ALL	ALL
T	ALL	ALL	≤15	>15	<18	>18	ALL	ALL
S	22.5	27.5	27.5	27.5	27.5	27.5	37.5	52.5
d	0.8	0.8	1.0	1.2	1.0	1.2	1.2	1.2
LL	5±1 (25±5 Optional)							



L	32	32	32	42.5	42.5	57.5
H	>22	22>H>,24.5	≥28	≥37	>37	ALL
P	10.2	≤15	≤15	>18	ALL	20.3
S	27.5	27.5	27.5	37.5	37.5	52.5
d	0.8	1.0	1.0	1.2	1.2	1.2
LL	5.5±1.5					



L	57.5
H	ALL
T	ALL
S	52.5±0.4
P	10.2±05
LL	5.5±1.5
d	1.2±0.05

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
700	0.1	104PSB700K2G	1200	4	13.3	26.5x16x7	22.5	0.8		2
700	0.15	154PSB700K2G	1200	5.5	9.5	26x19x10	22.5	0.8		2
700	0.22	224PSB700K2G	1200	6.5	7	26.5x20x11	22.5	0.8		2
700	0.22	224PSB700K2H	900	6.5	8	32x20x11	27.5	0.8		2
700	0.33	334PSB700K2H	1500	8.5	6	32x22x13	27.5	1		2
700	0.47	474PSB700K2H	900	10	4.8	32x24.5x15	27.5	1		2
700	0.68	684PSB700K2H	900	14	3.8	32x33x18	27.5	1.2		2
700	0.68	684PSB700K4H	900	17	3.1	32x33x18	27.5	1.2	5.1	4
700	1	105PSB700K4H	900	21	2.5	32x37x22	27.5	1.2	10.2	4
700	1	105PSB700K2H	900	14	3.2	32x37x22	27.5	1.2		2
700	1	105PSB700K2J	600	13.5	4	42.5x28x17	37.5	1.2		2
700	1.5	155PSB700K2J	600	14	3.6	42.5x30x22	37.5	1.2		2
700	1.8	185RSB700K4H	720	19.5	2.8	32x37x22	27.5	1.2	10.2	4
700	1.8	185RSB700K4H	720	19.5	2.8	32x37x22	27.5	1.2	10.5	4
700	2	205PSB700K4J	600	22.5	2.5	42.5x37x28	37.5	1.2	10.2	4
700	2	205PSB700K4JA	600	22.5	2.5	41.5x40x20	37.5	1.2	10.2	4
700	2	205PSB700K2J	600	14	3.2	42.5x37x28	37.5	1.2		2
700	2	205PSB700K2JA	600	14	3.2	41.5x40x20	37.5	1.2		2
700	2	205RSB700K2J	455	13	4.9	42x32x17	37.5	1.2		2
700	2.2	225RSB700K2J	455	13.5	4.6	42.5x30x22	37.5	1.2		2
700	2.2	225PSB700K2J	600	14	3.1	42.5x37x28	37.5	1.2		2
700	2.2	225PSB700K4J	600	23	2.4	42.5x37x28	37.5	1.2	20.3	4
700	2.5	255PSB700K4J	600	24.5	2.2	42.5x37x28	37.5	1.2	20.3	4
700	2.5	255PSB700K4JA	600	27	2.2	41.5x44x24	37.5	1.2	10.2	4
700	2.5	255RSB700K2J	455	14	4.5	42.5x33.5x22	37.5	1.2		2
700	2.5	255PSB700K2J	600	14	2.7	42.5x37x28	37.5	1.2		2
700	2.5	255PSB700K2JA	600	14	2.7	41.5x44x24	37.5	1.2		2
700	3	305PSB700K2J	600	14	2.7	42.5x45x30	37.5	1.2		2
700	3	305PSB700K4J	600	27	2	42.5x45x30	37.5	1.2	20.3	4
700	3.3	335PSB700K4J	600	27	2	42.5x45x30	37.5	1.2	20.3	4
700	3.3	335PSB700K6J	600	29.5	1.9	42.5x45x30	37.5	1.2	10.2	6
700	3.3	335PSB700K2J	600	14	2.7	42.5x45x30	37.5	1.2		2
700	3.3	335RSB700K4J	455	19.5	3.3	42.5x37x28	37.5	1.2	10.2	4
700	3.3	335RSB700K2J	455	14	4	42.5x37x28	37.5	1.2		2
700	4	405PSB700K2R	360	14	3.1	57.5x45x30	52.5	1.2		2
700	4	405PSB700K6R	200	27	2.4	57.5x45x30	52.5	1.2	10.2	6
700	4	405PSB700K4R	360	27	2.4	57.5x45x30	52.5	1.2	20.3	4
700	4.7	475RSB700K4J	455	24.5	2.7	42.5x45x30	37.5	1.2	20.3	4
700	4.7	475RSB700K2J	455	14	3.4	42.5x45x30	37.5	1.2		2
700	4.7	475PSB700K2R	360	14	2.9	57.5x50x35	52.5	1.2		2
700	4.7	475PSB700K4R	360	27	2.2	57.5x50x35	52.5	1.2	20.3	4
700	4.7	475PSB102K6R	500	37.5	1.7	57.5x57.5x38	52.5	1.2	10.2	6
700	4.7	475PSB700K6R	360	30	2.1	57.5x50x35	52.5	1.2	10.2	6
700	5	505RSB700K4J	455	24.5	2.7	42.5x45x30	37.5	1.2	20.3	4
700	5	505RSB700K2J	455	14	3.4	42.5x45x30	37.5	1.2		2
700	5	505PSB700K2R	360	14	2.9	57.5x50x35	52.5	1.2		2
700	5	505PSB700K6R	360	30.5	2.1	57.5x50x35	52.5	1.2	10.2	6
700	5	505PSB700K4R	360	27	2.2	57.5x50x35	52.5	1.2	20.3	4
700	5.6	565PSB700K4R	360	27	1.9	57.5x50x35	52.5	1.2	20.3	4
700	5.6	565PSB700K6R	360	32	1.8	57.5x50x35	52.5	1.2	10.2	6
700	5.6	565PSB700K2R	360	14	2.6	57.5x50x35	52.5	1.2		2
700	6.3	635PSB700K2R	360	14	2.6	57.5x50x35	52.5	1.2		2
700	6.3	635PSB700K4R	360	27	1.9	57.5x50x35	52.5	1.2	20.3	4
700	6.3	635PSB700K6R	360	33.5	1.8	57.5x50x35	52.5	1.2	10.2	6
700	6.8	685PSB700K6R	360	35.5	1.7	57.5x57.5x38	52.5	1.2	10.2	6
700	6.8	685PSB700K4R	360	27	1.8	57.5x57.5x38	52.5	1.2	20.3	4
700	6.8	685RSB700K4R	285	23.5	3.3	57.5x45x30	52.5	1.2	20.3	4
700	6.8	685RSB700K2R	285	14	4	57.5x45x30	52.5	1.2		2

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
700	8	805PSB700K4R	360	27	1.7	57.5x57.5x38	52.5	1.2	20.3	4
700	8	805PSB700K6R	360	38	1.6	57.5x57.5x38	52.5	1.2	10.2	6
700	10	106RSB700K6R	285	30	2.4	57.5x50x35	52.5	1.2	10.2	6
700	10	106RSB700K2R	285	14	3.2	57.5x50x35	52.5	1.2		2
700	10	106RSB700K4R	285	27	2.5	57.5x50x35	52.5	1.2	20.3	4
700	12	126RSB700K4R	285	27	2.2	57.5x57.5x38	52.5	1.2	20.3	4
700	12	126RSB700K6R	285	34	2.1	57.5x57.5x38	52.5	1.2	10.2	6
850	0.068	683PSB850K2G	1550	4	14	26.5x16x7	22.5	0.8		2
850	0.1	104PSB850K2G	1550	5	10.4	26.5x18.5x10	22.5	0.8		2
850	0.15	154PSB850K2G	1550	6.5	7.5	26.5x20x11	22.5	0.8		2
850	0.15	154PSB850K2H	1120	6.5	8.6	32x20x11	27.5	0.8		2
850	0.22	224PSB850K2H	1120	8	6.4	32x22x13	27.5	1		2
850	0.33	334PSB850K2H	1900	10	4.9	32x24.5x15	27.5	1		2
850	0.47	474PSB850K2H	1120	14	3.9	32x33x18	27.5	1.2		2
850	0.47	474PSB850K4H	1120	16.5	3.2	32x33x18	27.5	1.2	10.2	4
850	0.68	684PSB850K4H	1120	20.5	2.6	32x37x22	27.5	1.2	10.2	4
850	0.68	684PSB850K2H	1120	14	3.3	32x37x22	27.5	1.2		2
850	0.68	684RSB850K2H	900	12	5.6	32x33x18	27.5	1.2		2
850	0.68	684PSB850K2J	510	13	4.3	42.5x28x17	37.5	1.2		2
850	0.82	824RSB850K4H	900	13	5.1	32x33x18	27.5	1.2		4
850	0.82	824PSB850K2J	750	14	3.8	42x32x14	37.5	1.2		2
850	1	105RSB850K2H	900	14	4.6	32x37x22	27.5	1.2		2
850	1	105RSB850K4H	900	17	3.9	32x37x22	27.5	1.2	10.2	4
850	1	105PSB850K2J	750	14	3.3	42.5x30x22	37.5	1.2		2
850	1	105PSB850K4J	750	18.5	2.6	42.5x37x28	37.5	1.2	10.2	4
850	1.2	125PSB850K4J	900	20	2.4	42.5x33.5x22	37.5	1.2	10.2	4
850	1.2	125RSB850K2J	600	11.5	6.1	42x32x17	37.5	1.2		2
850	1.2	125PSB850K2J	900	14	3.1	42.5x33.5x22	37.5	1.2		2
850	1.5	155PSB850K2JA	750	14	2.9	41.5x44x24	37.5	1.2		2
850	1.5	155RSB850K2J	600	12.5	5.5	42.5x30x22	37.5	1.2		2
850	1.5	155PSB850K4JA	750	26	2.3	41.5x44x24	37.5	1.2	10.2	4
850	1.5	155PSB850K2J	750	14	2.9	42.5x37x28	37.5	1.2		2
850	1.5	155PSB850K4J	750	24	2.3	42.5x37x28	37.5	1.2	20.3	4
850	2	205PSB850K4J	750	27	2.1	42.5x45x30	37.5	1.2	20.3	4
850	2	205PSB850K6J	750	29	2	42.5x45x30	37.5	1.2	10.2	6
850	2	205PSB850K2J	750	14	2.7	42.5x45x30	37.5	1.2		2
850	2	205RSB850K4J	600	17	4.2	42.5x37x28	37.5	1.2	10.2	4
850	2	205RSB850K4JA	600	17	4.2	41.5x40x20	37.5	1.2	10.2	4
850	2	205RSB850K2J	600	14	4.9	42.5x37x28	37.5	1.2		2
850	2	205RSB850K2JA	600	14	4.9	41.5x40x20	37.5	1.2		2
850	2.2	225RSB850K2J	600	14	4.8	42.5x37x28	37.5	1.2		2
850	2.2	225RSB850K4J	600	17.5	4.1	42.5x37x28	37.5	1.2	20.3	4
850	2.2	225PSB850K2J	750	14	2.7	42.5x45x30	37.5	1.2		2
850	2.2	225PSB850K6J	750	30	2	42.5x45x30	37.5	1.2	10.2	6
850	2.2	225PSB850K4J	750	27	2.1	42.5x45x30	37.5	1.2	20.3	4
850	2.5	255RSB850K4J	600	21	3.7	41.5x44x24	37.5	1.2	10.2	4
850	2.5	255RSB850K2J	600	14	4.4	41.5x44x24	37.5	1.2		2
850	2.5	255PSB850K2R	450	14	2.9	57.5x45x30	52.5	1.2		2
850	2.5	255PSB850K4R	450	27	2.2	57.5x45x30	52.5	1.2	20.3	4
850	3	305RSB850K4J	600	22	3.3	42.5x45x30	37.5	1.2	20.3	4
850	3	305RSB850K2J	600	14	4	42.5x45x30	37.5	1.2		2
850	3	305PSB850K2R	450	14	3	57.5x45x30	52.5	1.2		2
850	3	305PSB850K4R	450	27	2.3	57.5x45x30	52.5	1.2	20.3	4
850	3	305PSB850K6R	450	29	2.2	57.5x45x30	52.5	1.2	10.2	6
850	3.3	335RSB850K4J	600	23	3.2	42.5x45x30	37.5	1.2	20.3	4
850	3.3	335RSB850K2J	600	14	3.9	42.5x45x30	37.5	1.2		2
850	3.3	335PSB850K2R	450	14	2.6	57.5x45x30	52.5	1.2		2
850	3.3	335PSB850K6R	450	30	2.1	57.5x45x30	52.5	1.2	10.2	6

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
850	3.3	335PSB850K4R4	450	27	2	57.5x45x30	52.5	1.2	20.3	4
850	4	05PSB850K4R	450	27	2	57.5x50x35	52.5	1.2	20.3	4
850	4	405PSB850K6R	450	32.5	1.9	57.5x50x35	52.5	1.2	10.2	6
850	4	405PSB850K2R	450	14	2.6	57.5x50x35	52.5	1.2		2
850	4	405RSB850K4R	360	22	3.7	57.5x45x30	52.5	1.2	20.3	4
850	4	405RSB850K2R	360	14	4.3	57.5x45x30	52.5	1.2		2
850	4.7	475PSB850K2R	450	14	2.5	57.5x50x35	52.5	1.2		2
850	4.7	475PSB850K4R	450	27	1.9	57.5x50x35	52.5	1.2	20.3	4
850	4.7	475PSB850K6R	450	34.5	1.8	57.5x50x35	52.5	1.2	10.2	6
850	5.6	565PSB850K6R	450	37	1.6	57.5x57.5x38	52.5	1.2	10.2	6
850	5.6	565PSB850K4R	450	27	1.7	57.5x57.5x38	52.5	1.2	20.3	4
850	5.6	565RSB850K4R	360	26.5	3	57.5x50x35	52.5	1.2	20.3	4
850	5.6	565RSB850K2R	360	14	3.6	57.5x50x35	52.5	1.2		2
850	6	605PSB850K4R	450	27	1.7	57.5x57.5x38	52.5	1.2	20.3	4
850	6	605PSB850K6R	450	38	1.6	57.5x57.5x38	52.5	1.2	10.2	6
850	6.8	685RSB850K6R	360	29.5	2.6	57.5x57.5x38	52.5	1.2	10.2	6
850	6.8	685RSB850K4R	360	27	2.7	57.5x57.5x38	52.5	1.2	20.3	4
850	8	805RSB850K4R	360	27	2.4	57.5x57.5x38	52.5	1.2	20.3	4
850	8	805RSB850K6R	360	33	2.3	57.5x57.5x38	52.5	1.2	10.2	6
1000	0.047	473PSB102K2G	1800	3.5	18.5	26.5x16x7	22.5	0.8		2
1000	0.068	683PSB102K2G	1800	4.5	13.7	26.5x17x8.5	22.5	0.8		2
1000	0.1	104PSB102K2G	1800	5.5	9.9	26.5x20x11	22.5	0.8		2
1000	0.1	104PSB102K2H	1300	5	11	32x17x9	27.5	0.8		2
1000	0.15	154PSB102K2G	1800	7	7.3	26.5x22x13	22.5	0.8		2
1000	0.15	154PSB102K2H	1300	6.5	8.2	32x20x11	27.5	0.8		2
1000	0.22	224PSB102K2H	1300	8.5	5.7	32x22x13	27.5	1		2
1000	0.33	334PSB102K2H	1300	12.5	4.5	32x28x14	27.5	1.2		2
1000	0.47	474PSB102K2H	1300	14	3.7	32x33x18	27.5	1.2		2
1000	0.47	474PSB102K4H	1300	17	3	32x33x18	27.5	1.2	10.2	4
1000	0.47	474PSB102K2J	870	12	4.7	42.5x28x17	37.5	1.2		2
1000	0.68	684RSB102K4H	1300	17	4	32x37x22	27.5	1.2	10.2	4
1000	0.68	684RSB102K2H	1300	14	4.7	32x37x22	27.5	1.2		2
1000	0.68	684RSB102K2J	750	11.5	5.9	42.5x28x17	37.5	1.2		2
1000	0.68	684PSB102K2J	870	14	4.1	42.5x30x22	37.5	1.2		2
1000	0.68	684PSB102K4J	870	17	3.4	42.5x37x28	37.5	1.2	10.2	4
1000	1	105PSB102K4J	870	22	2.9	42.5x37x28	37.5	1.2	10.2	4
1000	1	105PSB102K2J	870	14	3.6	42.5x37x28	37.5	1.2		2
1000	1	105PSB102K2JA	870	14	3	41.5x44x24	37.5	1.2		2
1000	1	105PSB102K4JA	870	22	2.9	41.5x40x20	37.5	1.2	10.2	2
1000	1	105RSB102K4J	750	15.5	4	42.5x30x22	37.5	1.2	10.2	4
1000	1	105RSB102K2J	750	14	4.7	42.5x30x22	37.5	1.2		2
1000	1.5	155RSB102K2J	750	14	4	42.5x37x28	37.5	1.2		2
1000	1.5	155RSB102K4J	750	19.5	3.3	42.5x37x28	37.5	1.2	10.2	4
1000	1.5	155PSB102K2J	870	14	3	42.5x45x30	37.5	1.2		2
1000	1.5	155PSB102K4J	870	26	2.3	42.5x45x30	37.5	1.2	20.3	4
1000	1.8	185RSB102K4J	750	22.5	3.2	41.5x44x24	37.5	1.2	10.2	4
1000	1.8	185RSB102K2J	750	14	3.9	41.5x44x24	37.5	1.2		2
1000	2	205RSB102K2J	750	14	3.9	42.5x45x30	37.5	1.2		2
1000	2	205RSB102K4J	750	23	3.2	42.5x45x30	37.5	1.2	20.3	4
1000	2	205PSB102K2R	500	14	3.4	57.5x45x30	52.5	1.2		2
1000	2	205PSB102K4R	500	26	2.7	57.5x45x30	52.5	1.2	20.3	4
1000	2.2	225RSB102K4J	750	24	3.1	42.5x45x30	37.5	1.2	20.3	4
1000	2.2	225RSB102K2J	750	14	3.8	42.5x45x30	37.5	1.2		2
1000	2.2	225PSB102K2R	500	14	3.3	57.5x45x30	52.5	1.2		2
1000	2.2	225PSB102K4R	500	26	2.6	57.5x45x30	52.5	1.2	20.3	4
1000	3	305RSB102K2R	450	14	3.9	57.5x45x30	37.5	1.2		2
1000	3	305RSB102K4R	450	23.5	3.2	57.5x45x30	37.5	1.2	20.3	4
1000	3	305PSB102K2R	500	14	2.9	57.5x50x35	52.5	1.2		2

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
1000	3	305PSB102K4R	500	27	2.2	57.5x50x35	52.5	1.2	20.3	4
1000	3	305PSB102K6R	500	31.5	2.1	57.5x50x35	52.5	1.2	10.2	6
1000	3.3	335PSB102K6R	500	32.5	2	57.5x50x35	52.5	1.2	10.2	6
1000	3.3	335PSB102K4R	500	27	2.1	57.5x50x35	52.5	1.2	20.3	4
1000	3.3	335RSB102K4R	1485	24	3.1	57.5x45x30	52.5	1.2	20.3	2
1000	3.3	335PSB102K2R	500	14	2.8	57.5x50x35	52.5	1.2		2
1000	3.3	335RSB102K2R	450	14	3.8	57.5x45x30	52.5	1.2		2
1000	4	405RSB102K2R	450	14	3.5	57.5x50x35	52.5	1.2		2
1000	4	405RSB102K4R	450	27	2.8	57.5x50x35	52.5	1.2	20.3	4
1000	4	405PSB102K4R	500	27	2	57.5x57.5x38	52.5	1.2	20.3	4
1000	4	405PSB102K6R	500	34	1.9	57.5x57.5x38	52.5	1.2	10.2	6
1000	4.7	475PSB102K4R	500	27	1.8	57.5x57.5x38	52.5	1.2	20.3	4
1000	4.7	475RSB102K4R	450	27	2.7	57.5x50x35	52.5	1.2	20.3	4
1000	4.7	475RSB102K2R	450	14	3.3	57.5x50x35	52.5	1.2		2
1000	5.6	565RSB102K6R	450	31	2.4	57.5x57.5x38	52.5	1.2	10.2	6
1000	5.6	565RSB102K4R	450	27	2.5	57.5x57.5x38	52.5	1.2	20.3	4
1000	6	605RSB102K4R	450	27	2.4	57.5x57.5x38	52.5	1.2	20.3	4
1000	6	605RSB102K6R	450	33	2.3	57.5x57.5x38	52.5	1.2	10.2	6
1200	0.033	333PSB122K2G	2000	3	23	26.5x16x7	22.5	0.8		2
1200	0.047	473PSB122K2G	4000	3.5	16.9	26.5x17x8.5	22.5	0.8		2
1200	0.068	683PSB122K2G	2000	4.5	12.7	26.5x18.5x10	22.5	0.8		2
1200	0.068	683PSB122K2H	1500	4.5	14.3	32x17x9	27.5	0.8		2
1200	0.1	104PSB122K2G	2000	6	9.7	26.5x22x13	22.5	0.8		2
1200	0.1	104PSB122K2H	1500	6	10.6	32x20x11	27.5	0.8		2
1200	0.15	154PSB122K2H	1500	7.5	7.6	32x22x13	27.5	1		2
1200	0.22	224PSB122K2H	1500	9.5	5.4	32x24.5x15	27.5	1		2
1200	0.33	334PSB122K2H	1500	13.5	4.3	32x33x18	27.5	1.2		2
1200	0.33	334PSB122K4H	1500	15.5	3.6	32x33x18	27.5	1.2		4
1200	0.33	334PSB122K2J	1000	11.5	5.9	42.5x28x17	37.5	1.2		2
1200	0.47	474PSB122K2H	1500	14	3.4	32x37x22	27.5	1.2		2
1200	0.47	474RSB122K2H	1120	12.5	5.7	32x33x18	27.5	1.2		2
1200	0.47	474PSB122K4H	1500	20.5	2.7	32x37x22	27.5	1.2		4
1200	0.47	474PSB122K2J	1000	13.5	4.8	42.5x30x22	37.5	1.2		2
1200	0.68	684RSB122K2H	1120	14	5	32x37x22	27.5	1.2		2
1200	0.68	684RSB122K4H	1120	16	4.3	32x37x22	27.5	1.2	10.2	4
1200	0.68	684PSB122K4J	1000	17.5	3.4	42.5x37x28	37.5	1.2	10.2	4
1200	0.68	684RSB122K2J	870	11.5	6.1	42x32x17	37.5	1.2		2
1200	0.68	684PSB122K2J	1000	14	4.1	42.5x37x28	37.5	1.2		2
1200	0.82	824PSB122K2J	1000	14	3.8	41.5x40x20	37.5	1.2		2
1200	0.82	824RSB122K2J	870	13	5.4	42.5x30x22	37.5	1.2		2
1200	0.82	824PSB122K4J	1000	20.5	3.1	41.5x40x20	37.5	1.2	10.2	4
1200	1	105PSB122K4J	1000	22	2.8	42.5x37x28	37.5	1.2	20.3	4
1200	1	105PSB122K2JA	1000	14	3.5	41.5x44x24	37.5	1.2		2
1200	1	105RSB122K4J	870	17.5	4.1	41.5x40x20	37.5	1.2	10.2	4
1200	1	105PSB122K2J	1000	14	3.5	42.5x37x28	37.5	1.2		2
1200	1	105PSB122K4JA	1000	23.5	2.8	41.5x44x24	37.5	1.2	10.2	2
1200	1	105RSB122K2J	870	14	4.8	41.5x40x20	37.5	1.2		2
1200	1.2	125RSB122K4J	870	19	3.7	42.5x37x28	37.5	1.2	10.2	4
1200	1.2	125PSB122K2J	1000	14	3.2	42.5x45x30	37.5	1.2		2
1200	1.2	125RSB122K2J	870	14	4.4	42.5x37x28	37.5	1.2		2
1200	1.2	125PSB122K4J	1000	25	2.5	42.5x45x30	37.5	1.2	20.3	4
1200	1.5	155PSB122K4J	1000	27	2.2	42.5x45x30	37.5	1.2	20.3	4
1200	1.5	155RSB122K2J	870	14	4	41.5x44x24	37.5	1.2		2
1200	1.5	155PSB122K2J	100	14	2.9	42.5x45x30	37.5	1.2		2
1200	1.5	155RSB122K4J	870	21.5	3.3	41.5x44x24	37.5	1.2	10.2	4
1200	2	205PSB122K2R	575	14	3.2	57.5x45x30	52.5	1.2		2
1200	2	205PSB122K4R	575	26.5	2.5	57.5x45x30	52.5	1.2	20.3	4
1200	2	205PSB122K6R	575	29	2.4	57.5x45x30	52.5	1.2	10.2	6

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
1200	2.2	225PSB122K4R	575	27	2.4	57.5x50x35	52.5	1.2	20.3	4
1200	2.2	225PSB122K6R	575	31	2.3	57.5x50x35	52.5	1.2	10.2	6
1200	2.2	225PSB122K2R	575	14	3	57.5x50x35	52.5	1.2		2
1200	2.2	225RSB122K4R	500	22	3.7	57.5x45x30	52.5	1.2	10.2	4
1200	2.2	225RSB122K2R	500	14	4.4	57.5x45x30	52.5	1.2		2
1200	2.5	255RSB122K2R	500	14	4.2	57.5x45x30	52.5	1.2		2
1200	2.5	255RSB122K4R	500	23	3.5	57.5x45x30	52.5	1.2	20.3	4
1200	2.5	255PSB122K2R	575	14	2.8	57.5x50x35	52.5	1.2		2
1200	2.5	255PSB122K4R	575	27	2.2	57.5x50x35	52.5	1.2	20.3	4
1200	2.5	255PSB122K6R	575	32	2.1	57.5x50x35	52.5	1.2	10.2	6
1200	3.3	335PSB122K6R	575	36	1.9	57.5x57.5x38	52.5	1.2	10.2	6
1200	3.3	335RSB122K4R	500	27	3	57.5x50x35	52.5	1.2	20.3	4
1200	3.3	335PSB122K4R	575	27	2	57.5x57.5x38	52.5	1.2	20.3	4
1200	3.3	335RSB122K2R	500	14	3.7	57.5x50x35	52.5	1.2		2
1200	3.6	365PSB122K4R	575	27	1.9	57.5x57.5x38	52.5	1.2	20.3	4
1200	3.6	365PSB122K6R	575	37.5	1.8	57.5x57.5x38	52.5	1.2	10.2	6
1200	4	405RSB122K6R	500	29	2.5	57.5x57.5x38	52.5	1.2	10.2	6
1200	4	405RSB122K4R	600	25	3.8	57.5x50x35	52.5	1.2	20.3	4
1200	4.7	475RSB122K4R	500	27	2.4	57.5x57.5x38	52.5	1.2	20.3	4
1200	4.7	475RSB122K6R	500	33	2.3	57.5x57.5x38	52.5	1.2	10.2	6
1500	0.022	223PSB152K2G	2500	2.5	30	26.5x16x7	22.5	0.8		2
1500	0.033	333PSB152K2G	2500	3.5	22	26.5x17x8.5	22.5	0.8		2
1500	0.047	473PSB152K2G	2500	4	16.5	26.5x18.5x10	22.5	0.8		2
1500	0.047	473PSB152K2H	1900	4	18.2	32x17x9	27.5	0.8		2
1500	0.068	683PSB152K2G	2500	5.5	12.3	26.5x22x13	22.5	0.8		2
1500	0.068	683PSB152K2H	1900	5	13.8	32x20x11	27.5	0.8		2
1500	0.1	104PSB152K2H	1900	6.5	9.5	32x22x13	27.5	0.8		2
1500	0.15	154PSB152K2H	1900	8.5	7.1	32x24.5x15	27.5	1		2
1500	0.22	224PSB152K2H	1900	12.5	5.1	32x33x18	27.5	1.2		2
1500	0.22	224PSB152K4H	1900	14	4.4	32x33x18	27.5	1.2	10.2	4
1500	0.22	224PSB152K2J	1220	10.5	6.9	42.5x28x17	37.5	1.2		2
1500	0.33	334PSB152K2H	1900	14	4.1	32x37x22	27.5	1.2		2
1500	0.33	334RSB152K2H	1220	12	6	32x33x18	27.5	1.2		2
1500	0.33	334PSB152K4H	1900	18	3.4	32x37x22	27.5	1.2	10.2	4
1500	0.33	334PSB152K2J	1220	12.5	5.4	42.5x30x22	37.5	1.2		2
1500	0.47	474RSB152K2H	1500	14	4.8	32x37x22	27.5	1.2		2
1500	0.47	474RSB152K4H	1500	16.5	4.1	32x37x22	27.5	1.2	10.2	4
1500	0.47	474PSB152K4J	1220	16	3.8	42.5x37x28	37.5	1.2	10.2	4
1500	0.47	474PSB152K2J	1220	14	4.5	42.5x37x28	37.5	1.2		2
1500	0.56	564PSB152K2J	1220	14	4.2	41.5x40x20	37.5	1.2		2
1500	0.56	564PSB152K4J	1220	19.5	3.5	41.5x40x20	37.5	1.2	10.2	4
1500	0.68	684PSB152K4J	1220	20.5	3.2	41.5x44x24	37.5	1.2	10.2	4
1500	0.68	684PSB152K4J	1220	20.5	3.2	42.5x37x28	37.5	1.2	10.2	4
1500	0.68	684RSB152K2J	1000	13	5.5	42.5x33.5x22	37.5	1.2		2
1500	0.68	684PSB152K2JA	1220	14	3.9	41.5x44x24	37.5	1.2		2
1500	0.68	684PSB152K2J	1220	14	3.9	42.5x37x28	37.5	1.2		2
1500	0.75	754PSB152K2J	1220	14	3.6	41.5x44x24	37.5	1.2		2
1500	0.75	754PSB152K4J	1220	23.5	2.9	41.5x44x24	37.5	1.2	10.2	4
1500	1	105PSB152K4J	1220	26	2.6	42.5x45x30	37.5	1.2	20.3	4
1500	1	105RSB152K2J	1000	14	4.8	42.5x37x28	37.5	1.2		2
1500	1	105RSB152K2JA	1000	14	4.8	41.5x44x24	37.5	1.2		2
1500	1	105PSB152K2J	1220	14	3.3	42.5x45x30	37.5	1.2		2
1500	1	105RSB152K4J	1000	18	4.1	42.5x37x28	37.5	1.2	20.3	4
1500	1	105RSB152K4JA	1000	19.5	4.1	41.5x44x24	37.5	1.2	10.2	4
1500	1.2	125PSB152K2R	725	14	3.6	57.5x45x30	52.5	1.2		2
1500	1.2	125PSB152K4R	725	25	2.9	57.5x45x30	52.5	1.2	20.3	4
1500	1.5	155RSB152K2J	1000	14	4	42.5x45x30	37.5	1.2		2
1500	1.5	155RSB152K4J	1000	23	3.3	42.5x45x30	37.5	1.2	20.3	4

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
1500	1.5	155PSB152K2R	725	14	3.3	57.5x50x35	52.5	1.2		2
1500	1.5	155PSB152K4R	725	27	2.6	57.5x50x35	52.5	1.2	20.3	4
1500	1.8	185PSB152K4R	725	27	2.4	57.5x50x35	52.5	1.2	20.3	4
1500	1.8	185PSB152K6R	725	30.5	2.3	57.5x50x35	52.5	1.2	10.2	6
1500	1.8	185PSB152K2R	725	14	3.1	57.5x50x35	52.5	1.2		2
1500	2	205RSB152K2R	575	14	4.3	57.5x45x30	52.5	1.2		2
1500	2	205RSB152K4R	575	22.5	3.6	57.5x45x30	52.5	1.2	20.3	4
1500	2.2	225PSB152K4R	725	27	3	57.5x57.5x38	52.5	1.2	20.3	4
1500	2.2	225RSB152K4R	575	24.5	3.5	57.5x50x35	52.5	1.2	20.3	4
1500	2.2	225RSB152K2R	575	14	4.2	57.5x50x35	52.5	1.2		2
1500	2.5	255RSB152K2R	575	14	4	57.5x50x35	52.5	1.2		2
1500	2.5	255PSB152K4R	725	27	2.2	57.5x57.5x38	52.5	1.2	20.3	4
1500	2.5	255RSB152K4R	575	26	3.3	57.5x50x35	52.5	1.2	20.3	4
1500	2.5	255PSB152K6R	725	35	2.1	57.5x57.5x38	52.5	1.2	10.2	6
1500	3.3	335RSB152K6R	575	31	2.7	57.5x57.5x38	52.5	1.2	10.2	6
1500	3.3	335RSB152K4R	575	27	2.8	57.5x57.5x38	52.5	1.2	20.3	4
2000	0.015	153PSB202K2G	3600	2	38	26.5x16x7	22.5	0.8		2
2000	0.022	223PSB202K2G	3600	3	28	26.5x17x8.5	22.5	0.8		2
2000	0.033	333PSB202K2G	3600	4.5	20.5	26.5x20x11	22.5	0.8		2
2000	0.033	333PSB202K2H	2550	4	23.7	32x20x11	27.5	0.8		2
2000	0.047	473PSB202K2G	3600	5	14.8	26.5x22x13	22.5	0.8		2
2000	0.047	473PSB202K2H	2550	4.5	16.8	32x20x11	27.5	0.8		2
2000	0.068	683PSB202K2H	2550	6	12.1	32x22x13	27.5	0.8		2
2000	0.1	104PSB202K2H	2550	7.5	8.4	32x24.5x15	27.5	1		2
2000	0.15	154PSB202K2H	2550	11	6.5	32x33x18	27.5	1.2		2
2000	0.15	154PSB202K4H	2550	12.5	5.8	32x33x18	27.5	1.2	10.2	4
2000	0.15	154PSB202K2J	1600	9.5	8.1	42.5x28x17	37.5	1.2		2
2000	0.22	224PSB202K2H	2550	14	5.2	32x37x22	27.5	1.2		2
2000	0.22	224RSB202K2H	1900	11	8.1	32x33x18	27.5	1.2		2
2000	0.22	224PSB202K4H	2550	16	4.5	32x37x22	27.5	1.2	10.2	4
2000	0.22	224PSB202K2J	1600	12	5.9	42.5x30x22	37.5	1.2		2
2000	0.33	334RSB202K2H	1900	14	5.8	32x37x22	27.5	1.2		2
2000	0.33	334RSB202K4H	1600	15.5	5.1	32x37x22	27.5	1.2	10.2	4
2000	0.33	334PSB202K4J	1600	17.5	4.2	42.5x37x28	37.5	1.2	10.2	4
2000	0.33	334PSB202K2J	1600	14	4.9	42.5x37x28	37.5	1.2		2
2000	0.33	334RSB202K2J	1600	11	7.4	42.5x30x22	37.5	1.2		2
2000	0.33	334PSB202K2JA	1600	14	4.9	41.5x40x20	37.5	1.2		2
2000	0.33	334PSB202K4JA	1600	18	4.2	41.5x40x20	37.5	1.2	10.2	4
2000	0.47	474PSB202K4JA	1600	21.5	3.4	41.5x44x24	37.5	1.2	10.2	4
2000	0.47	474PSB202K2JA	1600	14	4.1	41.5x44x24	37.5	1.2		2
2000	0.47	474RSB202K2J	1220	13	6.1	42.5x33.5x22	37.5	1.2		2
2000	0.47	474PSB202K2J	1600	14	4.1	42.5x37x28	37.5	1.2		2
2000	0.47	474PSB202K4J	1600	20	3.4	42.5x37x28	37.5	1.2	20.3	4
2000	0.56	564PSB202K4J	1600	23.5	3.1	42.5x45x30	37.5	1.2	20.3	4
2000	0.56	564PSB202K2J	1600	14	3.8	42.5x45x30	37.5	1.2		2
2000	0.68	684RSB202K2J	1220	14	5.4	42.5x37x28	37.5	1.2		2
2000	0.68	684RSB202K2JA	1220	14	5.4	51.5x44x24	37.5	1.2		2
2000	0.68	684RSB202K4JA	1220	18.5	4.7	41.5x44x24	37.5	1.2	10.2	4
2000	0.68	684RSB202K4J	1220	17	4.7	42.5x37x28	37.5	1.2	10.2	4
2000	0.68	684PSB202K2R	930	14	4.4	57.5x45x30	52.5	1.2		2
2000	0.68	684PSB202K4R	930	22	3.6	57.5x45x30	52.5	1.2	20.3	4
2000	0.82	824RSB202K4J	1220	20	4.2	42.5x45x30	37.5	1.2	20.3	4
2000	0.82	824PSB202K6R	580	24	3.1	57.5x45x30	52.5	1.2	10.2	6
2000	0.82	824PSB202K4R	930	23.5	3.2	57.5x45x30	52.5	1.2	20.3	4
2000	0.82	824PSB202K2R	930	14	3.9	57.5x45x30	52.5	1.2		2
2000	1	105RSB202K2J	1220	14	4.5	42.5x45x30	37.5	1.2		2
2000	1	105RSB202K4J	1220	21.5	3.8	42.5x45x30	37.5	1.2	20.3	4
2000	1	105PSB202K2R	930	14	3.6	57.5x50x35	52.5	1.2		2

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
2000	1	105PSB202K4R	930	27	2.9	57.5x50x35	52.5	1.2	20.3	4
2000	1	105PSB202K6R	580	27	2.9	57.5x50x35	52.5	1.2	10.2	6
2000	1.2	125PSB202K6R	930	29.5	2.5	57.5x50x35	52.5	1.2	10.2	6
2000	1.2	125PSB202K4R	930	27	2.6	57.5x50x35	52.5	1.2	20.3	4
2000	1.2	125PSB202K2R	930	14	3.3	57.5x50x35	52.5	1.2		2
2000	1.2	125RSB202K2R	870	14	4.8	57.5x45x30	52.5	1.2		2
2000	1.2	125RSB202K4R	870	21.5	4.1	57.5x45x30	52.5	1.2	20.3	4
2000	1.5	155RSB202K4R	725	24.5	3.7	57.5x50x35	52.5	1.2	20.3	4
2000	1.5	155RSB202K2R	725	14	4.4	57.5x50x35	52.5	1.2		2
2000	1.5	155PSB202K6R	930	33	2.2	57.5x57.5x38	52.5	1.2	10.2	6
2000	1.5	155PSB202K4R	930	27	2.3	57.3x57.5x38	52.5	1.2	20.3	4
2000	1.7	175PSB202K6R	930	34.5	2.1	57.5x57.5x38	52.5	1.2	10.2	6
2000	2.2	225RSB202K6R	725	29.5	3	57.5x55x40	52.5	1.2	10.2	6
2000	2.2	225RSB202K4R	725	27	3.1	57.5x55x40	52.5	1.2	20.3	4
2500	0.0068	682PSB252K2G	4900	1.5	70	26.5x16x7	22.5	0.8		2
2500	0.01	103PSB252K2G	4900	2	51	26.5x17x8.5	22.5	0.8		2
2500	0.015	153PSB252K2G	4900	2.5	36	26.5x18.5x10	22.5	0.8		2
2500	0.022	223PSB252K2G	4900	3.5	26.5	26.5x22x13	22.5	0.8		2
2500	0.022	223PSB252K2H	3350	3.5	30.5	32x20x11	27.5	0.8		2
2500	0.033	333PSB252K2H	3350	4	22.5	32x22x13	27.5	0.8		2
2500	0.047	473PSB252K2H	3350	5.5	16	32x24.5x15	27.5	0.8		2
2500	0.068	683PSB252K2H	3350	8.5	11.3	32x33x18	27.5	1		2
2500	0.1	104PSB252K2H	3350	10.5	7.6	32x33x18	27.5	1.2		2
2500	0.1	104PSB252K4H	3350	11.5	6.9	32x33x18	27.5	1.2		4
2500	0.1	104PSB252K2J	2050	8	11.5	42.5x28x17	37.5	1.2		2
2500	0.15	154RSB252K2J	2550	10	9.1	32x33x18	27.5	1.2		2
2500	0.15	154PSB252K2J	3350	13.5	6	32x37x22	27.5	1.2		2
2500	0.15	154PSB252K4J	3350	14.5	5.3	32x37x22	27.5	1.2	10.2	4
2500	0.15	154PSB252K2J	2050	10.5	7.9	42.5x30x22	37.5	1.2		2
2500	0.22	224RSB252K2H	2550	12.5	7.1	32x37x22	27.5	1.2		2
2500	0.22	224RSB252K2J	1600	10	8.3	42x32x17	27.5	1.2		2
2500	0.22	224PSB252K2JA	2050	14	6	41.5x40x20	37.5	1.2		2
2500	0.22	224PSB252K2J	2050	14	6	42.5x37x28	37.5	1.2		2
2500	0.22	224PSB252K4JA	2050	16	5.3	41.5x40x20	37.5	1.2	10.2	4
2500	0.22	224PSB252K4J	2050	16	5.3	42.5x37x28	37.5	1.2		4
2500	0.3	304PSB252K4J	2050	20	4.1	41.5x44x24	37.5	1.2	10.2	4
2500	0.3	304PSB252K2J	2050	14	4.8	41.5x44x24	37.5	1.2		2
2500	0.33	334PSB252K2J	2050	14	4.6	42.5x45x30	37.5	1.2		2
2500	0.33	334PSB252K2J	2050	14	4.6	42.5x45x30	37.5	1.2		2
2500	0.33	334PSB252K4J	1400	19.5	3.9	42.5x45x30	37.5	1.2		4
2500	0.33	334PSB252K4J	1400	19.5	3.9	42.5x45x30	37.5	1.2		4
2500	0.39	394PSB252K4J	2050	22	3.5	42.5x45x30	37.5	1.2		4
2500	0.39	394PSB252K2J	2050	14	4.4	42.5x45x30	37.5	1.2		2
2500	0.47	474RSB252K2J	1600	14	5.5	42.5x37x28	37.5	1.2		2
2500	0.47	474RSB252K2JA	1600	14	5.5	41.5x44x24	37.5	1.2		2
2500	0.47	474RSB252K4J	1600	16.5	4.8	42.5x37x28	37.5	1.2	10.2	4
2500	0.47	474RSB252K4JA	1600	18	4.8	41.5x44x24	37.5	1.2	10.2	4
2500	0.47	474PSB252K4R	1150	21	4	57.5x45x30	52.5	1.2	20.3	4
2500	0.47	474PSB252K2R	1150	14	4.7	57.5x45x30	52.5	1.2		2
2500	0.56	564PSB252K2R	1150	14	4.3	57.5x45x30	52.5	1.2		2
2500	0.56	564PSB252K4R	1150	22.5	3.6	57.5x45x30	52.5	1.2	20.3	4
2500	0.68	684PSB252K4R	1150	24.5	3.3	57.5x50x35	52.5	1.2	20.3	4
2500	0.68	684RSB252K4R	930	18	5.1	57.5x45x30	52.5	1.2	20.3	4
2500	0.68	684PSB252K6R	750	23	3.6	57.5x50x35	52.5	1.2	10.2	6
2500	0.68	684PSB252K2R	1150	14	4	57.5x50x35	52.5	1.2		2
2500	0.68	684RSB252K2R	930	14	5.8	57.5x45x30	52.5	1.2		2
2500	0.82	824PSB252K2R	1150	14	3.6	57.5x50x35	52.5	1.2		2
2500	0.82	824PSB252K2R	1150	14	3.6	57.5x50x35	52.5	1.2		2

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
2500	0.82	824RSB252K2R	930	14	5.3	57.5x45x30	52.5	1.2		4
2500	0.82	824PSB252K4R	750	26.5	3	57.5x50x35	52.5	1.2	20.3	4
2500	0.82	824PSB252K4R	750	26.5	3	57.5x50x35	52.5	1.2	20.3	4
2500	1	105PSB252K4R	1150	27	2.8	57.5x57.5x38	52.5	1.2	20.3	4
2500	1	105RSB252K2R	930	14	4.9	57.5x50x35	52.5	1.2		2
2500	1	105PSB252K6R	1150	30.5	2.7	57.5x57.5x38	52.5	1.2	10.2	lugs
2500	1.2	125RSB252K2R	930	14	4.4	57.5x50x35	52.5	1.2		2
2500	1.2	125RSB252K4R	930	25	3.7	57.5x50x35	52.5	1.2	20.3	4
2500	1.5	155RSB252K4R	930	27	3.3	57.5x57.5x38	52.5	1.2	20.3	4
2500	1.5	155RSB252K6R	930	29	3.2	57.5x57.5x38	52.5	1.2	10.2	6
3000	0.0047	472PSB302K2G	6300	1.5	87	26.5x16x7	22.5	0.8		2
3000	0.0068	682PSB302K2G	6300	2	64	26.5x17x8.5	22.5	0.8		2
3000	0.01	103PSB302K2G	6300	2.5	46	26.5x20x11	22.5	0.8		2
3000	0.01	103PSB302K2H	4350	2.5	54	32x20x11	27.5	0.8		2
3000	0.015	153PSB302K2G	6300	3	33	26.5x22x13	22.5	0.8		2
3000	0.015	153PSB302K2H	4350	3	38	32x20x11	27.5	0.8		2
3000	0.022	223PSB302K2H	4350	4	26.5	32x22x13	27.5	0.8		2
3000	0.033	333PSB302K2H	4350	5	19	32x24.5x15	27.5	0.8		2
3000	0.033	333PSB302K4H	2750	7	18.3	32x33x18	27.5	1.2	5.1	4
3000	0.047	473PSB302K4H	4350	8.5	13.3	32x33x18	27.5	1.2	10.2	4
3000	0.047	473PSB302K2H	4350	7.5	14	32x33x18	27.5	1		2
3000	0.068	683PSB302K2H	4350	10	10.4	32x37x22	27.5	1.2		2
3000	0.068	683PSB302K4H	4350	11	9.6	32x37x22	27.5	1.2	10.2	4
3000	0.068	683PSB302K2J	2500	7.5	12.3	42.5x28x17	37.5	1.2		2
3000	0.1	104RSB302K2H	3350	9	11	32x33x18	27.5	1.2		2
3000	0.1	104PSB302K2J	2500	9.5	9.3	42.5x30x22	37.5	1.2		2
3000	0.1	104RSB302K2J	2050	7	15.5	42.5x28x14	37.5	1.2		2
3000	0.1	104PSB302K4J	2500	10.5	8.6	42.5x30x22	37.5	1.2	10.2	4
3000	0.12	124PSB302K4J	2500	13.5	7.6	41.5x40x20	37.5	1.2	10.2	4
3000	0.12	124PSB302K2J	2500	12	8.3	41.5x40x20	37.5	1.2		2
3000	0.15	154RSB302K2H	3350	10	9.1	32x37x22	27.5	1.2		2
3000	0.15	154RSB302K2H	3350	12	8.5	32x37x22	27.5	1.2		2
3000	0.15	154RSB302K2J	2050	9	10.8	42x32x17	37.5	1.2		2
3000	0.15	154PSB302K2J	2500	14	6.7	42.5x37x28	37.5	1.2		2
3000	0.15	154PSB302K2JA	2500	14	6.7	41.5x44x24	37.5	1.2		2
3000	0.15	154PSB302K4JA	2500	16	6	41.5x44x24	37.5	1.2	10.2	4
3000	0.15	154PSB302K4J	2500	15	6	42.5x37x28	37.5	1.2	20.3	4
3000	0.18	184PSB302K4J	2500	17.5	5.3	41.5x44x24	37.5	1.2	10.2	4
3000	0.18	184PSB302K2J	2500	14	6	41.5x44x24	37.5	1.2		2
3000	0.22	224RSB302K2J	2050	12.5	8.1	42.5x37x28	37.5	1.2		2
3000	0.22	224RSB302K4J	2050	13.5	7.4	42.5x37x38	37.5	1.2	10.2	4
3000	0.22	224RSB302K4JA	2050	14	7.4	41.5x40x20	37.5	1.2	10.2	4
3000	0.22	224PSB302K2J	2050	14	5.1	42.5x45x30	37.5	1.2		2
3000	0.22	224RSB302K2JA	2050	12.5	8.1	41.5x40x20	37.5	1.2		2
3000	0.22	224RSB302K2J	2050	12.5	8.1	42.5x37x28	37.5	1.2		2
3000	0.22	224PSB302K4J	2050	18.5	4.4	42.5x45x30	37.5	1.2	20.3	4
3000	0.33	334RSB302K2J	2050	14	6.2	42.5x45x30	37.5	1.2		2
3000	0.33	334RSB302K4J	2050	18	5.5	42.5x45x30	37.5	1.2	10.2	4
3000	0.33	334PSB302K2R	900	14	5.1	57.5x45x30	52.5	1.2		2
3000	0.33	334PSB302K4R	1120	20.5	4.4	57.5x45x30	52.5	1.2	20.3	4
3000	0.47	474PSB302K4R	1400	23.5	3.9	57.5x50x35	52.5	1.2	20.3	4
3000	0.47	474PSB302K2R	1400	14	4.6	57.5x50x35	52.5	1.2		2
3000	0.47	474RSB302K2R	1150	14	6.6	57.5x45x30	52.5	1.2		2
3000	0.47	474RSB302K4R	1150	18	5.9	57.5x45x30	52.5	1.2	10.2	4
3000	0.63	634PSB302K4R	1400	26.5	3.5	57.5x57.5x38	52.5	1.2	20.3	4
3000	0.63	634PSB302K6R	1400	27.5	3.4	57.5x57.5x38	52.5	1.2	10.2	6
3000	0.68	684RSB302K4R	1150	20.5	5.2	57.5x50x35	52.5	1.2	20.3	4
3000	0.68	684RSB302K2R	1150	14	5.9	57.5x50x35	52.5	1.2		2

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
3000	0.82	824RSB302K2R	930	14	5.3	57.5x50x35	52.5	1.2		2
3000	0.82	824RSB302K4R	1150	22.5	4.6	57.5x50x35	52.5	1.2	20.3	4
3000	1	105RSB302K6R	1150	26.5	3.9	57.5x57.5x38	52.5	1.2	10.2	6
3000	1	105RSB302K4R	930	25	4	57.5x57.5x38	52.5	1.2	20.3	4

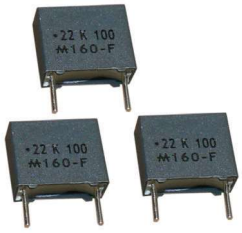
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Type 160 Metallized Polyester Radial Lead Capacitors

Radial Box Metallized Polyester Capacitors



The Type 160 series radial lead metallized polyester box capacitors are constructed in rugged rectangular plastic cases with lead spacings that are standard in the electronics industry. All Type 160 capacitors are available in bulk with a .217" ±.039" lead length, and they are good for general purpose applications such as bypass, decoupling, energy storage/discharge and arc suppression.

Highlights

- RoHS compliant
- Rugged plastic case
- Case and epoxy fill meets UL94V0
- 10 mm through 27.5 mm lead spacings
- Non-inductively wound
- Non-polar
- Wire lead material, tinned copper clad steel

RoHS Compliant

Specifications

Capacitance Range: 0.0022 µF to 10.0 µF

Voltage Range: 63 Vdc to 1000 Vdc

Capacitance Tolerance: ±5%, ±10%, ±20%

Operating Temperature Range: –55 °C to +125 °C (derating voltage to 1.25% per °C above 85 °C)

Dielectric Withstand Voltage: 1.6 x rated voltage for 2 sec @ +25 °C ±5 °C

Dissipation Factor (DF): $\tan\delta \times 10^{-4}$ at 25 °C ±5 °C

kHz	C ≤1 µF	C >1 µF
1	≤100	≤100
10	≥150	

Total Self Inductance (L):

Pitch (mm)	10	15	22.5	27.5
L (nH) ≈	9	10	18	18

Long Term Stability (after two years): Capacitance change $\Delta C/C \leq \pm 3\%$ under standard environmental conditions

Corona (Partial Discharge Inception Voltage):
200 Vac for 100 Vdc, 200 Vdc
250 Vac for 400 Vdc, 630 Vdc
300 Vac for 1000 Vdc

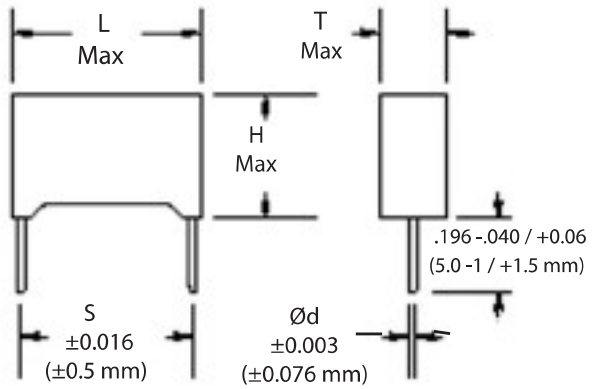
Maximum Pulse Rise Time (dv/dt):

	Pitch (mm)			
Vn	10	15	22.5	27.5
63	3	1.5	1	1
100/160	6/8	3	2	1
250	11	7	4	3
400	20	10	5.5	5
630	30	15	8	7
1000	60	25	15	10

If the working voltage (V) is less than the nominal voltage (Vn), the capacitor can work at higher dv/dt. In this case, the maximum value allowed is obtained by multiplying the above value with the ratio Vn/V.

Type 160 Metallized Polyester Radial Lead Capacitors

Capacitor Outline Drawing



Note: The lead diameter is a maximum dimension for lead spacing ≤15 mm and a nominal for lead spacing >15 mm

Test Method and Performance

Insulation Resistance	
Test Conditions	
Temperature	25 °C ±5 °C
Voltage Charge Time	1 minute
Voltage Charge	50 Vdc for Vn < 100 Vdc
	100 Vdc for Vn ≥ 100 Vdc
Performance	
For Vn > 100 Vdc	≥30,000 MΩ for ≤ 0.33µF
	≥10,000 MΩ x µF for C > 0.33µF
For Vn ≤100 Vdc	≥10,000 MΩ for C ≤ 0.1µF
	≥1,000 MΩ x µF for ≤ 0.1µF

Damp Heat Test	
Test Conditions	
Temperature	+40 °C
Relative Humidity	95%
Test Duration	21 days
Performance	
Capacitance Change ΔC/C	≤ ±5%
DF Change Δtgδ	≤50 x 10^{4} at 1 kHz
Insulation Resistance	≥ 50% of limit value

Soldering	
Test Conditions	
Soldering Temperature	260 °C ±5 °C
Soldering Duration	10 sec ±1 sec
Performance	
Capacitance Change ΔC/C	≤ ±2%
DF Change Δtgδ	≤30 x 10^{-4} at 10 kHz for C ≤1.0 µF
	≤20 x 10^{-4} at 1 kHz for C >1.0 µF

Life Test	
Test Conditions	
Temperature	+85 °C
Test Duration	1000 hrs
Voltage Applied	1.25 x Vn
Performance	
Capacitance Change ΔC/C	≤ ±5%
DF Change Δtgδ	≤30 x 10^{-4} at 10 kHz for C ≤1.0 µF
	≤20 x 10^{-4} at 1 kHz for C >1.0 µF
Insulation Resistance	≥ 50% of limit value

Ratings — RoHS Compliant

Cap (µF)	Catalog Part Number	Inches					Millimeters				
		L	T	H	S	Ød	L	T	H	S	Ød
	63 Vdc										
.22	160224*63D–F	0.512	0.157	0.374	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.27	160274*63D–F	0.512	0.157	0.374	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.33	160334*63E–F	0.512	0.157	0.374	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.39	160394*63E–F	0.512	0.157	0.374	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.47	160474*63E–F	0.512	0.197	0.433	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.56	160564*63D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.68	160684*63D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.68	160684*63G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.82	160824*63E–F	0.512	0.236	0.472	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.82	160824*63H–F	0.709	0.197	0.433	0.591	0.031	18.0	7.5	13.5	15.0	0.8
1.0	160105*63H–F	0.709	0.197	0.433	0.591	0.031	18.0	7.5	13.5	15.0	0.8
1.5	160155*63G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.5	15.0	0.8
2.2	160225*63H–F	0.709	0.295	0.531	0.591	0.031	18.0	7.5	14.0	15.0	0.8
3.3	160335*63M–F	1.043	0.276	0.650	0.886	0.031	18.0	10.0	16.0	15.0	0.8
4.7	160475*63N–F	1.043	0.335	0.669	0.886	0.031	26.5	8.5	17.0	22.5	0.8
6.8	160685*63O–F	1.043	0.394	0.748	0.886	0.031	26.5	10.0	19.0	22.5	0.8
10.0	160106*63P–F	1.260	0.433	0.787	1.083	0.031	26.5	13.0	23.0	22.5	0.8

* Indicates capacitance tolerance: J = ±5%, K = ±10%, M = ±20%

Type 160 Metallized Polyester Radial Lead Capacitors

RoHS Compliant

Cap (µF)	Catalog Part Number	Inches					Millimeters				
		L	T	H	S	Ød	L	T	H	S	Ød
100 Vdc											
.10	160104*100C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.12	160124*100C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.15	160154*100C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.18	160184*100C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.22	160224*100D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.27	160274*100D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.33	160334*100E–F	0.512	0.236	0.472	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.33	160334*100F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.39	160394*100E–F	0.512	0.236	0.472	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.39	160394*100F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.47	160474*100E–F	0.512	0.236	0.472	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.47	160474*100F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.56	160564*100G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.68	160684*100G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.82	160824*100H–F	0.709	0.295	0.531	0.591	0.031	18.0	7.5	13.5	15.0	0.8
1.0	160105*100H–F	0.709	0.295	0.531	0.591	0.031	18.0	7.5	13.5	15.0	0.8
1.5	160155*100M–F	1.043	0.276	0.650	0.886	0.031	26.5	7.0	16.5	22.5	0.8
2.2	160225*100N–F	1.043	0.335	0.669	0.886	0.031	26.5	8.5	17.0	22.5	0.8
3.3	160335*100O–F	1.043	0.394	0.748	0.886	0.031	26.5	10.0	19.0	22.5	0.8
4.7	160475*100P–F	1.260	0.433	0.787	1.083	0.031	32.0	11.0	20.0	27.5	0.8
6.8	160685*100Q–F	1.260	0.512	0.886	1.083	0.031	32.0	13.0	22.5	27.5	0.8
10.0	160106*100S–F	1.457	0.709	1.299	1.083	0.031	37.0	18.0	33.0	27.5	0.8
160 Vdc											
.10	160104*160C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
250 Vdc											
.033	160333*250C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.039	160393*250C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.047	160473*250C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.056	160563*250C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.068	160683*250C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.082	160823*250D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.10	160104*250D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.10	160104*250F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.12	160124*250D–F	0.512	0.236	0.472	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.12	160124*250F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.15	160154*250E–F	0.512	0.236	0.472	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.15	160154*250F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.18	160184*250E–F	0.512	0.236	0.472	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.18	160184*250F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.22	160224*250F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.27	160274*250G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.33	160334*250G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.39	160394*250H–F	0.709	0.295	0.531	0.591	0.031	18.0	7.5	13.5	15.0	0.8
.47	160474*250H–F	0.709	0.295	0.531	0.591	0.031	18.0	7.5	13.5	15.0	0.8
.47	160474*250L–F	1.043	0.236	0.591	0.886	0.031	26.5	6.0	15.0	22.5	0.8
.56	160564*250I–F	0.709	0.335	0.571	0.591	0.031	18.0	8.5	14.5	15.0	0.8
.56	160564*250M–F	1.043	0.276	0.650	0.886	0.031	26.5	7.0	16.5	22.5	0.8
.68	160684*250I–F	0.709	0.335	0.571	0.591	0.031	18.0	8.5	14.5	15.0	0.8
.68	160684*250M–F	1.043	0.276	0.650	0.886	0.031	26.5	7.0	16.5	22.5	0.8
.82	160824*250M–F	1.043	0.335	0.669	0.886	0.031	26.5	8.5	17.0	22.5	0.8

* Indicates capacitance tolerance: J = ±5%, K = ±10%, M = ±20%

Type 160 Metallized Polyester Radial Lead Capacitors

RoHS Compliant

Cap (µF)	Catalog Part Number	Inches					Millimeters				
		L	T	H	S	Ød	L	T	H	S	Ød
250 Vdc											
1.0	160105*250N–F	1.043	0.335	0.669	0.886	0.031	26.5	8.5	17.0	22.5	0.8
1.5	160155*250O–F	1.043	0.394	0.748	0.886	0.031	26.5	10.0	19.0	22.5	0.8
2.2	160225*250P–F	1.260	0.433	0.787	1.083	0.031	32.0	11.0	20.0	27.5	0.8
3.3	160335*250Q–F	1.260	0.512	0.886	1.083	0.031	32.0	13.0	22.5	27.5	0.8
4.7	160475*250R–F	1.260	0.591	1.181	1.083	0.031	32.0	15.0	30.0	27.5	0.8
6.8	160685*250S–F	1.457	0.709	1.299	1.083	0.031	37.0	18.0	33.0	27.5	0.8
400 Vdc											
.012	160123*400C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.015	160153*400C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.018	160183*400C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.022	160223*400C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.027	160273*400C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.033	160333*400D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.039	160393*400D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.047	160473*400E–F	0.512	0.236	0.472	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.047	160473*400F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.056	160563*400F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.068	160683*400F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.082	160823*400F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.10	160104*400G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.12	160124*400G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.15	160154*400H–F	0.709	0.295	0.531	0.591	0.031	18.0	7.5	13.5	15.0	0.8
.15	160154*400L–F	1.043	0.236	0.591	0.886	0.031	26.5	6.0	15.0	22.5	0.8
.18	160184*400L–F	1.043	0.236	0.591	0.886	0.031	26.5	6.0	15.0	22.5	0.8
.22	160224*400L–F	1.043	0.236	0.591	0.886	0.031	26.5	6.0	15.0	22.5	0.8
.27	160274*400M–F	1.043	0.276	0.650	0.886	0.031	26.5	7.0	16.5	22.5	0.8
.33	160334*400M–F	1.043	0.276	0.650	0.886	0.031	26.5	7.0	16.5	22.5	0.8
.39	160394*400N–F	1.043	0.335	0.669	0.886	0.031	26.5	8.5	17.0	22.5	0.8
.47	160474*400N–F	1.043	0.335	0.669	0.886	0.031	26.5	8.5	17.0	22.5	0.8
.56	160564*400O–F	1.043	0.394	0.748	0.886	0.031	26.5	10.0	19.0	22.5	0.8
.68	160684*400P–F	1.260	0.433	0.787	1.083	0.031	32.0	11.0	20.0	27.5	0.8
.82	160824*400P–F	1.260	0.433	0.787	1.083	0.031	32.0	11.0	20.0	27.5	0.8
1.0	160105*400P–F	1.260	0.433	0.787	1.083	0.031	32.0	11.0	20.0	27.5	0.8
1.0	160105*400Q–F	1.260	0.512	0.886	1.083	0.031	32.0	13.0	22.5	27.5	0.8
630 Vdc											
.0039	160392*630C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.0047	160472*630C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.0056	160562*630C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.0068	160682*630C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.0082	160822*630C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.010	160103*630C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.012	160123*630D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.015	160153*630D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.018	160183*630D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.022	160223*630E–F	0.512	0.236	0.472	0.394	0.031	13.0	6.0	12.0	10.0	0.8
.027	160273*630F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.033	160333*630F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.039	160393*630G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.047	160473*630G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.056	160563*630G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8

* Indicates capacitance tolerance: J = ±5%, K = ±10%, M = ±20%

Type 160 Metallized Polyester Radial Lead Capacitors

RoHS Compliant

Cap (µF)	Catalog Part Number	Inches					Millimeters				
		L	T	H	S	Ød	L	T	H	S	Ød
630 Vdc											
.068	160683*630H–F	0.709	0.295	0.531	0.591	0.031	18.0	7.5	13.5	15.0	0.8
.068	160683*630L–F	1.043	0.236	0.591	0.886	0.031	26.5	6.0	15.0	22.5	0.8
.082	160823*630L–F	1.043	0.236	0.591	0.886	0.031	26.5	6.0	15.0	22.5	0.8
.10	160104*630L–F	1.043	0.236	0.591	0.886	0.031	26.5	6.0	15.0	22.5	0.8
.12	160124*630M–F	1.043	0.276	0.650	0.886	0.031	26.5	7.0	16.5	22.5	0.8
.15	160154*630M–F	1.043	0.276	0.650	0.886	0.031	26.5	7.0	16.5	22.5	0.8
.18	160184*630N–F	1.043	0.335	0.669	0.886	0.031	26.5	8.5	17.0	22.5	0.8
.22	160224*630N–F	1.043	0.335	0.669	0.886	0.031	26.5	8.5	17.0	22.5	0.8
.27	160274*630Q–F	1.260	0.512	0.886	1.083	0.031	32.0	13.0	22.5	27.5	0.8
.33	160334*630P–F	1.260	0.433	0.787	1.083	0.031	32.0	11.0	20.0	27.5	0.8
.39	160394*630P–F	1.260	0.433	0.787	1.083	0.031	32.0	11.0	20.0	27.5	0.8
.47	160474*630Q–F	1.260	0.512	0.886	1.083	0.031	32.0	13.0	22.5	27.5	0.8
1000 Vdc											
.0022	160222*1000C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.0027	160272*1000C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.0033	160332*1000C–F	0.512	0.157	0.374	0.394	0.031	13.0	4.0	9.5	10.0	0.8
.0039	160392*1000D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.0047	160472*1000D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.0056	160562*1000D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.0068	160682*1000D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.0082	160822*1000D–F	0.512	0.197	0.433	0.394	0.031	13.0	5.0	11.0	10.0	0.8
.010	160103*1000F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.012	160123*1000F–F	0.709	0.197	0.433	0.591	0.031	18.0	5.0	11.0	15.0	0.8
.015	160153*1000F–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.018	160183*1000G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.022	160223*1000G–F	0.709	0.236	0.472	0.591	0.031	18.0	6.0	12.0	15.0	0.8
.027	160273*1000H–F	0.709	0.295	0.531	0.591	0.031	18.0	7.5	13.5	15.0	0.8
.033	160333*1000L–F	1.043	0.236	0.591	0.886	0.031	26.5	6.0	15.0	22.5	0.8
.039	160393*1000L–F	1.043	0.236	0.591	0.886	0.031	26.5	6.0	15.0	22.5	0.8
.047	160473*1000L–F	1.043	0.236	0.591	0.886	0.031	26.5	6.0	15.0	22.5	0.8
.056	160563*1000M–F	1.043	0.276	0.650	0.886	0.031	26.5	7.0	16.5	22.5	0.8
.068	160683*1000M–F	1.043	0.276	0.650	0.886	0.031	26.5	7.0	16.5	22.5	0.8
.082	160823*1000N–F	1.043	0.335	0.669	0.886	0.031	26.5	8.5	17.0	22.5	0.8
.10	160104*1000N–F	1.043	0.335	0.669	0.886	0.031	26.5	8.5	17.0	22.5	0.8
.12	160124*1000O–F	1.043	0.394	0.748	0.886	0.031	26.5	10.0	19.0	22.5	0.8
.15	160154*1000P–F	1.260	0.433	0.787	1.083	0.031	32.0	11.0	20.0	27.5	0.8
.18	160184*1000Q–F	1.260	0.512	0.886	1.083	0.031	32.0	13.0	22.5	27.5	0.8
.22	160224*1000Q–F	1.260	0.512	0.886	1.083	0.031	32.0	13.0	22.5	27.5	0.8

* Indicates capacitance tolerance: J = ±5%, K = ±10%, M = ±20%

Part Numbering System

160	104	K	100	C	–F
Series	Capacitance	Tolerance	Voltage	Case Code	ROHS Compliant
160	392 = .0039 µF	J = ±5%	100 = 100 Vdc	C	
	103 = .01 µF	K = ±10%	250 = 250 Vdc	D	
	104 = .1 µF	M = ±20%	630 = 630 Vdc	E	
	105 = 1.0 µF		1000 = 1000 Vdc	F	
				etc.	

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Type 168/185 Metallized Polyester Radial Lead Capacitors

Radial Box Metallized Polyester Capacitors for Automatic Insertion



The Type 168/185 series radial lead metallized polyester box capacitors are available in bulk (Type 168) or on ammo pack or tape and reel (Type 185). These capacitors are constructed in rugged rectangular plastic cases and all come with 5.0 mm (0.197") lead spacing. They are good for general purpose applications such as bypass, decoupling, energy storage/discharge and arc suppression.

Highlights

- Case and epoxy fill meets UL94V-0
- 5.0 mm (0.197") lead spacing
- Bulk, tape and reel or ammo pack
- Non-inductively wound
- Non-polar
- Low leakage
- Lead material: Tinned copper wire

Specifications

RoHS Compliant

Capacitance Range: 0.001 µF to 1.0 µF

Voltage Range: 50 Vdc to 400 Vdc

Capacitance Tolerance: ±5%, ±10%, ±20%

Operating Temperature Range: –55 °C to +125 °C (with 50% Vdc derating >85 °C)

Dielectric Withstand Voltage: 1.6 x rated voltage for 2 sec @ +25 °C ±5 °C

Dissipation Factor (DF): $\tan\delta \times 10^{-4}$ at 25 °C ±5 °C

kHz	C ≤0.1 µF	C > 0.1 µF
1	≤100	≤100
10	≤150	≤150
100	≤300	

Total Self Inductance (L): Approximately 7 nH

Long Term Stability (after two years): Capacitance change $\Delta C/C \leq \pm 3\%$ under standard environmental conditions

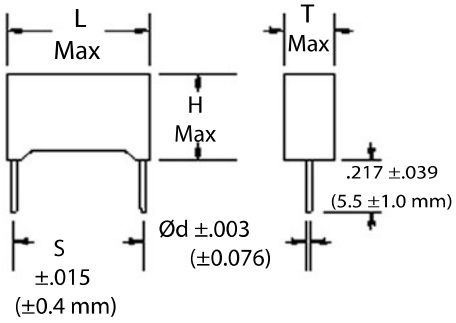
Maximum Pulse Rise Time (dv/dt):

Vn	Capacitance	V/µs
50		4
63		8
100	C > .0068 µF	10
	.0033 µF < C < .0068 µF	15
	C ≤ .0033 µF	30
250		44
400		100

If the working voltage (V) is less than the nominal voltage (Vn), the capacitor can work at higher dv/dt. In this case, the maximum value allowed is obtained by multiplying the above value with the ratio Vn/V.

Type 168/185 Metallized Polyester Radial Lead Capacitors

Capacitor Outline Drawing



Lead length shown is as supplied on the 168 Series

Soldering	
Test Conditions	
Soldering Temperature:	260 °C ±5 °C
Soldering Duration:	10 sec ±1 sec
Performance	
Capacitance Change ΔC/C:	≤ ±2%
DF Change Δtgδ:	≤30 x 10^{-4} at 10 kHz
Insulation Resistance:	≥ limit value

Test Method and Performance

Insulation Resistance	
Test Conditions	
Temperature:	25 °C ±5 °C
Voltage Charge Time:	1 minute
Voltage Charge:	10 Vdc for Vn < 100 Vdc 100 Vdc for Vn ≥ 100 Vdc
Performance	
For Vn > 100 Vdc:	C ≤ 0.33 µF, ≥15,000 MΩ C > 0.33 µF, ≥ 5,000 S
For Vn ≤100 Vdc:	C ≤ 0.33 µF, 30,000 MΩ C > 0.33 µF, ≥ 10,000 S
Damp Heat Test	
Test Conditions	
Temperature:	+40 °C
Relative Humidity:	95%
Test Duration:	21 days
Performance	
Capacitance Change ΔC/C:	±5%
DF Change Δtgδ:	≤ 0.005 (10 KHz)
Insulation Resistance:	≥ 50% of limit value
Life Test	
Test Conditions	REF
Temperature:	+85 °C
Test Duration:	2000 hrs
Voltage Applied:	1.25 x Vn
Performance	
Capacitance Change ΔC/C:	≤ ±2%
DF Change Δtgδ:	≤30 x 10^{-4} at 10 kHz
Insulation Resistance:	≥ 50% of limit value

Ratings — RoHS Compliant

Catalog Part Number	Tape & Reel Ammo Pack	Cap (µF)	Inches					Millimeters				
			L	T	H	S	Ød	L	T	H	S	Ød
50 Vdc												
168104*50A-F	185104*50#A>-F	0.10	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168154*50A-F	185154*50#A>-F	0.15	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168224*50C-F	185224*50#C>-F	0.22	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168334*50C-F	185334*50#C>-F	0.33	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168474*50H-F	185474*50#H>-F	0.47	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168684*50F-F	185684*50#F>-F	0.68	0.283	0.236	0.433	0.197	0.024	7.2	6.0	11.0	5.0	0.6
168824*50G-F	185824*50#G>-F	0.82	0.283	0.236	0.433	0.197	0.024	7.2	6.0	11.0	5.0	0.6
168105*50G-F	185105*50#G>-F	1.00	0.283	0.236	0.433	0.197	0.024	7.2	6.0	11.0	5.0	0.6
63 Vdc												
168473*63A-F	185473*63#A>-F	0.047	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168563*63A-F	185563*63#A>-F	0.056	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168683*63A-F	185683*63#A>-F	0.068	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168823*63A-F	185823*63#A>-F	0.082	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168104*63A-F	185104*63#A>-F	0.10	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168154*63C-F	185154*63#C>-F	0.15	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168184*63C-F	185184*63#C>-F	0.18	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168224*63C-F	185224*63#C>-F	0.22	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168274*63C-F	185274*63#C>-F	0.27	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168334*63H-F	185334*63#H>-F	0.33	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168474*63H-F	185474*63#H>-F	0.47	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168684*63F-F	185684*63#F>-F	0.68	0.283	0.177	0.374	0.197	0.024	7.2	4.5	9.5	5.0	0.6
168105*63G-F	185105*63#G>-F	1.00	0.283	0.236	0.433	0.197	0.024	7.2	6.0	11.0	5.0	0.6

* Indicates capacitance tolerance: J = ±5%, K = ±10%, M = ±20%
# Indicates packaging type: R = Tape and Reel, A = Ammo Pack
> Indicates tooling code: A = 16.5 mm, B = 18.5 mm (See H dimension in taping specifications)

Type 168/185 Metallized Polyester Radial Lead Capacitors

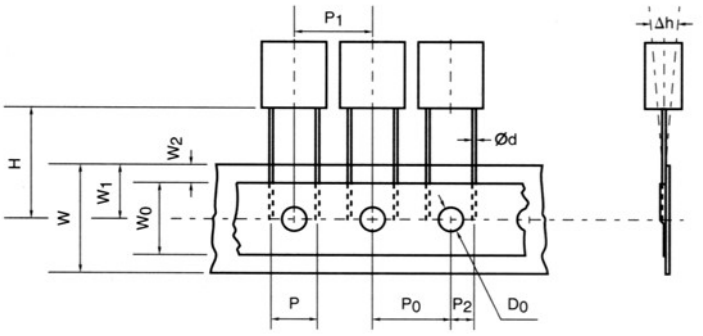
Catalog Part Number	Tape & Reel Ammo Pack	Cap (µF)	Inches					Millimeters				
			L	T	H	S	Ød	L	T	H	S	Ød
100 Vdc												
168102*100A-F	185102*100#A>-F	0.0010	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168152*100A-F	185152*100#A>-F	0.0015	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168222*100A-F	185222*100#A>-F	0.0022	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168272*100A-F	185272*100#A>-F	0.0027	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168332*100A-F	185332*100#A>-F	0.0033	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168392*100A-F	185392*100#A>-F	0.0039	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168472*100A-F	185472*100#A>-F	0.0047	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168562*100A-F	185562*100#A>-F	0.0056	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168682*100A-F	185682*100#A>-F	0.0068	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168822*100A-F	185822*100#A>-F	0.0082	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168103*100A-F	185103*100#A>-F	0.010	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168153*100A-F	185153*100#A>-F	0.015	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168183*100A-F	185183*100#A>-F	0.018	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168223*100A-F	185223*100#A>-F	0.022	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168273*100A-F	185273*100#A>-F	0.027	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168333*100C-F	185333*100#C>-F	0.033	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168393*100C-F	185393*100#C>-F	0.039	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168473*100C-F	185473*100#C>-F	0.047	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168683*100H-F	185683*100#H>-F	0.068	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168104*100H-F	185104*100#H>-F	0.10	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168154*100F-F	185154*100#F>-F	0.15	0.283	0.177	0.374	0.197	0.024	7.2	4.5	9.5	5.0	0.6
168224*100G-F	185224*100#G>-F	0.22	0.283	0.197	0.394	0.197	0.024	7.2	5.0	10.0	5.0	0.6
250 Vdc												
168332*250A-F	185332*250#A>-F	0.0033	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168472*250A-F	185472*250#A>-F	0.0047	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168682*250A-F	185682*250#A>-F	0.0068	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168103*250A-F	185103*250#A>-F	0.010	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168153*250A-F	185153*250#A>-F	0.015	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168223*250C-F	185223*250#C>-F	0.022	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168333*250C-F	185333*250#C>-F	0.033	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168473*250F-F	185473*250#F>-F	0.047	0.283	0.177	0.374	0.197	0.024	7.2	4.5	9.5	5.0	0.6
168683*250F-F	185683*250#F>-F	0.068	0.283	0.177	0.374	0.197	0.024	7.2	4.5	9.5	5.0	0.6
168104*250G-F	185104*250#G>-F	0.100	0.283	0.197	0.394	0.197	0.024	7.2	5.0	10	5.0	0.6
400 Vdc												
168102*400A-F	185102*400#A>-F	0.001	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168152*400A-F	185152*400#A>-F	0.0015	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168222*400A-F	185222*400#A>-F	0.0022	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168332*400C-F	185332*400#C>-F	0.0033	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168472*400C-F	185472*400#C>-F	0.0047	0.283	0.098	0.256	0.197	0.020	7.2	2.5	6.5	5.0	0.5
168682*400C-F	185682*400#C>-F	0.0068	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168103*400F-F	185103*400#F>-F	0.010	0.283	0.138	0.295	0.197	0.020	7.2	3.5	7.5	5.0	0.5
168153*400F-F	185153*400#F>-F	0.015	0.283	0.177	0.374	0.197	0.024	7.2	4.5	9.5	5.0	0.6
168223*400G-F	185223*400#G>-F	0.022	0.283	0.197	0.394	0.197	0.024	7.2	5.0	10	5.0	0.6

* Indicates capacitance tolerance: J = ±5%, K = ±10%, M = ±20%
# Indicates packaging type: R = Tape and Reel, A = Ammo Pack
> Indicates tooling code: A = 16.5 mm, B = 18.5 mm (See H dimension in taping specification)

Type 168/185 Metallized Polyester Radial Lead Capacitors

Tape Specification - 5.0 mm Lead Spacing

Standard EIA-468-B





Reel Packing



Ammo Box Packing

Item	Code	Millimeters	Inches
Lead-to-Lead Distance	P	$5.0^{+0.6-0.2}$	$.197^{+.024-.040}$
Feed Hole Pitch	P_0	$12.7^{\pm0.3}$	$.5^{\pm.012}$
Pitch of Component	P_1	$12.7^{\pm1.0}$	$.5^{\pm.039}$
Hole Center to Lead	P_2	$2.54^{\pm0.7}$	$.100^{\pm.028}$
Feed Hole Center to Component Center	P_3	$6.35^{\pm1.3}$	$.250^{\pm.051}$
Component Alignment, F-R	Δh	$0^{\pm2.0}$	$0^{\pm.079}$
Tape Width	W	$18^{+1.0-0.1}$	$.709^{+.039-.004}$
Hold-down Tape Width	W_0	6.0 min	.236 min
Hole Position	W_1	$9.0^{+0.75-0.05}$	$.355^{+.030-.001}$
Hold-down Tape Position	W_2	3.0 Max	.118 Max
Height of Component from Tape Center	H	>	>
Feed Hole Diameter	D_0	$4.0^{\pm0.3}$	$.157^{\pm.012}$

Case Thickness T	Quantity Reeled	Quantity Ammo Pack
2.5	2500	2000
3.5	1800	1500
4.5	1400	1300
5	1200	1000
6	1000	800

> The H dimension depends on the insertion equipment used. Specify the proper tooling code as indicated below.

Tooling	H Dimensions	
Code	Millimeters	Inches
A	$16.5^{\pm0.75}$	$.679^{\pm0.030}$
B	$18.5^{\pm0.75}$	$.728^{\pm0.030}$

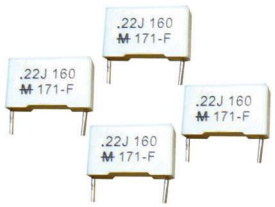
Part Numbering System for Auto Insertion

168/185	104	K	100	R	H	B	–F
				Packaging Type	Internal Code	*Tooling Code	RoHS Compliant
Series	Capacitance	Tolerance	Voltage	(#)	Letter	(>)	Designation
185	102 = .001 µF	J = ±5%	50 = 50 Vdc	A = Ammo		A	
	103 = .01 µF	K = ±10%	63 = 63 Vdc	R = Tape & Reel		B	
	104 = .1 µF	M = ±20%	100 = 100 Vdc				
	105 = 1.0 µF		250 = 250 Vdc				
			400 = 400 Vdc				

* Tooling code (>) depends on the users insertion equipment requirements. See table for available options.

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Radial Box Metallized Polypropylene Capacitors



Type 171 radial leaded, box, metallized polypropylene capacitors are available in five pitch sizes and have a flame retardant case and epoxy encapsulant that meets UL94V-0. The Type 171 is an excellent choice for applications requiring low dielectric losses, high insulation resistance in an AC or DC environment. The polypropylene direlectric gives this capacitor excellent pulse rise time (dv/dt) performance.

Highlights

- High dv/dt
- Low leakage
- Radial leaded (7.5, 10, 15, 22.5, 27.5 mm pitch)
- Flame retardant case and encapsulant meets UL94V-0
- Non-inductively wound

RoHS Compliant

Specifications

Capacitance Range: 0.0022 to 3.3 µF

Voltage Range: 160 to 630 Vdc (90 to 250 Vac, 60 Hz)

Capacitance Tolerance: ±5%, ±10%, ±20%

Operating Temperature Range: –55 ºC to +105 ºC (derate linearly to 50% rated voltage from 85 ºC to 105 ºC)

Dielectric Withstand Voltage: 1.6 x rated voltage for 2 s @ +25 ºC ±5 ºC

Dissipation Factor (DF): tgd x 10^{-4} at +25 ºC ±5 ºC

kHz	C ≤0.1 µF	0.1 µF <C ≤1 µF	C >1 µF
1	≤6	≤6	≤6
10	≤10	≤20	—
100	≤30	—	—

Insulation Resistance: 100,000 MΩ x µF, 200,000 MΩ Min.

Self Inductance: 2 mm lead length - total self inductance

Pitch (mm)	7.5	10	15	22.5	27.5
L (nH) ≈	8	9	10	18	18

Life Test: 2000 hrs @ 85 ºC 1.25 x Vn

Damp Heat Test: 95% RH @ +40 ºC for 56 days

Soldering: 260 ºC ±5 ºC for 10 s ±1 s

Long Term Storage Stability: ΔC/C ≤ ±0.5% after 2 years

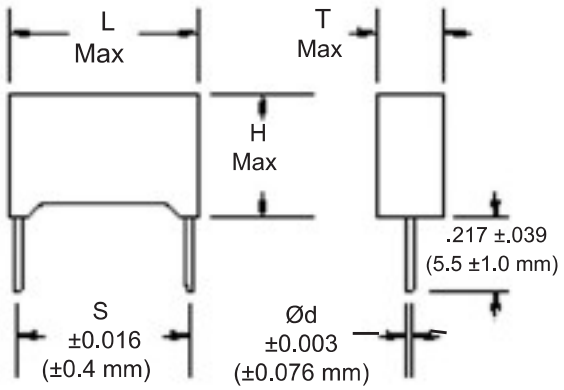
Maximum Pulse Rise Time dv/dt (V/µ):

Vn	Lead Spacing (Pitch)				
	7.5	10	15	22.5	27.5
160	5.5	4	2	1.5	1
250	15	11	7	4	3
400	35	20	10	5.5	5
630	55	30	15	8	7

If the working voltage (V) is less than the nominal voltage (Vn), the capacitor can work at higher dv/dt. In this case, the maximum value allowed is obtained by multiplying the above value (See table dv/dt) with the ratio Vn/V

Type 171 Radial Leaded Metallized Polypropylene

Outline Drawing



Ratings

RoHS Compliant

Cap (µF)	Catolog Part Number	Inches (mm)					ESR (mΩ) 20 kHz to 100 kHz	IRMS (Amps)		
		L Max	T Max	H Max	S (Pitch)	Ød		25 °C	45 °C	85 °C
160 Vdc / 90 Vac 60 Hz										
0.033	171333*160B-F	0.413 (10.5)	0.157 (4.0)	0.374 (9.5)	0.295 (7.5)	0.024 (0.6)	Not applicable. These capacitance values are not customarily used in switched-mode power supplies			
0.047	171473*160B-F	0.413 (10.5)	0.157 (4.0)	0.374 (9.5)	0.295 (7.5)	0.024 (0.6)				
0.047	171473*160C-F	0.512 (13.0)	0.157 (4.0)	0.374 (9.5)	0.394 (10)	0.024 (0.6)				
0.068	171683*160C7-F	0.413 (10.5)	0.197 (5.0)	0.433 (11.0)	0.295 (7.5)	0.024 (0.6)				
0.068	171683*160D-F	0.512 (13.0)	0.197 (5.0)	0.433 (11.0)	0.394 (10.0)	0.024 (0.6)				
0.1	171104*160C7-F	0.413 (10.5)	0.197 (5.0)	0.433 (11.0)	0.295 (7.5)	0.024 (0.6)				
0.1	171104*160E-F	0.512 (13.0)	0.236 (6.0)	0.472 (12.0)	0.394 (10.0)	0.024 (0.6)				
0.15	171154*160D7-F	0.413 (10.5)	0.236 (6.0)	0.472 (12.0)	0.295 (7.5)	0.024 (0.6)				
0.15	171154*160E-F	0.512 (13.0)	0.236 (6.0)	0.472 (12.0)	0.394 (10)	0.024 (0.6)				
0.22	171224*160F-F	0.709 (18.0)	0.197 (5.0)	0.433 (11.0)	0.591 (15.0)	0.031 (0.8)				
0.33	171334*160G-F	0.709 (18.0)	0.236 (6.0)	0.472 (12.0)	0.591 (15.0)	0.031 (0.8)				
0.47	171474*160H-F	0.709 (18.0)	0.295 (7.5)	0.531 (13.5)	0.591 (15.0)	0.031 (0.8)	37	3.7	3.1	1.4
0.68	171684*160L -F	1.043 (26.5)	0.236 (6.0)	0.591 (15.0)	0.886 (22.5)	0.031 (0.8)	33	4.1	3.5	1.6
1.0	171105*160N-F	1.043 (26.5)	0.335 (8.5)	0.669 (17.0)	0.886 (22.5)	0.031 (0.8)	26	5.5	4.7	2.6
1.5	171155*160O-F	1.043 (26.5)	0.394 (10.0)	0.748 (19.0)	0.886 (22.5)	0.031 (0.8)	20	6.1	5.1	3.1
2.2	171225*160P-F	1.26 (32.0)	0.433 (11.0)	0.787 (20.0)	1.083 (27.5)	0.031 (0.8)	18	6.3	5.7	3.3
3.3	171335*160Q-F	1.26 (32.0)	0.512 (13.0)	0.886 (22.5)	1.083 (27.5)	0.031 (0.8)	16	7.4	6.4	3.6
250 Vdc / 90 Vac 60 Hz										
0.015	171153*250B-F	0.413 (10.5)	0.157 (4.0)	0.374 (9.5)	0.295 (7.5)	0.024 (0.6)	Not applicable. These capacitance values are not customarily used in switched-mode power supplies			
0.022	171223*250B-F	0.413 (10.5)	0.157 (4.0)	0.374 (9.5)	0.295 (7.5)	0.024 (0.6)				
0.022	171223*250C-F	0.512 (13.0)	0.157 (4.0)	0.374 (9.5)	0.394 (10)	0.024 (0.6)				
0.033	171333*250C-F	0.512 (13.0)	0.157 (4.0)	0.374 (9.5)	0.394 (10)	0.024 (0.6)				
0.047	171473*250D-F	0.512 (13.0)	0.197 (5.0)	0.433 (11.0)	0.394 (10)	0.024 (0.6)				
0.068	171683*250E-F	0.512 (13.0)	0.236 (6.0)	0.472 (12.0)	0.394 (10)	0.024 (0.6)				

* indicates capacitance tolereance, J = ±5%, K = ±10%, M = ±20%

RoHS Compliant

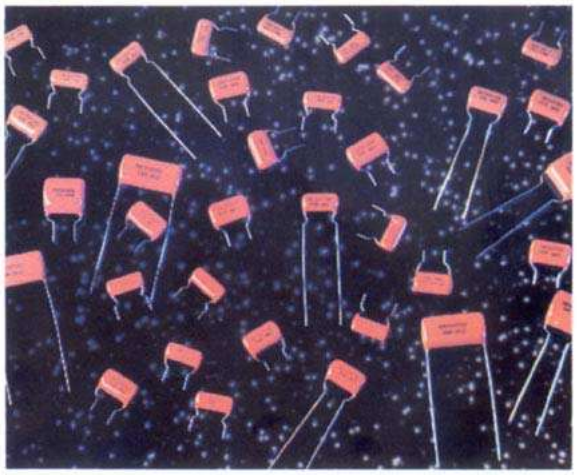
Ratings

Cap (µF)	Catolog Part Number	Inches (mm)					ESR (mΩ) 20 kHz to 100 kHz	IRMS (Amps)		
		L Max	T Max	H Max	S (Pitch)	Ød		25 °C	45 °C	85 °C
250 Vdc / 90 Vac 60 Hz										
0.10	171104*250F-F	0.709 (18.0)	0.197 (5.0)	0.433 (11.0)	0.591 (15.0)	0.031 (0.8)	Not applicable			
0.15	171154*250G-F	0.709 (18.0)	0.236 (6.0)	0.472 (12.0)	0.591 (15.0)	0.031 (0.8)				
0.22	171224*250H-F	0.709 (18.0)	0.295 (7.5)	0.531 (13.5)	0.591 (15.0)	0.031 (0.8)				
0.33	171334*250L-F	1.043 (26.5)	0.236 (6.0)	0.591 (15.0)	0.886 (22.5)	0.031 (0.8)				
0.47	171474*250M-F	1.043 (26.5)	0.276 (7.0)	0.650 (16.5)	0.886 (22.5)	0.031 (0.8)	35	3.8	3.6	1.7
0.68	171684*250Q-F	1.26 (32.0)	0.512 (13.0)	0.886 (22.5)	1.083 (27.5)	0.031 (0.8)	32	4	3.8	1.9
1.0	171105*250P-F	1.26 (32.0)	0.433 (11.0)	0.787 (20.0)	1.083 (27.5)	0.031 (0.8)	28	4.4	4.4	3.2
1.5	171155*250Q-F	1.26 (32.0)	0.512 (13.0)	0.886 (22.5)	1.083 (27.5)	0.031 (0.8)	26	5.1	4.9	3.5
400 Vdc / 220 Vac 60 Hz										
0.0068	171682*400B-F	0.413 (10.5)	0.157 (4.0)	0.374 (9.5)	0.295 (7.5)	0.024 (0.6)	Not applicable. These capacitance values are not customarily used in switched-mode power supplies			
0.010	171103*400B-F	0.413 (10.5)	0.157 (4.0)	0.374 (9.5)	0.295 (7.5)	0.024 (0.6)				
0.010	171103*400C-F	0.512 (13.0)	0.157 (4.0)	0.374 (9.5)	0.394 (10.0)	0.024 (0.6)				
0.015	171153*400D-F	0.512 (13.0)	0.197 (5.0)	0.433 (11.0)	0.394 (10.0)	0.024 (0.6)				
0.022	171223*400D-F	0.512 (13.0)	0.197 (5.0)	0.433 (11.0)	0.394 (10.0)	0.024 (0.6)				
0.033	171333*400E-F	0.512 (13.0)	0.236 (6.0)	0.472 (12.0)	0.394 (10.0)	0.024 (0.6)				
0.047	171473*400F-F	0.709 (18.0)	0.197 (5.0)	0.433 (11.0)	0.591 (15.0)	0.031 (0.8)				
0.068	171683*400G-F	0.709 (18.0)	0.236 (6.0)	0.472 (12.0)	0.591 (15.0)	0.031 (0.8)				
0.10	171104*400H-F	0.709 (18.0)	0.295 (7.5)	0.531 (13.5)	0.591 (15.0)	0.031 (0.8)				
0.15	171154*400I-F	0.709 (18.0)	0.335 (8.5)	0.571 (14.5)	0.591 (15.0)	0.031 (0.8)				
0.22	171224*400N-F	1.043 (26.5)	0.335 (8.5)	0.669 (17.0)	0.886 (22.5)	0.031 (0.8)				
0.33	171334*400O-F	1.043 (26.5)	0.394 (10.0)	0.748 (19.0)	0.886 (22.5)	0.031 (0.8)				
0.47	171474*400P-F	1.26 (32.0)	0.433 (11.0)	0.787 (20.0)	1.083 (27.5)	0.031 (0.8)	32	5.7	5	2.2
0.68	171684*400Q-F	1.26 (32.0)	0.512 (13.0)	0.886 (22.5)	1.083 (27.5)	0.031 (0.8)	30	5.7	5.5	2.4
630 Vdc / 250 Vac 60 Hz										
0.0022	171222*630B-F	0.413 (10.5)	0.157 (4.0)	0.374 (9.5)	0.295 (7.5)	0.024 (0.6)	Not applicable. These capacitance values are not customarily used in switched-mode power supplies			
0.0022	171222*630C-F	0.512 (13.0)	0.157 (4.0)	0.374 (9.5)	0.394 (10.0)	0.024 (0.6)				
0.0033	171332*630B-F	0.413 (10.5)	0.157 (4.0)	0.374 (9.5)	0.295 (7.5)	0.024 (0.6)				
0.0033	171332*630C-F	0.512 (13.0)	0.157 (4.0)	0.374 (9.5)	0.394 (10.0)	0.024 (0.6)				
0.0047	171472*630B-F	0.413 (10.5)	0.157 (4.0)	0.374 (9.5)	0.295 (7.5)	0.024 (0.6)				
0.0047	171472*630C-F	0.512 (13.0)	0.157 (4.0)	0.374 (9.5)	0.394 (10.0)	0.024 (0.6)				
0.0068	171682*630D-F	0.512 (13.0)	0.197 (5.0)	0.433 (11.0)	0.394 (10.0)	0.024 (0.6)				
0.010	171103*630D-F	0.512 (13.0)	0.197 (5.0)	0.433 (11.0)	0.394 (10.0)	0.024 (0.6)				
0.015	171153*630E-F	0.512 (13.0)	0.236 (6.0)	0.472 (12.0)	0.394 (10.0)	0.024 (0.6)				
0.022	171223*630F-F	0.709 (18.0)	0.197 (5.0)	0.433 (11.0)	0.591 (15.0)	0.031 (0.8)				
0.033	171333*630G-F	0.709 (18.0)	0.236 (6.0)	0.472 (12.0)	0.591 (15.0)	0.031 (0.8)				
0.047	171473*630H-F	0.709 (18.0)	0.295 (7.5)	0.531 (13.5)	0.591 (15.0)	0.031 (0.8)				
0.068	171683*630I-F	0.709 (18.0)	0.335 (8.5)	0.571 (14.5)	0.591 (15.0)	0.031 (0.8)				
0.10	171104*630N-F	1.043 (26.5)	0.335 (8.5)	0.669 (17.0)	0.886 (22.5)	0.031 (0.8)				
0.15	171154*630O-F	1.043 (26.5)	0.394 (10.0)	0.748 (19.0)	0.886 (22.5)	0.031 (0.8)				
0.22	171224*630P-F	1.26 (32.0)	0.433 (11.0)	0.787 (20.0)	1.083 (27.5)	0.031 (0.8)				
0.33	171334*630Q-F	1.26 (32.0)	0.512 (13.0)	0.886 (22.5)	1.083 (27.5)	0.031 (0.8)				

* indicates capacitance tolereance, J = ±5%, K = ±10%, M = ±20%

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Type 225P, Orange Drop®, Polyester Film/Foil Capacitors



Features

- Radial-lead. Pressed profile.
- Non-inductively wound, extended foil construction.
- Over 35 years of proven dependability.
- Wide availability through CDE Distribution.

Specifications

Capacitance Range:
.00 to 1.0 µF

Capacitance Tolerance:
±5%, ±10%, ±20%

Voltage Ratings:
100 to 600 Volts DC

Operating Temperature Range:
-55°C to +85°C (at full voltage)

Voltage Derating:
At +105°C, 70% of +85°C rating.
At +125°C, 50% of +85°C rating.

Lead Wire:
Tinned copper-clad steel,
.032 (0.8) diameter, #20 AWG

Insulation Resistance:

At +25°C:	100,000 MΩ for ≤ .25 µF
	25,000 MΩ-µF for C > .25 µF
At +85°C:	10,000 MΩ for C ≤ .15 µF
	1,500MΩ-µF for C >.15 µF
At+105°C:	1.500 MΩ for C ≤ .17 µF
	250 MΩ-µF for C > .17µF
At +125°C:	200 MΩ for C ≤ .13 µF
	25 MΩ-µF for C >.13 µF

Dissipation Factor:
0.75% Maximum @ 1 KHz, +25°C

Encapsulation:
Conformal coating of orange, flame retardant epoxy. Meets UL94V-0 specifications.

Dielectric/Construction:
Polyester film, single section design. Non-inductively wound with extended aluminum foil.

Dimensions in inches, metric (mm) in parenthesis.

General Specifications

The Type 225P Orange Drop® is designed and manufactured for operation in a wide range of demanding environments and applications. Type 225P capacitors are wound from the most reliable polyester film and aluminum foil available and are protected by a rugged conformal coating of orange epoxy. They may be operated up to +125 °C with proper derating.

The combination of proven dependability and extensive availability through CDE distribution make the 225P an ideal choice for many commercial and industrial electronic applications, from power supplies and instrumentation to audio amplifiers and test equipment.

Operating Temperature Range:

The standard operating temperature range for polyester film is -55°C to +85°C. The 225P may be operated at full voltage within this temperature range.

The 225P may be operated up to +105°C provided the DC working voltage is reduced to 70% of the +85°C rating (full rating), and up to +125°C with a 50% reduction from the +85°C rating (full rating).

For more specific details regarding operation above +85°C please contact our design engineering department.

The maximum operating temperature for the 225P polyester film capacitors is +125°C.

Dielectric Withstanding Voltage:

Units shall withstand a DC potential of 250% of rated voltage applied between terminals for not more than 5 seconds.

Lead Bend Test:

After 3 consecutive 180° bends. No damage.

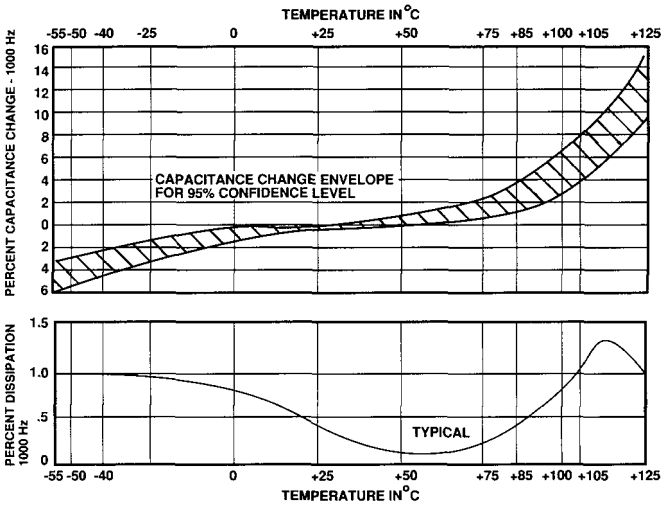
Humidity Testing:

Units subjected to 95% relative humidity for 72 hours with no voltage applied at +75°C. After 4 hours of drying minimum product of insulation resistance and capacitance shall be 5,000 MΩ-μF.

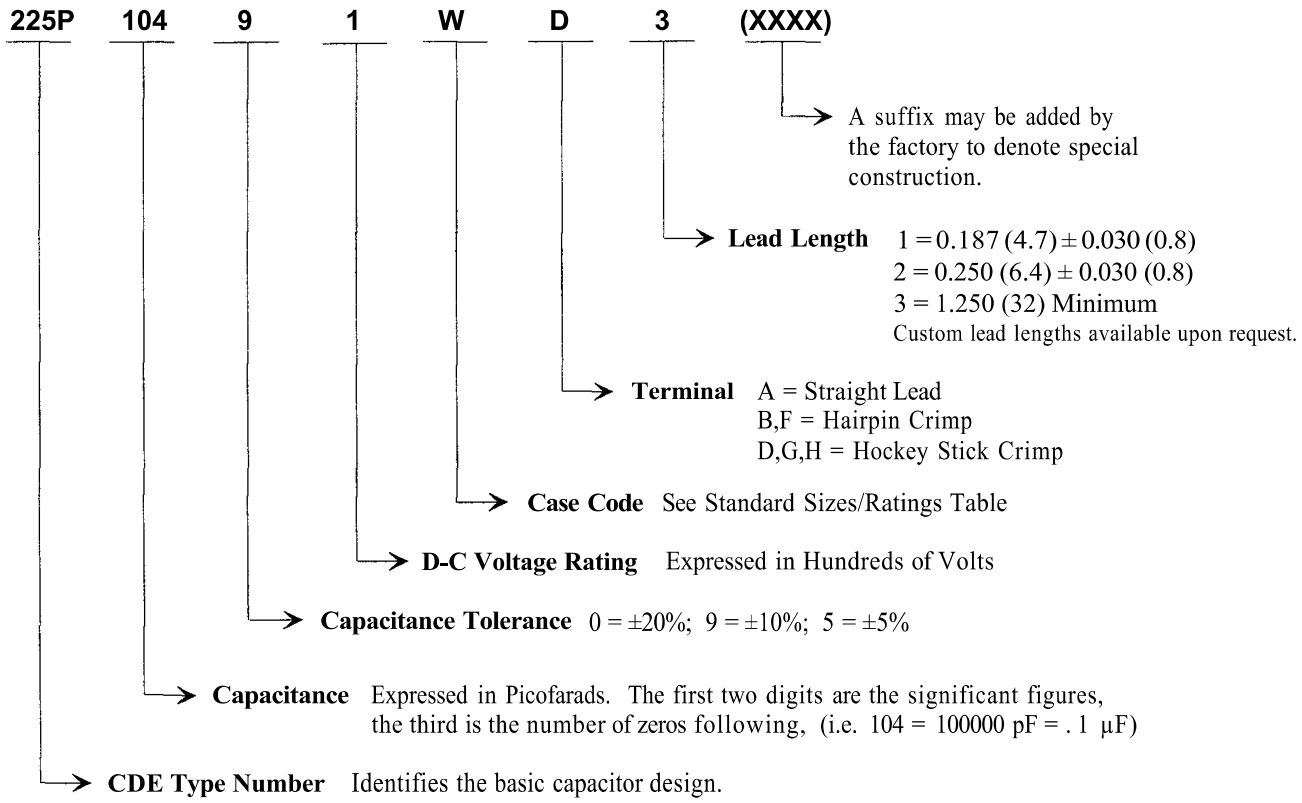
DC Voltage Life Test:

500 hours at +85°C at 150% of rated voltage. After test; capacitance shall not have changed by more than ±5% of initial value, insulation resistance shall not have decreased by more than 50% of initial value and dissipation factor shall not have increased to more than 1.0%. In addition, there should be no open or short circuits, and no sign of visible damage.

Typical Temperature Characteristics:



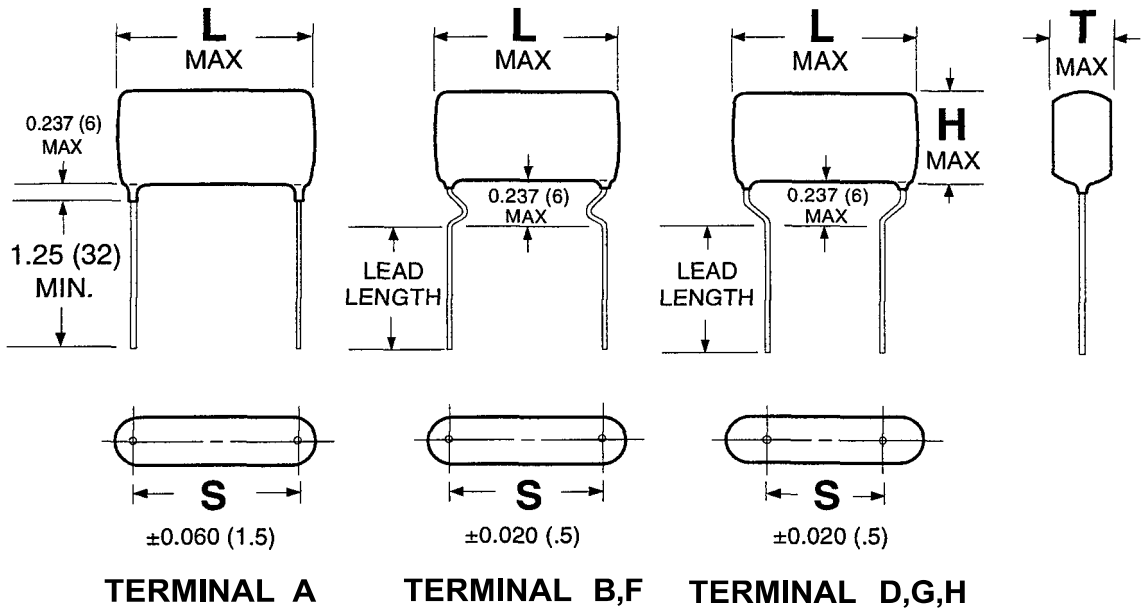
Ordering/Part Number information



Standard Marking Format

Sample Marking on unit	Description	Tolerance codes per EIA Standards
CDE225P100V 104K 9810	CDE - CDE Electronics identification 225P - Type number 100V - D-C Voltage rating, Volts 104K - Capacitance and tolerance code 9810 - Weekly date code (i.e. 10th week of 1998)	J ±5% K ±10% M ±20%

Standard Lead Styles



Standard Lead Spacings

CASE CODE	S					
	Term. A	Term. B	Term. D	Term. F	Term. G	Term. H
W	0.562 (14.3)	0.562 (14.3)	0.375 (9.5)	0.394 (10)	0.295 (7.5)	0.197 (5)
X	0.613 (15.6)	0.613 (15.6)	0.375 (9.5)	0.590 (15)	0.394 (10)	0.295 (7.5)
Y	0.969 (24.6)	0.969 (24.6)	0.719 (18.3)	0.886 (22.5)	0.590 (15)	---

Dimensions in inches, metric (mm) in parenthesis.

Type 225P Standard Sizes/Ratings[2]

Value, µF	Part Number[1]	L MAX	T MAX	H MAX	Value, µF	Part Number[1]	L MAX	T MAX	H MAX
100 VDC					200 VDC				
.001	225P10291W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.001	225P10292X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0012	225P12291W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.0012	225P12292X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0015	225P15291W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.0015	225P15292X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0018	225P18291W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.0018	225P18292X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0022	225P22291W	.70 (17.8)	.25 (6,4)	.35 (8.9)	.0022	225P22292X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0027	225P27291W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.0027	225P27292X	.80 (20.3)	.25 (6.4)	.55 (14.0)
					.0033	225P33292X	.80 (20.3)	.25 (6,4)	.55 (14.0)
.0033	225P33291W	.70 (17.8)	.25 (6.4)	.35 (8.9)					
.0039	225P39291W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.0039	225P39292X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0047	225P47291W	.70 (17,8)	.25 (6.4)	.35 (8.9)	.0047	225P47292X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0056	225P56291W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.0056	225P56292X	.80 (20.3)	.25 (6.4)	.58 (14.7)
.0068	225P68291W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.0068	225P68292X	.80 (20.3)	.25 (6.4)	.58 (14.7)
.0082	225P82291W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.0082	225P82292X	.80 (20.3)	.25 (6.4)	.58 (14.7)
					.01	225P10392X	.80 (20.3)	.25 (6.4)	.58 (14.7)
.01	225P10391W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.012	225P12392X	.80 (20.3)	.25 (6.4)	.58 (14.7)
.012	225P12391W	.70 (17.8)	.25 (6.4)	.35 (8.9)					
.015	225P15391W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.015	225P15392X	.80 (20.3)	.25 (6.4)	.58 (14.7)
.018	225P18391W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.018	225P18392X	.80 (20.3)	.25 (6.4)	.58 (14.7)
.022	225P22391W	.70 (17.8)	.25 (6.4)	.35 (8.9)	.022	225P22392X	.80 (20.3)	.25 (6.4)	.58 (14.7)
.027	22SP27391W	.70 (17.8)	.27 (6.9)	.37 (9.4)	.027	225P27392X	.80 (20.3)	.28 (7.1)	.61 (15.5)
					.033	225P33392X	.80 (20.3)	.28 (7.1)	.61 (15.5)
.033	225P33391W	.70 (17.8)	.27 (6,9)	.37 (9.4)	.039	225P39392X	.80 (20.3)	.28 (7.1)	.61 (15.5)
.039	225P39391W	.70 (17.8)	.30 (7.6)	.42 (10.7)	.047	225P47392X	.80 (20.3)	.28 (7.1)	.61 (15.5)
.047	225P47391W	.70 (17.8)	.30 (7.6)	.42 (10.7)					
.056	225P56391W	.70 (17.8)	.34 (8.6)	.49 (12.4)	.056	225P56392X	.80 (20.3)	.31 (7.9)	.64 (16.3)
.068	225P68391W	.70 (17.8)	.34 (8.6)	.49 (12.4)	.068	225P68392X	.80 (20.3)	.31 (7,9)	.64 (16.3)
.082	225P82391W	.70 (17.8)	.40 (10.2)	.55 (14.0)	.082	225P82392X	.80 (20.3)	.34 (8.6)	.67 (17.0)
.1	225P10491W	.70 (17.8)	.40 (10.2)	.55 (14.0)	.1	225P10492X	.80 (20.3)	.37 (9.4)	.71 (18.0)
					.12	225P12492X	.80 (20.3)	.39 (9.9)	.72 (18.3)
.12	225P12491X	.80 (20.3)	.37 (9.4)	.57 (14.5)	.15	225P15492X	.80 (20.3)	.41 (10.4)	.74 (18.8)
.15	225P15491X	.80 (20.3)	.40 (10.2)	.62 (15.7)	.18	225P18492X	.80 (20.3)	.46 (11.7)	.75 (19.1)
.18	225P18491X	.80 (20.3)	.43 (10.9)	.66 (16.8)	.22	225P22492X	.80 (20.3)	.48 (12.2)	.77 (19.6)
.22	225P22491X	.80 (20.3)	.46 (11.7)	.70 (17.8)					
.27	225P27491X	.80 (20.3)	.49 (12.4)	.74 (18.8)	.27	225P27492Y	1.25 (31.8)	.39 (9.9)	.71 (18.0)
.33	225P33491X	.80 (20.3)	.52 (13.2)	.77 (19.6)	.33	225P33492Y	1.25 (31.8)	.41 (10.4)	.71 (18.0)
.39	225P39491X	.80 (20.3)	.55 (14.0)	.81 (20.6)	.39	225P39492Y	1.25 (31.8)	.45 (11.4)	.77 (19.6)
.47	225P47491X	.80 (20.3)	.60 (15.2)	.86 (21.8)	.47	225P47492Y	1.25 (31.8)	.50 (12.7)	.83 (21.1)
					.56	225P56492Y	1.25 (31.8)	.67 (17.0)	.99 (25.1)
.56	225P56491Y	1.25 (31.8)	.55 (14.0)	.88 (22.4)	.68	225P68492Y	1.25 (31.8)	.84 (21.3)	1.14 (29.0)
.68	225P68491Y	1.25 (31.8)	.58 (14.7)	.90 (22.9)					
.82	225P82491Y	1.25 (31.8)	.65 (16.5)	.94 (23.9)					
1.0	225P10591Y	1.25 (31.8)	.72 (18.3)	.98 (24.9)					

[1] To complete part number for specific tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

[2] Shaded part numbers, when ordered as ±10% tolerance with the D3 terminal style and lead length, are Standard Stock items available through the CDE Distribution Network. For complete part number please add the D3 suffix to the above part numbers in accordance with the Ordering Information (i.e. 225P10491WD3). Other part numbers are available on special order.

Dimensions in inches, metric (mm) in parenthesis.

Type 225P Standard Sizes/Ratings[2]

Value, µF	Part Number[1]	L MAX	T MAX	H MAX	Value, µF	Part Number[1]	L MAX	T MAX	H MAX
400 VDC					600 VDC				
.001	225P10294X	.80 (20.3)	.25 (6.4)	.55(14.0)	.001	225P10296X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0012	225P12294X	.80 (20.3)	.25 (6.4)	.55(14.0)	.0012	225P12296X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0015	225P15294X	.80 (20.3)	.25 (6.4)	.55(14.0)	.0015	225P15296X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0018	225P18294X	.80 (20.3)	.25 (6.4)	.55(14.0)	.0018	225P18296X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0022	225P22294X	.80 (20.3)	.25 (6,4)	.55(14.0)	.0022	225P22296X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0027	225P27294X	.80 (20.3)	.25 (6.4)	.55(14.0)	.0027	225P27296X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0033	225P33294X	.80 (20.3)	.25 (6.4)	.55(14.0)	.0033	225P33296X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0039	225P39294X	.80 (20.3)	.25 (6.4)	.55(14.0)	.0039	225P39296X	.80 (20.3)	.25 (6.4)	.55 (14.0)
.0047	225P47294X	.80 (20.3)	.25(6.4)	.55 (14.0)	.0047	225P47296X	.80 (20.3)	.25 (6.4)	.58 (14.7)
.0056	225P56294X	.80 (20.3)	.25 (6.4)	.58(14.7)	.0056	225P56296X	.80 (20.3)	.25 (6.4)	.58 (14.7)
.0068	225P68294X	.80 (20.3)	.25 (6.4)	.58(14.7)	.0068	225P68296X	.80 (20.3)	.25 (6.4)	.58 (14.7)
.0082	225P82294X	.80 (20.3)	.25 (6.4)	.58(14.7)	.0082	225P82296X	.80 (20.3)	.31 (7.9)	.64 (16.3)
.01	225P10394X	.80 (20.3)	.25 (6.4)	.58 (14.7)	.01	225P10396X	.80 (20.3)	.31 (7.9)	.64 (16.3)
.012	225P12394X	.80 (20.3)	.25 (6.4)	.58 (14.7)	.012	225P12396X	.80 (20.3)	.34 (8.6)	.67 (17.0)
.015	225P15394X	.80 (20.3)	.28 (7.1)	.58(14.7)	.015	225P15396X	.80 (20.3)	.34 (8.6)	.67 (17.0)
.018	225P18394X	.80 (20.3)	.31 (7.9)	.58 (14.7)	.018	225P18396X	.80 (20.3)	.37 (9.4)	.74 (18.8)
.022	225P22394X	.80 (20.3)	.31 (7.9)	.58(14.7)	.022	225P22396X	.80 (20.3)	.37 (9.4)	.74 (18.8)
.027	225P27394X	.80 (20.3)	.34 (8.6)	.65(16.5)	.027	225P27396X	.80 (20.3)	.44 (11.2)	.77 (19.6)
.033	225P33394X	.80 (20.3)	.34 (8.6)	.65(16.5)	.033	225P33396X	.80 (20.3)	.44 (11.2)	.77 (19.6)
.039	225P39394X	.80 (20.3)	.41 (10.4)	.65(16.5)	.039	225P39396X	.80 (20.3)	.50 (12.7)	.83 (21.1)
.047	225P47394X	.80 (20.3)	.41 (10.4)	.65(16.5)	.047	225P47396X	.80 (20.3)	.50 (12.7)	.83 (21.1)
.056	225P56394X	.80 (20.3)	.47(11.9)	.80 (20.3)	.056	225P56396Y	1.25(31.8)	.47 (11.9)	.82 (20.8)
.068	225P68394X	.80 (20.3)	.47(11.9)	.80 (20.3)	.068	225P68396Y	1.25(31.8)	.47 (11.9)	.82 (20.8)
.082	225P82394X	.80 (20.3)	.50 (12.7)	.82 (20.8)	.082	225P82396Y	1.25(31.8)	.53 (13.5)	.88 (22.4)
.1	225P10494X	.80 (20.3)	.52(13.2)	.84(21.3)	.1	225P10496Y	1.25(31.8)	.56 (14.2)	.91 (23.1)
.12	225P12494Y	1.25(31.8)	.44(11.2)	.77(19.6)	.12	225P12496Y	1.25(31.8)	.60 (15.2)	.92 (23.4)
.15	225P15494Y	1.25(31.8)	.47(11.9)	.80 (20.3)	.15	225P15496Y	1.25(31.8)	.62 (15.7)	.94 (23.9)
.18	225P18494Y	1.25(31.8)	.52(13.2)	.84(21.3)	.18	225P18496Y	1.25(31.8)	.70 (17.8)	1.02 (25.9)
.22	225P22494Y	1.25(31.8)	.56(14.2)	.89 (22.6)	.22	225P22496Y	1.25(31.8)	.76 (19.3)	1.10 (27.9)
.27	225P27494Y	1.25(31.8)	.69 (17.5)	.91 (23.1)					
.33	225P33494Y	1.25(31.8)	.72 (18.3)	.99 (25.1)					
.39	225P39494Y	1.25(31.8)	.75(19.1)	1.10(27.9)					
.47	225P47494Y	1.25(31.8)	.84(21.3)	1.14(29.0)					

To complete part number for specific tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

[2] Shaded part numbers, when ordered as ±10% tolerance with the D3 terminal style and lead length, are Standard Stock items available through the CDE Distribution Network. For complete part number please add the D3 suffix to the above part numbers in accordance with the Ordering Information (i.e. 225P10491WD3). Other part numbers are available on special order.

Dimensions in inches, metric (mm) in parenthesis.

dV/dt Specifications

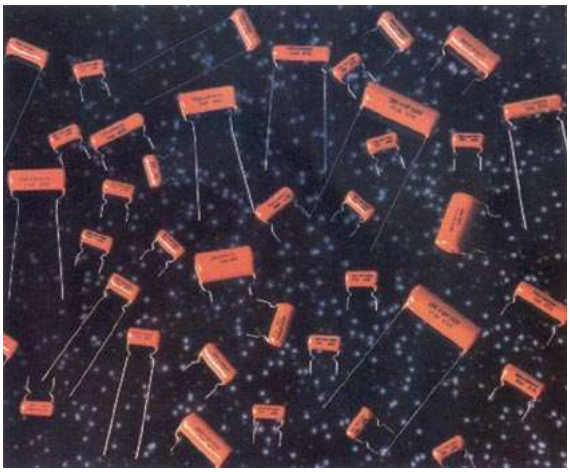
Maximum Pulse Rise Time (dV/dt) in Volts/µsec

Cap Value (µF)	100V	200V	400V	600V
.001	12200	14800	21000	23300
.0012	11100	13500	19100	21300
.0015	9900	12100	17100	19000
.0018	9100	11100	15600	17400
.0022	8200	10000	14100	15700
.0027	7400	9000	12800	14200
.0033	6700	8200	11500	12800
.0039	6200	7500	10600	11800
.0047	5600	6800	9700	10700
.0056	5100	6300	8900	9800
.0068	4700	5700	8000	8900
.0082	4200	5200	7300	8100
.01	3800	4700	6600	7400
.012	3500	4300	6100	6700
.015	3100	3800	5400	6000
.018	2900	3500	4900	5500
.022	2600	3200	4500	5000
.027	2300	2900	4000	4500
.033	2100	2600	3700	4100
.039	1900	2400	3400	3700
.047	1800	2200	3100	3400
.056	1600	2000	2800	3100
.068	1500	1800	2500	2800
.082	1300	1600	2300	2300
.1	1200	1500	2100	2100
.12	1000	1400	1900	1900
.15	900	1200	1500	1700
.18	800		1400	1600
.22	700	1000	1300	1400
.27	700	800	1200	
.33	600	700	1000	
.39	600	700	1000	
.47	500	600	900	
.56	400	600		
.68	400	500		
.82	400			
1.0	300			

Note: dV/dt ratings based on measurements made at the junction of the wire leads and capacitor body.

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Type 418P Orange Drop® Round Profile Polyester Film/Foil Capacitors



Features

- Radial-lead. Round profile.
- Non-inductively wound, extended foil construction.
- Ratings up to 1000 Volts DC.

Specifications

Capacitance Range:
.001 to 1.0 µF

Capacitance Tolerance:
±5%, ±10%, ±20%

Voltage Ratings:
100 to 1000 Volts DC

Operating Temperature Range:
-55°C to +85°C (at full voltage)

Voltage Derating:
At +105°C, 70% of +85°C rating.
At +125°C, 50% of +85°C rating.

Lead Wire:
Tinned copper-clad steel,
.032 (0.8) diameter, #20 AWG

Insulation Resistance:

At +25°C:	100,000 MΩ for C ≤ .25 µF
	25,000 MΩ-µF for C > .25 µF
At +85°C:	10,000 MΩ for C ≤ .15 µF
	1,500 MΩ-µF for C > .15 µF
At +105°C:	1,500 MΩ for C ≤ .17 µF
	250 MΩ-µF for C > .17 µF
At +125°C:	200 MΩ for C ≤ .13 µF
	25 MΩ-µF for C > .13 µF

Dissipation Factor:
0.75% Maximum @ 1 KHz, +25°C

Encapsulation:
Conformal coating of orange, flame retardant epoxy. Meets UL94V-0 specifications.

Dielectric/Construction:
Polyester film, single section design. Non-inductively wound with extended aluminum foil.

General Specifications

The Type 418P Orange Drop® is designed and manufactured for operation in a wide range of demanding environments and applications. Type 418P capacitors are wound from the most reliable polyester film and aluminum foil available and are protected by a rugged conformal coating of orange epoxy. They may be operated up to +125°C with proper derating.

The 418P series finds use in many commercial and industrial applications, from power supplies and audio amplifiers to welding equipment and ultrasonics.

Operating Temperature Range:

The standard operating temperature range for polyester film is -55°C to +85°C. The 418P may be operated at full voltage within this temperature range.

The 418P may be operated up to +105°C provided the DC working voltage is reduced to 70% of the +85°C rating (full rating), and up to +125°C with a 50% reduction from the +85°C rating (full rating).

For more specific details regarding operation above +85°C please contact our design engineering department.

The maximum operating temperature for the 418P polyester film capacitor is +125°C.

Dielectric Withstanding Voltage:

Units rated below 1000 VDC shall withstand a DC potential of 250% of rated voltage applied between terminals for not more than 5 seconds. Units rated at 1000 VDC shall withstand a DC potential of 200% of rated voltage applied between terminals for not more than 5 seconds.

Lead Bend Test:

After 3 consecutive 180° bends. No damage.

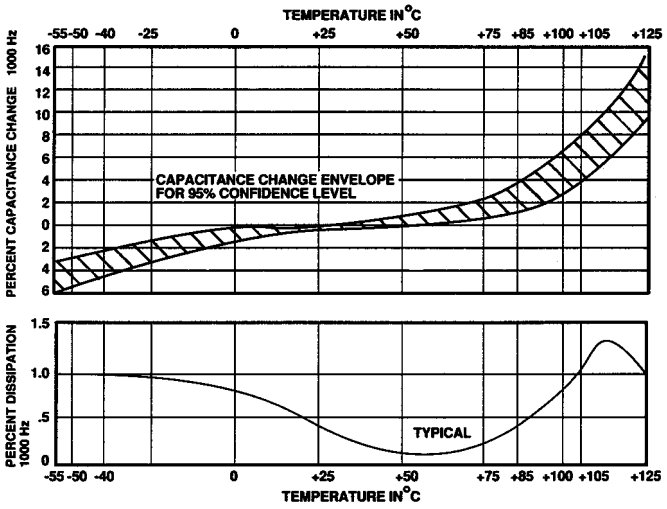
Humidity Testing:

Units subjected to 95% relative humidity for 72 hours with no voltage applied at +75°C. After 4 hours of drying minimum product of insulation resistance and capacitance shall be 5,000 MΩ-µF

DC Voltage Life Test:

500 hours at +85°C at 150% of rated voltage. After test; capacitance shall not have changed by more than ±5% of initial value, insulation resistance shall not have decreased by more than 50% of initial value and dissipation factor shall not have increased to more than 1.0%. In addition, there should be no open or short circuits, and no sign of visible damage.

Typical Temperature Characteristics:



Ordering/Part Number Information

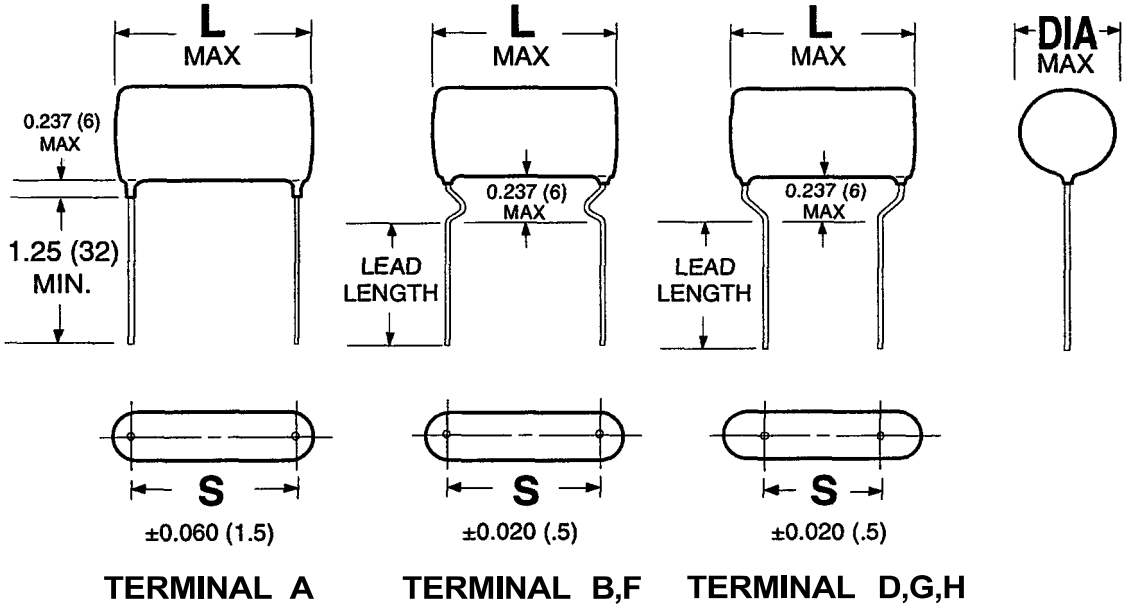
418P 104 9 6 L D 3 (XXXX)

- **(XXXX)** — A suffix may be added by the factory to denote special construction.
- **3** — **Lead Length** 1 = 0.187 (4.7) ±0.030 (0.8); 2 = 0.250 (6.4) ±0.030 (0.8); 3 = 1.250 (32) Minimum. Custom lead lengths available upon request.
- **D** — **Terminal** A = Straight Lead; B,F = Hairpin Crimp; D,G,H = Hockey Stick Crimp
- **L** — **Case Code** See Standard Sizes/Ratings Table
- **6** — **D-C Voltage Rating** Expressed in Hundreds of Volts
- **9** — **Capacitance Tolerance 0 = ±20%; 9 = ±10%; 5 = ±5%**
- **104** — **Capacitance** Expressed in Picofarads. The first two digits are the significant figures, the third is the number of zeros following. (i.e. 104 = 100000 pF = .1 µF)
- **418P** — **CDE Type Number** Identifies the basic capacitor design.

Standard Marking Format

Sample Marking on unit	Description	Tolerance codes per EIA Standards
CDE418P600V 104K 9810	CDE - CDE Electronics identification 418P - Type number 600V - D-C Voltage rating, Volts 104K - Capacitance and tolerance code 9810 - Weekly date code (i.e. 10th week of 1998)	J ±5% K ±10% M ±20%

Standard Lead Styles



Standard Lead Spacings

CASE CODE	S					
	Term. A	Term. B	Term. D	Term. F	Term. G	Term. H
J	0.500 (12.7)	0.500 (12.7)	0.375 (9.5)	0.394 (10)	0.295 (7.5)	0.197 (5)
K	0.688 (17.5)	0.688 (17.5)	0.375 (9.5)	0.590 (15)	0.394 (10)	0.295 (7.5)
L	0.969 (24.6)	0.969 (24.6)	0.719 (18.3)	0.886 (22.5)	0.590 (15)	---
M	1.344 (34.1)	1.344 (34.1)	1.094 (27.8)	---	1.083 (27.5)	---

Type 418P Standard Sizes/Ratings[2]

Value, µF	Part Number[1]	L MAX	DIA MAX
100 VDC			
.027	418P27391J	.70 (17.8)	.35 (8.9)
.033	418P33391J	.70 (17.8)	.35 (8.9)
.039	418P39391J	.70 (17.8)	.35 (8.9)
.047	418P47391J	.70 (17.8)	.35 (8.9)
.056	418P56391J	.70 (17.8)	.35 (8.9)
.068	418P68391J	.70 (17.8)	.35 (8.9)
.082	418P82391K	.90 (22.9)	.40 (10.2)
.1	418P10491K	.90 (22.9)	.40 (10.2)
.12	418P12491K	.90 (22.9)	.45 (11.4)
.15	418P15491K	.90 (22.9)	.45 (11.4)
.18	418P18491L	1.20 (30.5)	.45 (11.4)
.22	418P22491L	1.20 (30.5)	.45 (11.4)
.27	418P27491L	1.20 (30.5)	.50 (12.7)
.33	418P33491L	1.20 (30.5)	.50 (12.7)
.39	418P39491M	1.60 (40.6)	.50 (12.7)
.47	418P47491M	1.60 (40.6)	.50 (12.7)
.56	418P56491M	1.60 (40.6)	.60 (15.2)
.68	418P68491M	1.60 (40.6)	.60 (15.2)
.82	418P82491M	1.60 (40.6)	.65 (16.5)
1.0	418P10591M	1.60 (40.6)	.70 (17.8)
200 VDC			
.0056	418P56292J	.70 (17.8)	.33 (8.4)
.0068	418P68292J	.70 (17.8)	.33 (8.4)
.0082	418P82292J	.70 (17.8)	.33 (8.4)
.01	418P10392J	.70 (17.8)	.33 (8.4)
.012	418P12392J	.70 (17.8)	.33 (8.4)
.015	418P15392J	.70 (17.8)	.33 (8.4)
.018	418P18392J	.70 (17.8)	.33 (8.4)
.022	418P22392J	.70 (17.8)	.33 (8.4)
.027	418P27392J	.70 (17.8)	.35 (8.9)
.033	418P33392K	.90 (22.9)	.38 (9.7)
.039	418P39392K	.90 (22.9)	.38 (9.7)
.047	418P47392K	.90 (22.9)	.38 (9.7)
.056	418P56392L	1.20 (30.5)	.38 (9.7)
.068	418P68392L	1.20 (30.5)	.38 (9.7)
.082	418P82392L	1.20 (30.5)	.40 (10.2)
.1	418P10492L	1.20 (30.5)	.40 (10.2)
.12	418P12492L	1.20 (30.5)	.45 (11.4)
.15	418P15492L	1.20 (30.5)	.45 (11.4)
.18	418P18492L	1.20 (30.5)	.50 (12.7)
.22	418P22492L	1.20 (30.5)	.50 (12.7)
.27	418P27492M	1.60 (40.6)	.47 (11.9)
.33	418P33492M	1.60 (40.6)	.47 (11.9)
.39	418P39492M	1.60 (40.6)	.50 (12.7)
.47	418P47492M	1.60 (40.6)	.55 (14.0)

Value, µF	Part Number[1]	L MAX	DIA MAX
400 VDC			
.001	418P10294J	.70 (17.8)	.30 (7.6)
.0012	418P12294J	.70 (17.8)	.30 (7.6)
.0015	418P15294J	.70 (17.8)	.30 (7.6)
.0018	418P18294J	.70 (17.8)	.30 (7.6)
.0022	418P22294J	.70 (17.8)	.30 (7.6)
.0027	418P27294J	.70 (17.8)	.30 (7.6)
.0033	418P33294J	.70 (17.8)	.30 (7.6)
.0039	418P39294J	.70 (17.8)	.30 (7.6)
.0047	418P47294J	.70 (17.8)	.30 (7.6)
.0056	418P56294J	.70 (17.8)	.33 (8.4)
.0068	418P68294J	.70 (17.8)	.33 (8.4)
.0082	418P82294J	.70 (17.8)	.35 (8.9)
.01	418P10394J	.70 (17.8)	.35 (8.9)
.012	418P12394J	.70 (17.8)	.35 (8.9)
.015	418P15394J	.70 (17.8)	.38 (9.7)
.018	418P18394K	.90 (22.9)	.38 (9.7)
.022	418P22394K	.90 (22.9)	.38 (9.7)
.027	418P27394K	.90 (22.9)	.40 (10.2)
.033	418P33394K	.90 (22.9)	.40 (10.2)
.039	418P39394L	1.20 (30.5)	.40 (10.2)
.047	418P47394L	1.20 (30.5)	.40 (10.2)
.056	418P56394L	1.20 (30.5)	.45 (11.4)
.068	418P68394L	1.20 (30.5)	.45 (11.4)
.082	418P82394L	1.20 (30.5)	.52 (13.2)
.1	418P10494L	1.20 (30.5)	.52 (13.2)
.12	418P12494L	1.20 (30.5)	.55 (14.0)
.15	418P15494L	1.20 (30.5)	.57 (14.5)
.18	418P18494M	1.60 (40.6)	.60 (15.2)
.22	418P22494M	1.60 (40.6)	.60 (15.2)
.27	418P27494M	1.60 (40.6)	.65 (16.5)
.33	418P33494M	1.60 (40.6)	.65 (16.5)
.39	418P39494M	1.60 (40.6)	.72 (18.3)
.47	418P47494M	1.60 (40.6)	.80 (20.3)

1. To complete part number for specific tolerance, terminal style and lead length please refer to Ordering/Part Number Information [2] page. The 418P series is available through the CDE Distribution Network on special order.

Dimensions in inches, metric (mm) in parenthesis.

Type 418P Standard Sizes/Ratings [2]

Value, µF	Part Number[1]	L MAX	DIA MAX	Value, µF	Part Number[1]	L MAX	DIA MAX
600 VDC				1000 VDC			
.001	418P10296J	.70 (17.8)	.30 (7.6)	.001	418P102910J	.70 (17.8)	.33 (8.4)
.0012	418P12296J	.70 (17.8)	.33 (8.4)	.0012	418P122910J	.70 (17.8)	.33 (8.4)
.0015	418P15296J	.70 (17.8)	.33 (8.4)	.0015	418P152910J	.70 (17.8)	.33 (8.4)
.0018	418P18296J	.70 (17.8)	.33 (8.4)	.0018	418P182910J	.70 (17.8)	.35 (8.9)
.0022	418P22296J	.70 (17.8)	.33 (8.4)	.0022	418P222910J	.70 (17.8)	.35 (8.9)
.0027	418P27296J	.70 (17.8)	.35 (8.9)	.0027	418P272910K	.90 (22.9)	.35 (8.9)
.0033	418P33296J	.70 (17.8)	.35 (8.9)	.0033	418P332910K	.90 (22.9)	.35 (8.9)
.0039	418P39296J	.70 (17.8)	.38 (9.7)	.0039	418P392910K	.90 (22.9)	.38 (9.7)
.0047	418P47296J	.70 (17.8)	.38 (9.7)	.0047	418P472910K	.90 (22.9)	.40 (10.2)
.0056	418P56296J	.70 (17.8)	.40 (10.2)	.0056	418P562910K	.90 (22.9)	.43 (10.9)
.0068	418P68296J	.70 (17.8)	.40 (10.2)	.0068	418P682910K	.90 (22.9)	.43 (10.9)
.0082	418P82296K	.90 (22.9)	.40 (10.2)	.0082	418P822910K	.90 (22.9)	.48 (12.2)
.01	418P10396K	.90 (22.9)	.40 (10.2)	.01	418P103910K	.90 (22.9)	.48 (12.2)
.012	418P12396K	.90 (22.9)	.40 (10.2)	.012	418P123910L	1.20 (30.5)	.48 (12.2)
.015	418P15396K	.90 (22.9)	.40 (10.2)	.015	418P153910L	1.20 (30.5)	.48 (12.2)
.018	418P18396K	.90 (22.9)	.45 (11.4)	.018	418P183910L	1.20 (30.5)	.58 (14.7)
.022	418P22396K	.90 (22.9)	.45 (11.4)	.022	418P223910L	1.20 (30.5)	.58 (14.7)
.027	418P27396L	1.20 (30.5)	.45 (11.4)	.027	418P273910L	1.20 (30.5)	.65 (16.5)
.033	418P33396L	1.20 (30.5)	.45 (11.4)	.033	418P333910L	1.20 (30.5)	.65 (16.5)
.039	418P39396L	1.20 (30.5)	.55 (14.0)	.039	418P393910M	1.60 (40.6)	.65 (16.5)
.047	418P47396L	1.20 (30.5)	.55 (14.0)	.047	418P473910M	1.60 (40.6)	.65 (16.5)
.056	418P56396L	1.20 (30.5)	.60 (15.2)	.056	418P563910M	1.60 (40.6)	.75 (19.1)
.068	418P68396L	1.20 (30.5)	.60 (15.2)	.068	418P683910M	1.60 (40.6)	.75 (19.1)
.082	418P82396L	1.20 (30.5)	.65 (16.5)	.082	418P823910M	1.60 (40.6)	.85 (21.6)
.1	418P10496L	1.20 (30.5)	.65 (16.5)	.1	418P104910M	1.60 (40.6)	.85 (21.6)
.12	418P12496M	1.60 (40.6)	.70 (17.8)				
.15	418P15496M	1.60 (40.6)	.70 (17.8)				
.18	418P18496M	1.60 (40.6)	.80 (20.3)				
.22	418P22496M	1.60 (40.6)	.80 (20.3)				
.25	418P25496M	1.60 (40.6)	.80 (20.3)				

[1] To complete part number for specific tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

[2] The 418P series is available through the CDE Distribution Network on special order.

Dimensions in inches, metric (mm) in parenthesis.

dV/dt Specifications

Maximum Pulse Rise Time (dV/dt) in Volts/µsec

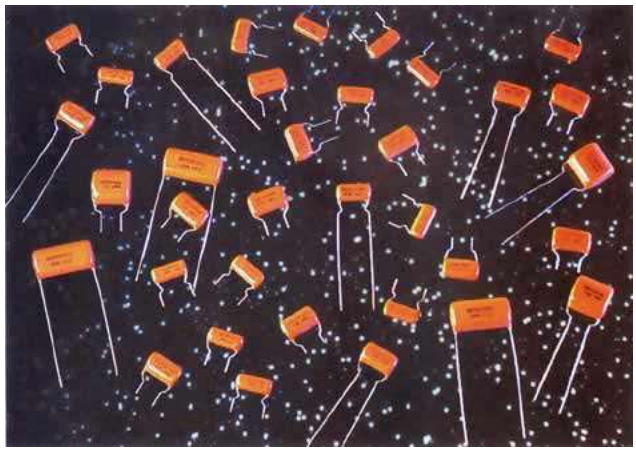
Cap Value (µF)	100V	200V	400V	600V	1000V
.001				22100	22700
.0012				20200	20800
.0015				18100	18600
.0018				16500	17000
.0022				14900	15300
.0027				13500	13800
.0033			11000	12200	12500
.0039			10100	11200	11500
.0047			9200	10200	10500
.0056		5900	8400	9300	9000
.0068		5400	7600	8500	8200
.0082		4900	6900	7200	7400
.01		4500	6300	6600	6700
.012		4100	5700	6000	5700
.015		3600	5100	5400	5100
.018		3300	4400	4900	4700
.022		3000	4000	4400	4200
.027	2000	2700	3600	3700	3800
.033	1800	2400	3200	3300	3400
.039	1700	2100	2800	3100	2900
.047	1500	1900	2500	2800	2700
.056	1400	1800	2300	2600	2400
.068	1300	1500	2100	2300	2200
.082	1100	1400	1900	2100	2000
.1	1000	1200	1700	1900	1800
.12	900	1100	1600	1600	
15	800	1000	1400	1500	
.18	700	900	1200	1300	
.22	600	800	1100	1200	
.25	600	800	1000	1100	
.27	600	700	1000	1100	
.33	500	600	900		
.39	400	600	800		
47	400	500	700		
.56	400				
.68	300				
.82	300				
1.0	300				

Note: dV/dt ratings based on measurements made at the junction of the wire leads and capacitor body

Dimensions in inches, metric (mm) in parenthesis.

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Type 425M Orange Drop® Metallized Polyester Film Capacitors



Features

- Radial-lead
- Pressed profile
- Non-inductively wound
- Compact size
- Self-healing properties

Specifications

Capacitance Range:
012 to 12.0 µF

Capacitance Tolerance:
±5%, ±10%

Voltage Ratings:
100 to 630 Volts DC

Operating Temperature Range:
-55°C to +85°C (at full voltage)

Voltage Derating:
At +105°C, 70% of +85°C rating.
At +125°C, 50% of +85°C rating

Pulse Rise Time (dV/dt):
See standard ratings table dV/dt rating is in Volts/µsec.

Insulation Resistance:

At +25°C:	10,000 MΩ for C ≤ 1.0 µF
	10,000 MΩ-µF for C > 1.0 µF
At +85°C	1,000 MΩ for C ≤ 1.0 µF
	1,000MΩ-µF for C > 1 0 µF

Dissipation Factor:
1 0% Maximum @ 1 KHz, +25°C

Encapsulation:
Conformal coating of orange, flame retardant epoxy. Meets UL94V-0 specifications.

Lead Wire:
Tinned copper-clad steel, .032 (0.8) diameter, #20 AWG.

Dielectric/Construction:
Metallized Polyester film, single section design Non-inductively wound.

Dimensions in inches, metric (mm) in parenthesis.

Ordering/Part Number Information

425M 105 9 2 J B 3 (XXXX)

- **(XXXX)** — A suffix may be added by the factory to denote special construction.
- **3** — **Lead Length** 1 = 0.187 (4.7) ± 0.030 (0.8); 2 = 0.250 (6.4) ± 0.030 (0.8); 3 = 1.250 (32) Minimum. Custom lead lengths available upon request.
- **B** — **Terminal** A = Straight Lead; B,F = Hairpin Crimp; G = Hockey Stick Crimp
- **J** — **Case Code** See Standard Sizes/Ratings Table
- **2** — **D-C Voltage Rating** 1 = 100 VDC; 2 = 250 VDC; 4 = 400 VDC; 6 = 630 VDC
- **9** — **Capacitance Tolerance** 9 = ±10%; 5 = ±5%
- **105** — **Capacitance** Expressed in Picofarads. The first two digits are the significant figures, the third is the number of zeros following. (i.e. 105 = 1000000 pF = 1.0 µF)
- **425M** — **CDE Type Number** Identifies the basic capacitor design.

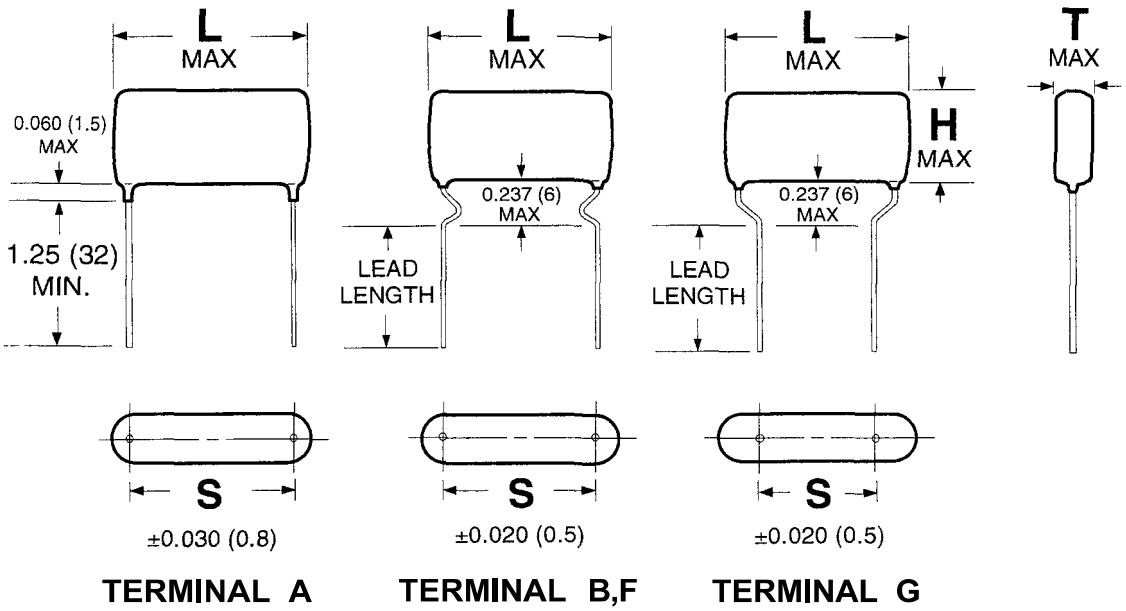
Standard Marking Format

Sample Marking on unit	Description
CDE425M250V	CDE - CDE Electronics identification
105K 9910	425M - Type number
	250V - DC Voltage rating, Volts
	105K - Capacitance and tolerance code
	9910 - Weekly date code (i.e. 10th week of 1999)

Tolerance codes per EIA Standards

J	±5%
K	±10%

Standard Lead Styles



TERMINAL A **TERMINAL B,F** **TERMINAL G**

Standard Lead Spacings

CASE CODE	S			
	Term. A	Term. B	Term. F	Term. G
N	0.394 (10.0)	0.394 (10.0)	0.295 (7.5)	0.197 (5.0)
J	0.590 (15.0)	0.590 (15.0)	0.394 (10.0)	0.295 (7.5)
R	0.886 (22.5)	0.886 (22.5)	0.590 (15.0)	0.394 (10.0)
L	1.083 (27.5)	1.083 (27.5)	0.886 (22.5)	0.590 (15.0)

Type 425M Standard Sizes/Ratings

Value (µF)	Part Number[1]	L MAX	T MAX	H WAX	dV/dt Volts/µsec	Value (µF)	Part Number[1]	L MAX	T MAX	H MAX	dV/dt Volts/µsec
100 VDC						250 VDC					
0.33	425M33491N	.52 (13.2)	.24 (6.1)	.38 (9.7)	38	0.12	425M12492N	.52 (13.2)	.23 (5.8)	.37 (9.4)	59
0.39	425M39491N	.52 (13.2)	.24 (6.1)	.42 (10.7)	46	0.15	425M15492N	.52 (13.2)	.24 (6.1)	.41 (10.4)	77
0.43	425M43491N	.52 (13.2)	.24 (6.1)	.45 (11.4)	50	0.18	425M18492N	.52 (13.2)	.24 (6.1)	.45 (11.4)	89
0.47	425M47491N	.52 (13.2)	.25 (6.4)	.46 (11.7)	54	0.22	425M22492N	.52 (13.2)	.26 (6.6)	.47 (11.9)	100
0.5	425M50491N	.52 (13.2)	.26 (6.6)	.46 (11.7)	56	0.25	425M25492N	.52 (13.2)	.28 (7.1)	.49 (12.4)	107
0.56	425M56491N	.52 (13.2)	.27 (6.9)	.48 (12.2)	60	0.27	425M27492N	.52 (13.2)	.29 (7.4)	.50 (12.7)	110
0.62	425M62491N	.52 (13.2)	.28 (7.1)	.49 (12.4)	63	0.3	425M30492N	.52 (13.2)	.30 (7.6)	.51 (13.0)	114
0.68	425M68491N	.52 (13.2)	.29 (7.4)	.50 (12.7)	65	0.33	425M33492N	.52 (13.2)	.32 (8.1)	.52 (13.2)	118
0.75	425M75491N	.52 (13.2)	.31 (7.9)	.52 (13.2)	68						
0.82	425M82491N	.52 (13.2)	.30 (7.6)	.57 (14.5)	70	0.39	425M39492J	.73 (18.5)	.23 (5.8)	.50 (12.7)	47
0.9	425M90491N	.52 (13.2)	.31 (7.9)	.58 (14.7)	72	0.43	425M43492J	.73 (18.5)	.24 (6.1)	.51 (13.0)	50
1.0	425M10591N	.52 (13.2)	.33 (8.4)	.60 (15.2)	74	0.47	425M47492J	.73 (18.5)	.25 (6.4)	.52 (13.2)	52
						0.5	425M50492J	.73 (18.5)	.26 (6.6)	.53 (13.5)	53
1.2	425M12591J	.73 (18.5)	.26 (6.6)	.53 (13.5)	31	0.56	425M56492J	.73 (18.5)	.27 (6.9)	.54 (13.7)	56
1.5	425M15591J	.73 (18.5)	.29 (7.4)	.56 (14.2)	34	0.62	425M62492J	.73 (18.5)	.29 (7.4)	.56 (14.2)	58
1.8	425M18591J	.73 (18.5)	.31 (7.9)	.58 (14.7)	36	0.68	425M68492J	.73 (18.5)	.30 (7.6)	.57 (14.5)	59
2.0	425M20591J	.73 (18.5)	.33 (8.4)	.60 (15.2)	37	0.75	425M75492J	.73 (18.5)	.31 (7.9)	.58 (14.7)	61
2.2	425M22591J	.73 (18.5)	.34 (8.6)	.62 (15.7)	38	0.82	425M82492J	.73 (18.5)	.33 (8.4)	.60 (15.2)	62
2.5	425M25591J	.73 (18.5)	.37 (9.4)	.64 (16.3)	39	0.9	425M90492J	.73 (18.5)	.34 (8.6)	.61 (15.5)	63
2.7	425M27591J	.73 (18.5)	.38 (9.7)	.65 (16.5)	39	1.0	425M10592J	.73 (18.5)	.36 (9.1)	.63 (16.0)	65
3.0	425M30591J	.73 (18.5)	.40 (10.2)	.67 (17.0)	40	1.2	425M12592J	.73 (18.5)	.39 (9.9)	.67 (17.0)	67
3.3	425M33591J	.73 (18.5)	.42 (10.7)	.69 (17.5)	41	1.5	425M15592J	.73 (18.5)	.42 (10.7)	.75 (19.1)	68
3.6	425M36591R	1.03 (26.2)	.34 (8.6)	.61 (15.5)	22	1.8	425M18592R	1.03 (26.2)	.35 (8.9)	.69 (17.5)	39
3.9	425M39591R	1.03 (26.2)	.33 (8.4)	.67 (17.0)	23	2.0	425M20592R	1.03 (26.2)	.37 (9.4)	.71 (18.0)	39
4.3	425M43591R	1.03 (26.2)	.35 (8.9)	.68 (17.3)	23	2.2	425M22592R	1.03 (26.2)	.39 (9.9)	.72 (18.3)	40
4.7	425M47591R	1.03 (26.2)	.36 (9.1)	.70 (17.8)	23	2.5	425M25592R	1.03 (26.2)	.41 (10.4)	.75 (19.1)	41
5.0	425M50591R	1.03 (26.2)	.37 (9.4)	.71 (18.0)	24	2.7	425M27592R	1.03 (26.2)	.43 (10.9)	.77 (19.6)	41
5.6	425M56591R	1.03 (26.2)	.40 (10.2)	.73 (18.5)	24	3.0	425M30592R	1.03 (26.2)	.45 (11.4)	.79 (20.1)	41
6.0	425M60591R	1.03 (26.2)	.41 (10.4)	.75 (19.1)	24	3.3	425M33592R	1.03 (26.2)	.48 (12.2)	.82 (20.8)	42
6.2	425M62591R	1.03 (26.2)	.42 (10.7)	.76 (19.3)	24	3.6	425M36592R	1.03 (26.2)	.50 (12.7)	.84 (21.3)	42
6.8	425M68591R	1.03 (26.2)	.44 (11.2)	.78 (19.8)	25	3.9	425M39592R	1.03 (26.2)	.52 (13.2)	.86 (21.8)	42
7.0	425M70591R	1.03 (26.2)	.45 (11.4)	.78 (19.8)	25	4.3	425M43592R	1.03 (26.2)	.55 (14.0)	.89 (22.6)	43
7.5	425M75591R	1.03 (26.2)	.46 (11.7)	.80 (20.3)	25	4.7	425M47592R	1.03 (26.2)	.55 (14.0)	.96 (24.4)	43
8.0	425M80591R	1.03 (26.2)	.48 (12.2)	.82 (20.8)	25						
8.2	425M82591R	1.03 (26.2)	.48 (12.2)	.82 (20.8)	25	5.0	425M50592L	1.23 (31.2)	.50 (12.7)	.90 (22.9)	33
10.0	425M10691R	1.03 (26.2)	.54 (13.7)	.88 (22.4)	26	5.6	425M56592L	1.23 (31.2)	.53 (13.5)	.94 (23.9)	34
11.0	425M11691R	1.03 (26.2)	.57 (14.5)	.91 (23.1)	26	6.0	425M60592L	1.23 (31.2)	.55 (14.0)	.96 (24.4)	34
12.0	425M12691R	1.03 (26.2)	.59 (15.0)	.93 (23.6)	26	6.2	425M62592L	1.23 (31.2)	.56 (14.2)	.97 (24.6)	34

[1] To complete part number for specific tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

Type 425M, Orange Drop®, Metallized Polyester Film/Foil Capacitors

Type 425M Standard Sizes/Ratings

Value (µF)	Part Number[1]	L MAX	T MAX	H MAX	dV/dt Volts/µsec
400 VDC					
0.047	425M47394N	.52 (13.2)	.23 (5.8)	.37 (9.4)	112
0.05	425M50394N	.52 (13.2)	.23 (5.8)	.38 (9.7)	122
0.056	425M56394N	.52 (13.2)	.22 (5.6)	.43 (10.9)	137
0.062	425M62394N	.52 (13.2)	.23 (5.8)	.44 (11.2)	149
0.068	425M68394N	.52 (13.2)	.24 (6.1)	.45 (11.4)	160
0.07	425M70394N	.52 (13.2)	.24 (6.1)	.45 (11.4)	163
0.075	425M75394N	.52 (13.2)	.25 (6.4)	.46 (11.7)	170
0.082	425M82394N	.52 (13.2)	.26 (6.6)	.47 (11.9)	178
0.1	425M10494N	.52 (13.2)	.28 (7.1)	.49 (12.4)	195
0.12	425M12494J	.73 (18.5)	.22 (5.6)	.42 (10.7)	59
0.15	425M15494J	.73 (18.5)	.22 (5.6)	.49 (12.4)	72
0.18	425M18494J	.73 (18.5)	.24 (6.1)	.51 (13.0)	80
0.22	425M22494J	.73 (18.5)	.26 (6.6)	.53 (13.5)	87
0.25	425M25494J	.73 (18.5)	.28 (7.1)	.55 (14.0)	91
0.27	425M27494J	.73 (18.5)	.29 (7.4)	.56 (14.2)	93
0.3	425M30494J	.73 (18.5)	.30 (7.6)	.57 (14.5)	96
0.33	425M33494J	.73 (18.5)	.30 (7.6)	.63 (16.0)	98
0.39	425M39494J	.73 (18.5)	.32 (8.1)	.66 (16.8)	102
0.43	425M43494J	.73 (18.5)	.34 (8.6)	.68 (17.3)	104
0.47	425M47494J	.73 (18.5)	.35 (8.9)	.69 (17.5)	105
0.5	425M50494J	.73 (18.5)	.37 (9.4)	.70 (17.8)	106
0.56	425M56494R	1.03 (26.2)	.29 (7.4)	.63 (16.0)	56
0.62	425M62494R	1.03 (26.2)	.31 (7.9)	.64 (16.3)	57
0.68	425M68494R	1.03 (26.2)	.32 (8.1)	.66 (16.8)	58
0.75	425M75494R	1.03 (26.2)	.34 (8.6)	.67 (17.0)	59
0.82	425M82494R	1.03 (26.2)	.35 (8.9)	.69 (17.5)	60
0.9	425M90494R	1.03 (26.2)	.37 (9.4)	.71 (18.0)	61
1.0	425M10594R	1.03 (26.2)	.39 (9.9)	.73 (18.5)	62
1.2	425M12594R	1.03 (26.2)	.43 (10.9)	.77 (19.6)	63
1.5	425M15594L	1.23 (31.2)	.42 (10.7)	.76 (19.3)	49
1.8	425M18594L	1.23 (31.2)	.47 (11.9)	.81 (20.6)	50
2.0	425M20594L	1.23 (31.2)	.47 (11.9)	.87 (22.1)	50
2.2	425M22594L	1.23 (31.2)	.49 (12.4)	.90 (22.9)	51
2.5	425M25594L	1.23 (31.2)	.53 (13.5)	.93 (23.6)	51
2.7	425M27594L	1.23 (31.2)	.55 (14.0)	.96 (24.4)	51
3.0	425M30594L	1.23 (31.2)	.58 (14.7)	.99 (25.1)	52

Value (µF)	Part Number[1]	L MAX	T MAX	H MAX	dV/dt Volts/µsec
630 VDC					
0.012	425M12396N	.52 (13.2)	.23 (5.8)	.35 (8.9)	160
0.015	425M15396N	.52 (13.2)	.25 (6.4)	.37 (9.4)	233
0.018	425M18396N	.52 (13.2)	.24 (6.1)	.44 (11.2)	277
0.022	425M22396N	.52 (13.2)	.26 (6.6)	.46 (11.7)	321
0.025	425M25396N	.52 (13.2)	.27 (6.9)	.48 (12.2)	345
0.027	425M27396N	.52 (13.2)	.28 (7.1)	.49 (12.4)	358
0.03	425M30396N	.52 (13.2)	.29 (7.4)	.50 (12.7)	375
0.033	425M33396N	.52 (13.2)	.31 (7.9)	.51 (13.0)	388
0.039	425M39396N	.52 (13.2)	.31 (7.9)	.58 (14.7)	408
0.043	425M43396N	.52 (13.2)	.32 (8.1)	.59 (15.0)	419
0.047	425M47396N	.52 (13.2)	.34 (8.6)	.61 (15.5)	428
0.05	425M50396N	.52 (13.2)	.35 (8.9)	.62 (15.7)	434
0.056	425M56396J	.73 (18.5)	.26 (6.6)	.46 (11.7)	124
0.062	425M62396J	.73 (18.5)	.27 (6.9)	.47 (11.9)	132
0.068	425M68396J	.73 (18.5)	.28 (7.1)	.48 (12.2)	138
0.07	425M70396J	.73 (18.5)	.28 (7.1)	.49 (12.4)	140
0.075	425M75396J	.73 (18.5)	.29 (7.4)	.50 (12.7)	144
0.082	425M82396J	.73 (18.5)	.30 (7.6)	.51 (13.0)	149
0.1	425M10496J	.73 (18.5)	.31 (7.9)	.58 (14.7)	159
0.12	425M12496J	.73 (18.5)	.34 (8.6)	.61 (15.5)	166
0.15	425M15496J	.73 (18.5)	.35 (8.9)	.69 (17.5)	174
0.18	425M18496J	.73 (18.5)	.39 (9.9)	.72 (18.3)	179
0.22	425M22496J	.73 (18.5)	.43 (10.9)	.77 (19.6)	183
0.25	425M25496J	.73 (18.5)	.46 (11.7)	.80 (20.3)	186
0.27	425M27496R	1.03 (26.2)	.35 (8.9)	.69 (17.5)	94
0.3	425M30496R	1.03 (26.2)	.37 (9.4)	.71 (18.0)	96
0.33	425M33496R	1.03 (26.2)	.39 (9.9)	.72 (18.3)	98
0.39	425M39496R	1.03 (26.2)	.42 (10.7)	.76 (19.3)	100
0.43	425M43496R	1.03 (26.2)	.44 (11.2)	.78 (19.8)	101
0.47	425M47496R	1.03 (26.2)	.46 (11.7)	.80 (20.3)	102
0.5	425M50496R	1.03 (26.2)	.48 (12.2)	.82 (20.8)	102
0.56	425M56496R	1.03 (26.2)	.51 (13.0)	.85 (21.6)	103
0.62	425M62496R	1.03 (26.2)	.54 (13.7)	.88 (22.4)	104
0.68	425M68496R	1.03 (26.2)	.56 (14.2)	.91 (23.1)	105
0.75	425M75496R	1.03 (26.2)	.59 (15.0)	.94 (23.9)	105
0.82	425M82496L	1.23 (31.2)	.54 (13.7)	.88 (22.4)	80
0.9	425M90496L	1.23 (31.2)	.57 (14.5)	.91 (23.1)	81
1.0	425M10596L	1.23 (31.2)	.60 (15.2)	.94 (23.9)	81

[1] To complete part number for specific tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

General Specifications

The Type 425M Orange Drop® is designed and manufactured for operation in a wide range of demanding environments and applications. Type 425M capacitors are wound from the most reliable metallized polyester film available and are protected by a rugged conformal coating of orange epoxy. They may be operated up to +125°C with proper derating.

The 425M series is an ideal choice for a variety of commercial and industrial electronic applications, from power supplies and instrumentation to amplifiers and lighting ballasts. The 425M series is constructed of the highest quality polyester film with a vacuum deposited metal electrode. Metallized film offers specific clearing/self-healing characteristics that remove a fault or short in the dielectric film by vaporizing the metal electrode surrounding the defect and isolating the area.

Operating Temperature Range:

The standard operating temperature range for polyester film is -55°C to +85°C. The 425M may be operated at full voltage within this temperature range.

The 425M may be operated up to +105°C provided the DC working voltage is reduced to 70% of the +85°C rating (full rating), and up to +125°C with a 50% reduction from the +85°C rating (full rating).

For more specific details regarding operation above +85°C please contact our application engineering department.

The maximum operating temperature for the 425M series is +125°C.

Dielectric Withstanding Voltage:

Units shall withstand a DC potential of 150% of rated voltage applied between terminals for not more than 2 minutes.

Lead Bend Test:

After 3 consecutive 180° bends. No damage.

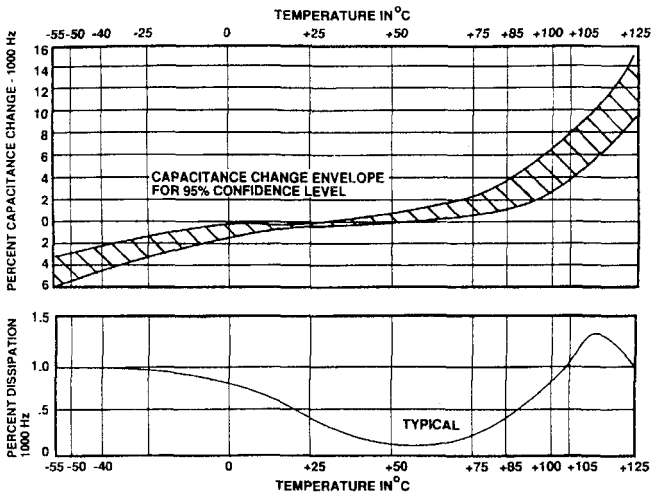
Humidity Testing:

Units subjected to 95% relative humidity for 72 hours with no voltage applied at +75°C. After 4 hours of drying minimum product of insulation resistance and capacitance shall be 5,000 MΩ-μF, but need not exceed 5000 MΩ.

DC Voltage Life Test:

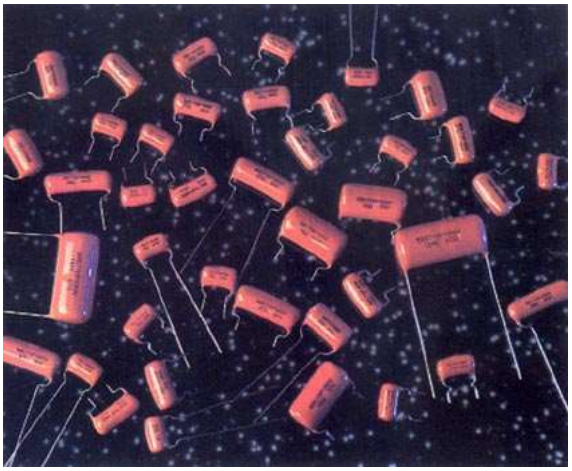
500 hours at +85°C at 125% of rated voltage. After test; capacitance shall not have changed by more than ±5% of initial value, insulation resistance shall not have decreased by more than 50% of initial value and dissipation factor shall not have increased to more than 1.0%. In addition, there should be no open or short circuits, and no sign of visible damage.

Typical Temperature Characteristics:



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Type 715P, Orange Drop®, Polypropylene Film/Foil Capacitors



Features

- Long history of proven reliability
- Low dissipation factor.
- Tolerances as close as ±1%.
- Excellent stability, virtually linear temperature coefficient.
- Various lead spacings, crimp styles and lead lengths available.

Specifications

Capacitance Range:
.001 µF to 0.47 µF

Capacitance Tolerance:
±1% to ±10%

Voltage Ratings:
100 to 2000 Volts D-C
70 to 500 Volts A-C

Operating Temperature Range:
-55°C to +85°C
(+105°C with proper voltage derating)

Lead Wire:
Tinned copper-clad steel,
.032 (0.8) diameter, #20 AWG

Dissipation Factor:
See tabulated data.

Insulation Resistance:
400,000 MΩ minimum at +25°C
20,000 MΩ minimum at +85°C
2,000 MΩ minimum at +105°C

Pulse Rise Time, dV/dt:
See tabulated data.

Corona Start Voltage (typical):
See tabulated data.

Encapsulation:
Conformal coating of flame retardant orange epoxy (meets UL94V-0 specifications)

Dielectric:
Polypropylene film.

Construction:
Non-inductively wound with extended foil. Additional details on general specifications page.

Applications:
Switching and high voltage power supplies, inverters, snubbers, resonant converters and electronic lighting ballasts.

Dimensions in inches, metric (mm) in parenthesis.

General Specifications

The 715P and 716P series are manufactured with polypropylene film and extended foil. Polypropylene has a very low dissipation factor, low dielectric absorption and exhibits excellent capacitance stability. These characteristics combined with the direct connection of the lead wire to the extended foil electrode makes the 715P and 716P series ideal for high current, high pulse applications.

The 715P series has a round profile and is available in tolerances as close as ±1%. The 716P series has a pressed profile and, in addition, is designed with copper leads, thus adding to it's performance in high frequency, high pulse current applications.

Other specifications are listed below and on the following pages.

Operating Temperature Range:
The standard operating temperature range for polypropylene film is -55°C to +85°C. The 715P and 716P may be operated up to +105°C provided the DC working voltage is reduced by 50%.

For specific derating of the AC voltage when operating above +85°C please contact our design engineering department.

The maximum operating temperature for 715P and 716P polypropylene film capacitors is + 105°C.

Dielectric Withstanding Voltage:
Units rated below 800 VDC shall withstand a DC potential of 250% of rated voltage applied between terminals for not more than 5 seconds; units rated 800 VDC and above shall withstand 200% of rated voltage.

Construction:
Units rated 100 through 600 VDC are single section designs constructed of plain polypropylene film with extended foil. Units rated 800 VDC and above are series-section designs with extended foil and incorporate a floating common of metallized polypropylene. All units are non-inductively wound.

Temperature Coefficient:
The typical temperature coefficient is -180 ppm/°C over the temperature range of -55°C to +85°C.

Humidity Testing:
Units subjected to 95% relative humidity for 72 hours with no voltage applied at +75°C. After 4 hours of drying minimum product of insulation resistance and capacitance shall be 50,000 megohm-microfarads.

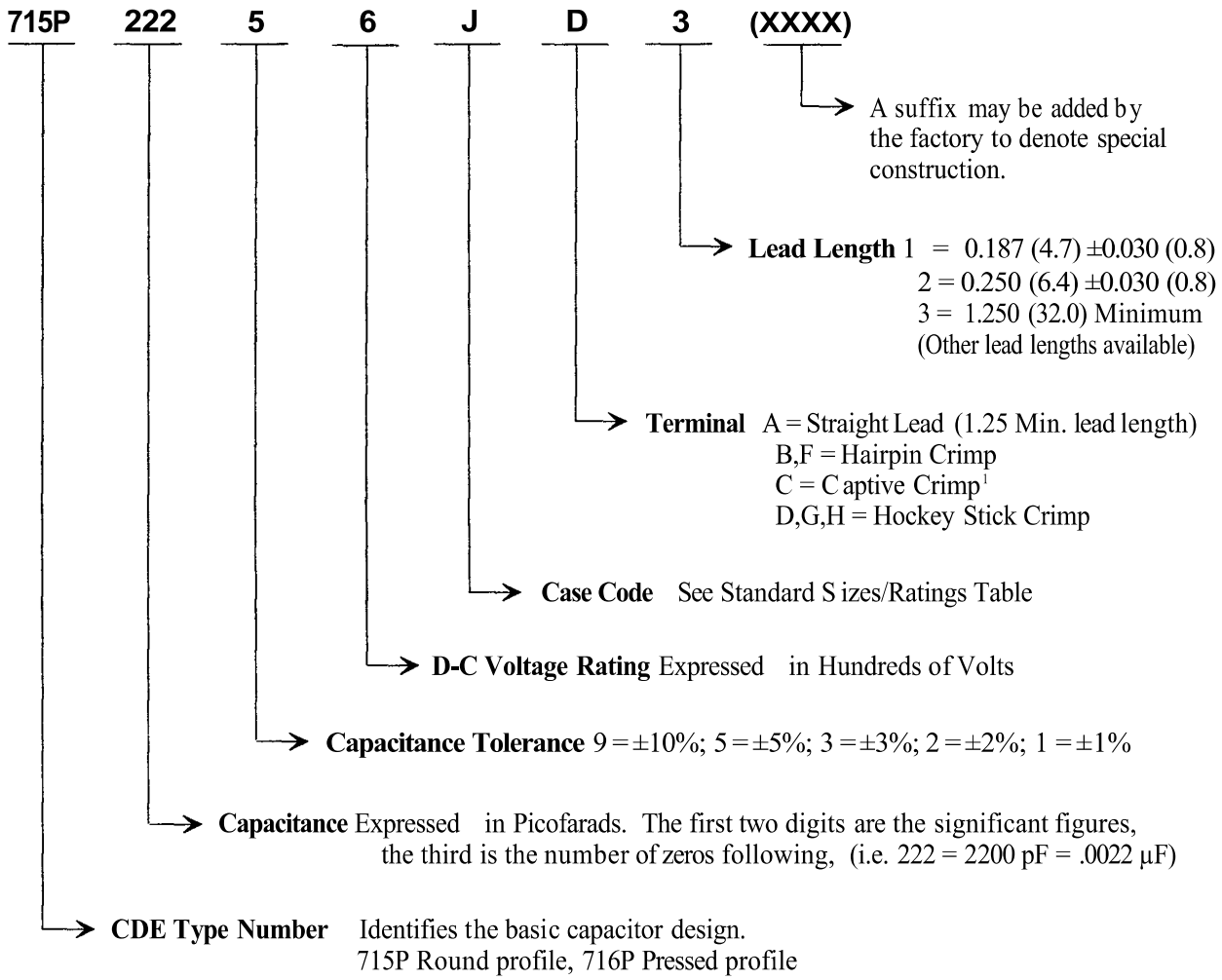
DC Voltage Life Test:
Minimum of 500 hours at +85°C at 150% of rated voltage. After test, capacitance shall not have changed by more than 3%, insulation resistance shall not have decreased by more than 25% and dissipation factor shall not have changed by more than 0.03%. Measurements made at 1 KHz.

AC Voltage Life Test:
Minimum of 500 hours at +85°C at 60 Hz. AC test voltage applied at 110% of AC rating. After test, capacitance shall not have changed by more than 3%, insulation resistance shall not have decreased by more than 25%, and dissipation factor shall not have changed by more than 0.03%. Measurements made at 1 KHz.

Additional notes on Life Testing:
CDE performs standard 500 hour accelerated life tests, both DC and line frequency AC, to monitor process control over our wide range of products.

We also perform longer term life testing, typically 2000 hours, during development of most products. In addition we do accelerated life testing at 10-250 KHz for our High Performance AC products. For additional life test information please contact us.

Ordering/Part Number Information



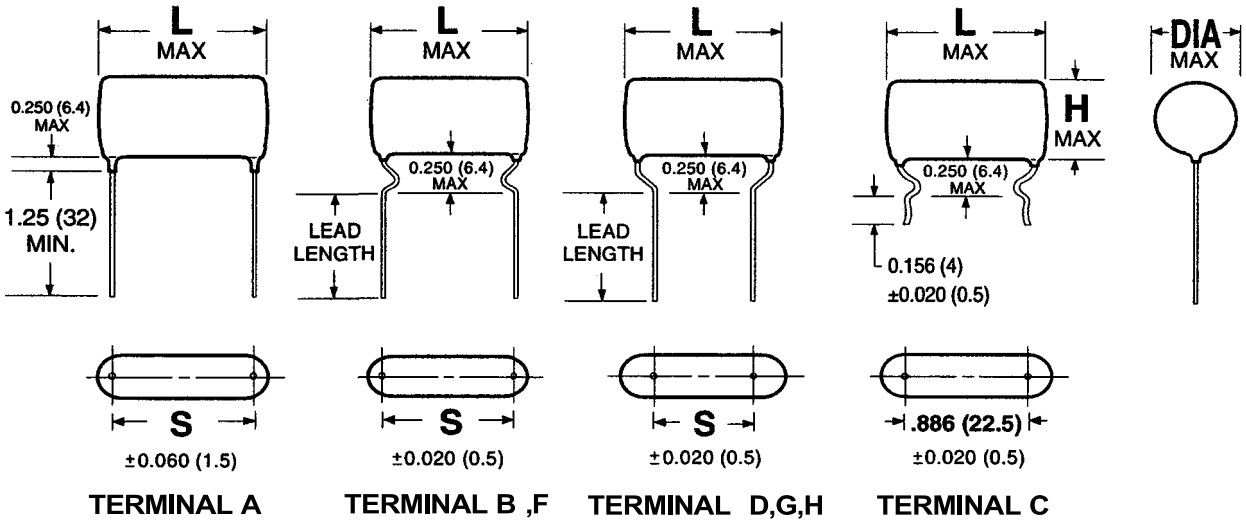
[1]Terminal C has a fixed lead length of 0.156 (4.0) ±0.020 (0.5), therefore it is not necessary to indicate the lead length digit when ordering. Available for "L" case code parts only

Please note:

While it is not possible to list every capacitance value, tolerance, or design/size variation available, our flexibility in design and manufacturing gives us the ability to quickly, and cost effectively, provide you with the capacitor you require. Please contact us today with your specific needs!

Dimensions in inches, metric (mm) in parenthesis.

Standard Lead Styles



Standard Lead Spacings

CASE CODE	S, inches (metric, mm in parentheses)						
	Term. A	Term. B	Term. D	Term. C *	Term. F	Term. G	Term. H
N	0.394 (10)	0.394 (10)	---	---	0.295 (7.5)	0.197 (5)	---
J	0.500 (12.7)	0.500 (12.7)	0.375 (9.5)	---	0.394 (10)	0.295 (7.5)	0.197 (5)
K	0.688 (17.5)	0.688 (17.5)	0.375 (9.5)	---	0.590 (15)	0.394 (10)	0.295 (7.5)
L	1.031 (26.2)	0.969 (24.6)	0.719 (18.3)	0.886 (22.5)	0.886 (22.5)	0.590 (15)	---
M	1 406 (35.7)	1.344 (34.1)	1.094 (27.8)	---	---	1.083 (27.5)	---

* Terminal C is designed for printed circuit boards requiring a lead spacing of 0.886 (22.5) with board hole sizes of 0.044 (1.1) to 0.048 (1.2) in diameter. Available for "L" case code parts only. Please consult us if you have a specific requirement.

Standard Marking Format

Sample Marking on unit

CDE715P600V
222J 9810

Description

CDE - CDE Electronics identification
715P - Type number
600V - D-C Voltage rating, Volts
222J - Capacitance and tolerance code
9810 - Weekly date code (i.e. 10th week of 1998)

Tolerance codes per EIA Standards

F	±1%
G	±2%
H	±3%
J	±5%
K	±10%

Dimensions in inches, metric (mm) in parenthesis.

Type 715P Standard Sizes/Ratings[1]

Value, µF	Part Number[2]	L MAX	DIA MAX	H MAX
100 VDC / 70 VAC*				
.0056	715P56291N	.57 (14.5)	.25 (6.4)	.31 (7.9)
.006	715P60291N	.57 (14.5)	.25 (6.4)	.31 (7.9)
.0068	715P68291N	.57 (14.5)	.26 (6.6)	.32 (8.1)
.0075	715P75291N	.57 (14.5)	.26 (6.6)	.32 (8.1)
.0082	715P82291N	.57 (14.5)	.27 (6.9)	.33 (8.4)
.009	715P90291N	.57 (14.5)	.26 (6.6)	.32 (8.1)
.01	715P10391N	.57 (14.5)	.26 (6.6)	.32 (8.1)
.012	715P12391N	.57 (14.5)	.28 (7.1)	.34 (8.6)
.015	715P15391N	.57 (14.5)	.29 (7.4)	.35 (8.9)
.018	715P18391N	.57 (14.5)	.31 (7.9)	.37 (9.4)
.022	715P22391N	.57 (14.5)	.33 (8.4)	.39 (9.9)
.025	715P25391N	.57 (14.5)	.35 (8.9)	.41 (10.4)
.027	715P27391N	.57 (14.5)	.35 (8.9)	.41 (10.4)
.033	715P33391N	.57 (14.5)	.38 (9.7)	.44 (11.2)
.039	715P39391J	.70 (17.8)	.34 (8.6)	.40 (10.2)
.047	715P47391J	.70 (17.8)	.36 (9.1)	.42 (10.7)
.05	715P50391J	.70 (17.8)	.37 (9.4)	.43 (10.9)
.056	715P56391J	.70 (17.8)	.38 (9.7)	.44 (11.2)
.062	715P62291J	.70 (17.8)	.40 (10.2)	.46 (11.7)
.068	715P68391J	.70 (17.8)	.41 (10.4)	.47 (11.9)
.075	715P75391K	.90 (22.9)	.36 (9.1)	.42 (10.7)
.082	715P82391K	.90 (22.9)	.37 (9.4)	.43 (10.9)
.09	715P90391K	.90 (22.9)	.38 (9.7)	.44 (11.2)
.1	715P10491K	.90 (22.9)	.40 (10.2)	.46 (11.7)
.12	715P12491K	.90 (22.9)	.43 (10.9)	.49 (11.9)
.15	715P15491K	.90 (22.9)	.46 (11.7)	.52 (13.2)
.18	715P18491K	.90 (22.9)	.50 (12.7)	.56 (14.2)
.2	715P20491K	.90 (22.9)	.52 (13.2)	.58 (14.7)
.22	715P22491K	.90 (22.9)	.54 (13.7)	.60 (15.2)
.25	715P25491L	1.25 (31.8)	.47 (11.9)	.53 (13.5)
.27	715P27491L	1.25 (31.8)	.48 (12.2)	.54 (13.7)
.3	715P30491L	1.25 (31.8)	.50 (12.7)	.56 (14.2)
.33	715P33491L	1.25 (31.8)	.52 13.2)	.58 (14.7)
200 VDC /155 VAC*				
.01	715P10392J	.70 (17.8)	.25 (6.4)	.31 (7.9)
.012	715P12392J	.70 (17.8)	.26 (6.6)	.32 (8.1)
.015	715P15392J	.70 (17.8)	.28 (7.1)	.34 (8.6)
.018	715P18392J	.70 (17.8)	.29 (7.4)	.35 (8.9)
.022	715P22392J	.70 (17.8)	.31 (7.9)	.37 (9.4)
.027	715P27392J	.70 (17.8)	.33 (8.4)	.39 (9.9)
.033	715P33392J	.70 (17.8)	.36 (9.1)	.42 (10.7)
.039	715P39392K	.90 (22.9)	.32 (8.1)	.38 (9.7)
.047	715P47392K	.90 (22.9)	.34 (8.6)	.40 (10.2)
.056	715P56392K	.90 (22.9)	.37 (9.4)	.43 (10.9)
.068	715P68392K	.90 (22.9)	.39 (9.9)	.45 (11.4)
.082	715P82392L	1.25 (31-8)	.36 (9.1)	.42 (10.7)
.1	715P10492L	1.25 (31.8)	.38 (9.7)	.44 (11.2)
.12	715P12492L	1.25 (31.8)	.41 (10.4)	.47 (11.9)
.15	715P15492L	1.25 (31.8)	.44 (11.2)	.5 (12.7)
.18	715P18492L	1.25 (31.8)	.47 (11.9)	.53 (13.5)
.22	715P22492L	1.25 (31.8)	.51 (13.0)	.57 (14.5)
.27	715P27492M	1.65 (41.9)	.49 (12.4)	.55 (14.0)
.33	715P33492M	1.65 (41.9)	.53 (13.5)	.59 (15.0)
.39	715P39492M	1.65 (41.9)	.56 (14.2)	.62 (15.7)
.47	715P47492M	1.65 (41.9)	.60 (15.2)	.66 (16.8)
400 VDC / 200 VAC*				
.001	715P10294J	.70 (17.8)	.35 (8.9)	.39 (9.9)
.0012	715P12294J	.70 (17.8)	.36 (9.1)	.40 (10.2)
.0015	715P15294J	.70 (17.8)	.32 (8.1)	.36 (9.1)
.0018	715P18294J	.70 (17.8)	.34 (8.6)	.38 (9.7)
.0022	715P22294J	.70 (17.8)	.33 (8.4)	.37 (9.4)
.0027	715P27294J	.70 (17.8)	.35 (8.9)	.39 (9.9)
.0033	715P33294J	.70 (17.8)	.32 (8.1)	.36 (9.1)
.0039	715P39294J	.70 (17.8)	.34 (8.6)	.38 (9.7)
.0047	715P47294J	.70 (17.8)	.34 (8.6)	.38 (9.7)
.0056	715P56294J	.70 (17.8)	.36 (9.1)	.40 (10.2)
.0068	715P68294J	.70 (17.8)	.29 (7.4)	.35 (8.9)
.0082	715P82294J	.70 (17.8)	.30 (7.6)	.36 (9.1)
.01	715P10394J	.70 (17.8)	.30 (7.6)	.36 (9.1)
.012	715P12394J	.70 (17.8)	.32 (8.1)	.38 (9.7)
.015	715P15394J	.70 (17.8)	.34 (8.6)	.40 (10.2)
.018	715P18394K	.90 (22.9)	.31 (7.9)	.37 (9.4)
.022	715P22394K	.90 (22.9)	.33 (8.4)	.39 (9.9)
.027	715P27394K	.90 (22.9)	.36 (9.1)	.42 (10.7)
.033	715P33394K	.90 (22.9)	.38 (9.7)	.44 (11.2)
.039	715P39394L	1.25 (31.8)	.35 (8.9)	.41 (10.4)
.047	715P47394L	1.25 (31.8)	.37 (9.4)	.43 (10.9)
.056	715P56394L	1.25 (31.8)	.39 (9.9)	.45 (11.4)
.068	715P68394L	1.25 (31.8)	.42 (10.7)	.48 (12.2)
.082	715P82394L	1.25 (31.8)	.45 (11.4)	.51 (13.0)
.1	715P10494L	1.25 (31.8)	.48 (12.2)	.54 (13.7)
.12	715P12494L	1.25 (31.8)	.52 (13.2)	.58 (14.7)
.15	715P15494L	1.25 (31.8)	.56 (14.2)	.62 (15.7)
.18	715P18494M	1.65 (41.9)	.54 (13.7)	.60 (15.2)
.22	715P22494M	1.65 (41.9)	.58 (14.7)	.64 (16.3)
.27	715P27494M	1.65 (41.9)	.63 (16.0)	.69 (17.5)
.33	715P33494M	1.65 (41.9)	.70 (17.8)	.76 (19.3)
.39	715P39494M	1.65 (41.9)	.75 (19.1)	.81 (20.6)
.47	715P47494M	1.65 (41.9)	.82 (20.8)	.88 (22.4)

[1] Shaded part numbers, when ordered as ±5% tolerance with D3 leads, are standard stock items available through the CDE Distribution Network. For complete part number add letter and number for terminal style and lead length in accordance with Ordering Information, (i.e. 715P10452LD3)

[2] To complete part number for proper tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

* Please refer to performance curves for RMS Voltage vs. Frequency characteristics.

Dimensions in inches, metric (mm) in parenthesis.

Type 715P Standard Sizes/Ratings[1]

Value, µF	Part Number[2]	L MAX	DIA MAX	H MAX
600 VDC / 2 00 VAC*				
.001	715P10296J	.70 (17.8)	.35 (8.9)	.39 (9.9)
.0012	715P12296J	.70 (17.8)	.36 (9.1)	.40 (10.2)
.0015	715P15296J	.70 (17.8)	.32 (8.1)	.36 (9.1)
.0018	715P18296J	.70 (17.8)	.34 (8.6)	.38 (9.7)
.0022	715P22296J	.70 (17.8)	.33 (8.4)	.37 (9.4)
.0027	715P27296J	.70 (17.8)	.35 (8.9)	.39 (9.9)
.0033	715P33296J	.70 (17.8)	.32 (8.1)	.36 (9.1)
.0039	715P39296J	.70 (17.8)	.34 (8.6)	.38 (9.7)
.0047	715P47296J	.70 (17.8)	.34 (8.6)	.38 (9.7)
.0056	715P56296J	.70 (17.8)	.36 (9.1)	.40 (10.2)
.0068	715P68296J	.70 (17.8)	.38 (9.7)	.42 (10.7)
.0082	715P82296K	.90 (22.9)	.34 (8.6)	.38 (9.7)
.01	715P10396K	.90 (22.9)	.36 (9.1)	.40 (10.2)
.012	715P12396K	.90 (22.9)	.38 (9.7)	.42 (10.7)
.015	715P15396K	.90 (22.9)	.42 (10.7)	.46 (11.7)
.018	715P18396K	.90 (22.9)	.44 (11.2)	.48 (12.2)
.022	715P22396K	.90 (22.9)	.48 (12.2)	.52 (13.2)
.027	715P27396L	1.25 (31.8)	.43 (10.2)	.47 (11.9)
.033	715P33396L	1.25 (31.8)	.46 (11.7)	.50 (12.7)
.039	715P39396L	1.25 (31.8)	.49 (12.4)	.53 (13.5)
.047	715P47396L	1.25 (31.8)	.52 (13.2)	.56 (14.2)
.056	715P56396L	1.25 (31.8)	.56 (14.2)	.60 (15.2)
.068	715P68396L	1.25 (31.8)	.60 (15.2)	.64 (16.3)
.082	715P82396L	1.25 (31.8)	.65 (16.5)	.69 (17.5)
.1	715P10496L	1.25 (31.8)	.71 (18.0)	.75 (19.2)
.12	715P12496M	1.65 (41.9)	.65 (16.5)	.69 (17.5)
.15	715P15496M	1.65 (41.9)	.71 (18.0)	.75 (19.1)
.18	715P18496M	1.65 (41.9)	.77 (19.6)	.81 (20.6)
.22	715P22496M	1.65 (41.9)	.83 (21.1)	.85 (21.6)
800 VDC / 450 VAC*				
.0056	715P56298L	1.25 (31.8)	.28 (71)	.34 (8.6)
.0068	715P68298L	1.25 (31.8)	.29 (7.4)	.35 (8.9)
.0082	715P82298L	1.25 (31.8)	.31 (7.9)	.37 (9.4)
.01	715P10398L	1.25 (31.8)	.33 (8.4)	.39 (9.9)
.012	715P12398L	1.25 (31.8)	.35 (8.9)	.41 (10.4)
.015	715P15398L	1.25 (31.8)	.38 (9.7)	.44 (11.2)
.018	715P18398L	1.25 (31.8)	.41 (10.4)	.47 (11.9)
.022	715P22398L	1.25 (31.8)	.44 (11.2)	.50 (12.7)
.027	715P27398L	1.25 (31.8)	.47 (11.9)	.53 (13.5)
.033	715P33398L	1.25 (31.8)	.51 (13.0)	.57 (14.5)
.039	715P39398M	1.65 (41.9)	.47 (11.9)	.53 (13.5)
.047	715P47398M	1.65 (41.9)	.50 (12.7)	.56 (14.2)
.056	715P56398M	1.65 (41.9)	.53 (13.5)	.59 (15.0)
.068	715P68398M	1.65 (41.9)	.58 (14.7)	.64 (16.3)
.082	715P82398M	1.65 (41.9)	.62 (15.7)	.68 (17.3)
.1	715P10498M	1.65 (41.9)	.67 (17.0)	.73 (18.5)

Value, µF	Part Number	L MAX	DIA MAX	H MAX
1000 VDC / 4 50 VAC*				
.0056	715P562910L	1.25 (31.8)	.28 (7.1)	.34 (8.6)
.0068	715P682910L	1.25 (31.8)	.29 (7.4)	.35 (8.9)
.0082	715P822910L	1.25 (31.8)	.31 (7.9)	.37 (9.4)
.01	715P103910L	1.25 (31.8)	.33 (8.4)	.39 (3.9)
.012	715P123910L	1.25 (31.8)	.35 (8.9)	.41 (10.4)
.015	715P153910L	1.25 (31.8)	.38 (9.7)	.44 (11.2)
.018	715P183910L	1.25 (31.8)	.41 (10.4)	.47 (11.9)
.022	715P223910L	1.25 (31.8)	.44 (11.2)	.50 (12.7)
.027	715P273910L	1.25 (31.8)	.47 (11.9)	.53 (13.5)
.033	715P333910L	1.25 (31.8)	.51 (13.0)	.57 (14.5)
.039	715P393910M	1.65 (41.9)	.47 (11.9)	.53 (13.5)
.047	715P473910M	1.65 (41.9)	.50 (12.7)	.56 14.2)
.056	715P563910M	1.65 (41.9)	.53 (13.5)	.59 (15.0)
.068	715P683910M	1.65 (41.9)	.58 (14.7)	.64 (16.3)
.082	715P823910M	1.65 (41.9)	.62 (15.7)	.68 (17.3)
.1	715P104910M	1.65 (41.9)	.67 (17.0)	.73 (18.5)
1200 VDC / 475 VAC*				
.001	715P102912L	1.25 (31.8)	.29 (7.4)	.33 (8.4)
.0012	715P122912L	1.25 (31.8)	.30 (7.6)	.34 (8.6)
.0015	715P152912L	1.25 (31.8)	.32 (8.1)	.36 (9.1)
.0018	715P182912L	1.25 (31.8)	.34 (8.6)	.38 (9.7)
.0022	715P222912L	1.25 (31.8)	.35 (8.9)	.39 (9.9)
.0027	715P272912L	1.25 (31.8)	.38 (9.7)	.42 (10.7)
.0033	715P332912L	1.25 (31.8)	.32 (8.1)	.38 (9.7)
.0039	715P392912L	1.25 (31.8)	.34 (8.6)	.40 (10.2)
.0047	715P472912L	1.25 (31.8)	.36 (9.1)	.42 (10.7)
.0056	715P562912L	1.25 (31.8)	.38 (9.7)	.44 (11.2)
.0068	715P682912L	1.25 (31.8)	.41 (10.4)	.47 (11.9)
.0082	715P822912L	1.25 (31.8)	.44 (11.2)	.50 (12.7)
.01	715P103912L	1.25 (31.8)	.47 (11.9)	.53 (13.5)
.012	715P123912L	1.25 (31.8)	.51 (13.0)	.57 (14.5)
.015	715P153912L	1.25 (31.8)	.55 (14.0)	.61 (15.5)
.018	715P183912M	1.65 (41.9)	.50 (12.7)	.56 (14.2)
.022	715P223912M	1.65 (41.9)	.54 (13.7)	.60 (15.2)
.027	715P273912M	1.65 (41.9)	.59 (15.0)	.65 (16.5)
.033	715P333912M	1.65 (41.9)	.64 (16.3)	.70 (17.8)
.039	715P393912M	1.65 (41.9)	.68 (17.3)	.74 (18.8)
.047	715P473912M	1.65 (41.9)	.74 (18.8)	.80 (20.3)

[1] Shaded part numbers, when ordered as ±5% tolerance with D3 leads, are standard stock Items available through the CDE Distribution Network. For complete part number add letter and number for terminal style and lead length in accordance with Ordering Information, (i.e. 715P10452LD3)

[2] To complete part number for proper tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

* Please refer to performance curves for RMS Voltage vs. Frequency characteristics.

Dimensions in inches, metric (mm) in parenthesis.

Type 715P, Orange Drop®, Polypropylene Film/Foil Capacitors

Type 715P Standard Sizes/Ratings[1]

Value, µF	Part Number[2]	L MAX	DIA MAX	H MAX
1600 VDC / 500 VAC*				
.001	715P102916L	1.25 (31.8)	.29 (7.4)	.33 (8.4)
.0012	715P122916L	1.25 (31.8)	.30 (7.6)	.34 (8.6)
.0015	715P152916L	1.25 (31.8)	.32 (8.1)	.36 (9.1)
.0018	715P182916L	1.25 (31.8)	.34 (8.6)	.38 (9.7)
.0022	715P222916L	1.25 (31.8)	.35 (8.9)	.39 (9.9)
.0027	715P272916L	1.25 (31.8)	.38 (9.7)	.42 (10.7)
.0033	715P332916L	1.25 (31.8)	.40 (10.2)	.44 (11.2)
.0039	715P392916L	1.25 (31.8)	.43 (10.9)	.47 (11.9)
.0047	715P472916L	1.25 (31.8)	.46 (11.7)	.50 (12.7)
.0056	715P562916L	1.25 (31.8)	.49 (12.4)	.53 (13.5)
.0068	715P682916L	1.25 (31.8)	.52 (13.2)	.56 (14.2)
.0082	715P822916L	1.25 (31.8)	.56 (14.2)	.60 (15.2)
.01	715P103916L	1.25 (31.8)	.61 (15.5)	.65 (16.5)
.012	715P123916M	1.65 (41.9)	.54 (13.7)	.58 (14.7)
.015	715P153916M	1.65 (41.9)	.59 (15.0)	.63 (16.0)
.018	715P183916M	1.65 (41.9)	.63 (16.0)	.67 (17.0)
.022	715P223916M	1.65 (41.9)	.69 (17.5)	.73 (18.5)
.027	715P273916M	1.65 (41.9)	.74 (18.8)	.78 (19.8)
.033	715P333916M	1.65 (41.9)	.81 (20.6)	.85 (21.6)

Value, µF	Part Number[2]	L MAX	DIA MAX	H MAX
2000 VDC / 500 VAC*				
.001	715P102920L	1.25 (31.8)	.29 (7.4)	.33 (8.4)
.0012	715P122920L	1.25 (31.8)	.30 (7.6)	.34 (8.6)
.0015	715P152920L	1.25 (31.8)	.32 (8.1)	.36 (9.1)
.0018	715P182920L	1.25 (31.8)	.34 (8.6)	.38 (9.7)
.0022	715P222920L	1.25 (31.8)	.35 (8.9)	.39 (9.9)
.0027	715P272920L	1.25 (31.8)	.38 (9.7)	.42 (10.7)
.0033	715P332920L	1.25 (31.8)	.40 (10.2)	.44 (11.2)
.0039	715P392920L	1.25 (31.8)	.43 (10.9)	.47 (11.9)
.0047	715P472920L	1.25 (31.8)	.46 (11.7)	.50 (12.7)
.0056	715P562920L	1.25 (31.8)	.49 (12.4)	.53 (13.5)
.0068	715P682920L	1.25 (31.8)	.52 (13.2)	.56 (14.2)
.0082	715P822920L	1.25 (31.8)	.56 (14.2)	.60 (15.2)
.01	715P103920L	1.25 (31.8)	.61 (15.5)	.65 (16.5)
.012	715P123920M	1.65 (41.9)	.54 (13.7)	.58 (14.7)
.015	715P153920M	1.65 (41.9)	.59 (15.0)	.63 (16.0)
.018	715P183920M	1.65 (41.9)	.63 (16.0)	.67 (17.0)
.022	715P223920M	1.65 (41.9)	.69 (17.5)	.73 (18.5)
.027	715P273920M	1.65 (41.9)	.74 (18.8)	.78 (19.8)
.033	715P333920M	1.65 (41.9)	.81 (20.6)	.85 (21.6)

[1] Shaded part numbers, when ordered as ±5% tolerance with D3 leads, are standard stock items available through the CDE Distribution Network. For complete part number add letter and number for terminal style and lead length in accordance with Ordering Information, (i.e. 715P10452LD3)

[2] To complete part number for proper tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

* Please refer to performance curves for RMS Voltage vs. Frequency characteristics.

Please note:

It is not possible to list every capacitance value available for each rating, if you require a specific cap value not listed just give us a call. We will supply the details you need.

Dimensions in inches, metric (mm) in parenthesis.

Corona, Dissipation Factor Specifications

Corona Start Voltage

D-C Rating	Typical Corona Start Voltage, RMS
100	250
200	300
400, 600	325
800, 1000	600
1200	625
1600, 2000	650

Maximum Dissipation Factor (D.F.) in %

Cap	100V-600V		800V/1000V		1200V		1600V/2000V	
Range (µF)	20KHz	100KHz	20KHz	100KHz	20KHz	100KHz	20KHz	100KHz
.001 - .01	.029	.040	.039	.088	.035	.068	.033	.059
.012 - .022	.031	.050	.040	.098	.043	.111	.039	.093
.027 - .047	.034	.071	.055	.175	.047	.132	.041	.102
.056 - .068	.037	.089	.058	.193	--	--	--	--
.082 - .1	.042	.116	.063	.220	--	--	--	--
.12 - .15	.049	.158	--	--	--	--	--	--
.18 - .22	.059	.217	--	--	--	--	--	--
.27 - .33	.074	.309	--	--	--	--	--	--
.39 - 47	.093	.427	--	--	--	--	--	--

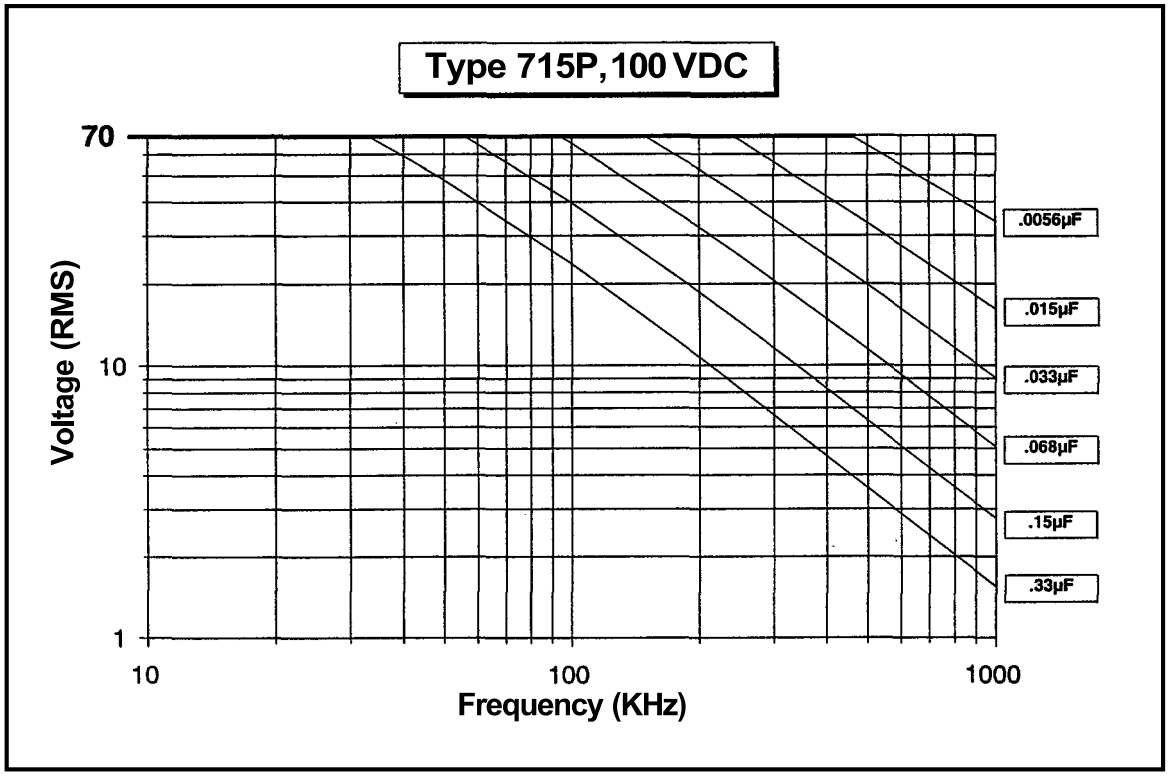
dV/dt Specifications

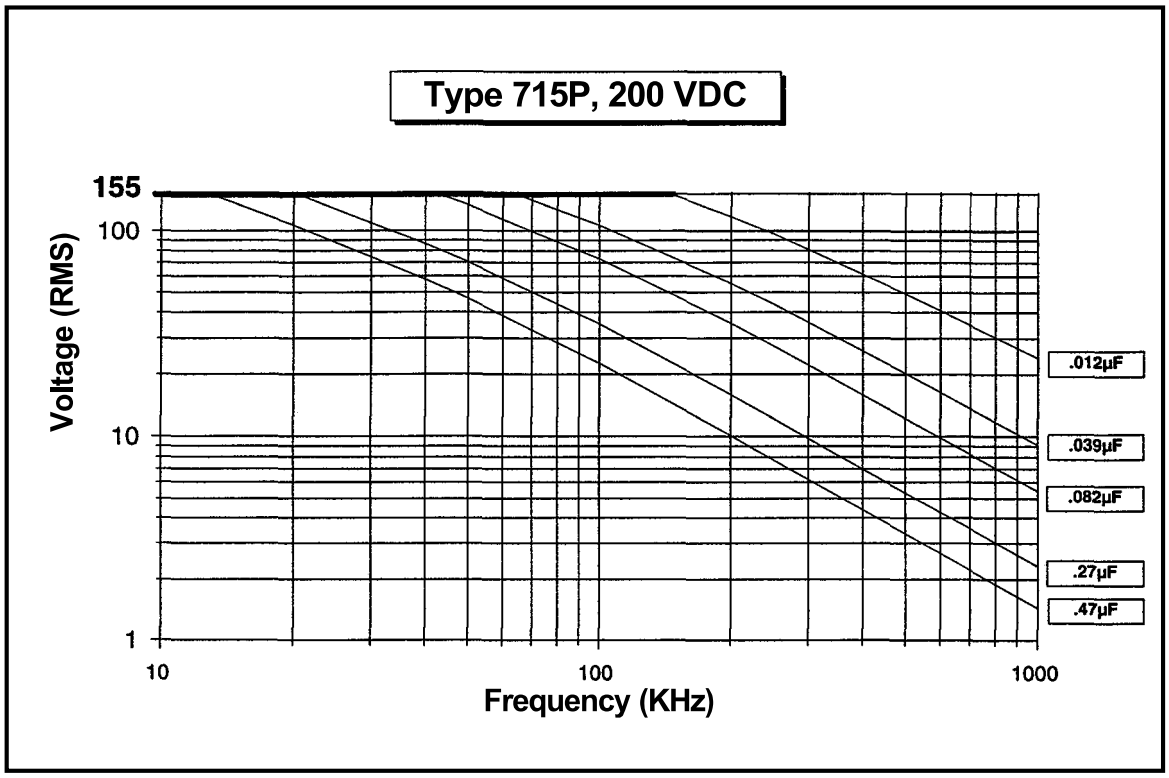
Maximum Pulse Rise Time (dV/dt) in Volts/µsec

Cap Value (µF)	100V	200V	400V	600V	800V/ 1000V	1200V	1600V/ 2000V
.001	-	-	19900	19900	-	43200	43200
.0012	-	-	18200	18200	-	39500	39500
.0015	-	-	16200	16200	-	35300	35300
.0018	-	-	14800	14800	-	32200	32200
.0022	-	-	13400	13400	-	29100	29100
.0027	-	-	12100	12100	-	25000	26300
.0033	-	-	11000	11000	-	22600	23800
.0039	-	-	10100	10100	-	20800	21900
.0047	-	-	9200	9200	-	18900	19900
.0056	4900	-	8400	8400	16400	17400	18300
.0068	4500	-	7600	7600	14900	15700	16600
.0082	4100	-	6900	6500	13600	14300	15100
.01	3700	4400	6300	5900	12300	13000	13700
.012	3400	4100	5700	5400	11200	11900	11600
.015	3000	3600	5100	4800	10000	10600	10300
.018	2800	3300	4400	4400	9200	9000	9400
.022	2500	3000	4000	4000	8300	8100	8500
.027	2200	2700	3600	3300	7500	7300	7700
.033	2000	2400	3200	3000	6800	6600	7000
.039	1900	2100	2800	2800	6200	6100	-
.047	1700	1900	2500	2500	5300	5600	-
.056	1500	1800	2300	2300	4800	-	-
.068	1300	1600	2100	2100	4400	-	-
.082	1200	1400	1900	1900	4000	-	-
.1	1100	1200	1700	1700	3600	-	-
.12	900	1100	1600	1500	-	-	-
.15	800	1000	1400	1300	-	-	-
.18	800	910	1200	1200	-	-	-
.22	700	820	1100	1100	-	-	-
.27	600	690	970	-	-	-	-
.33	500	620	880	-	-	-	-
.39	-	570	810	-	-	-	-
.47	-	520	740	-	-	-	-

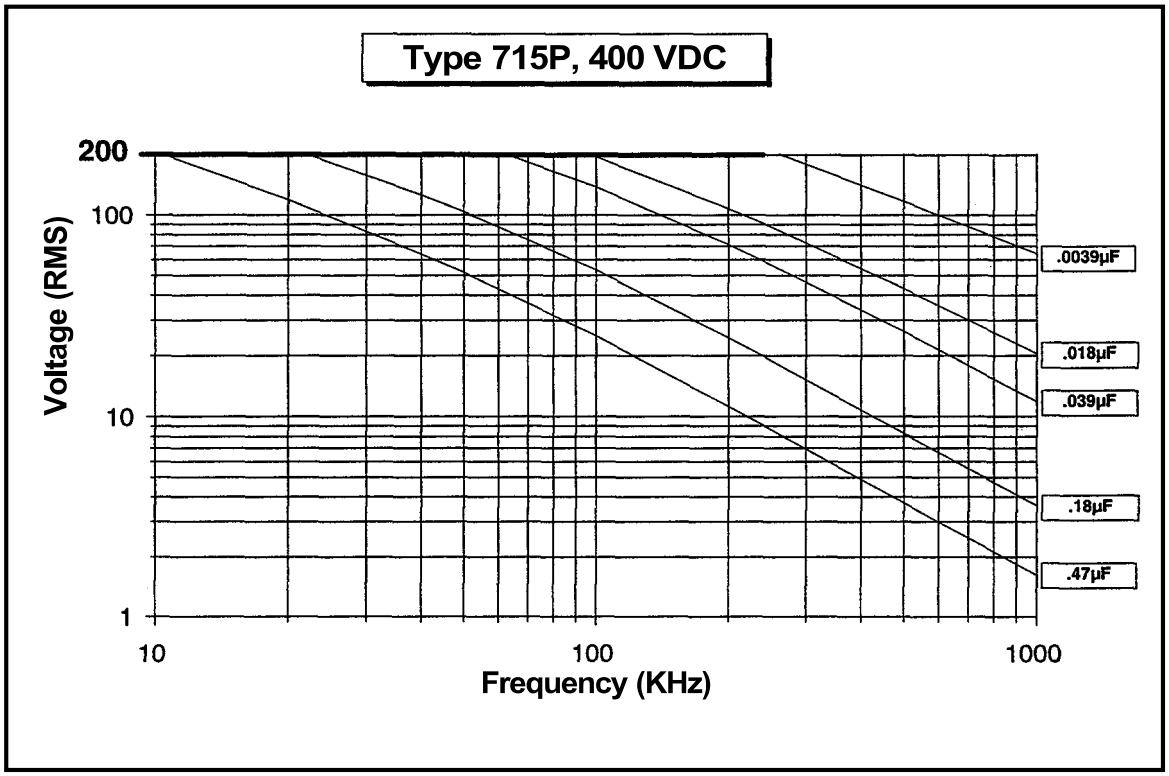
Note: dV/dt ratings based on measurements made at junction of the wire leads and capacitor body.

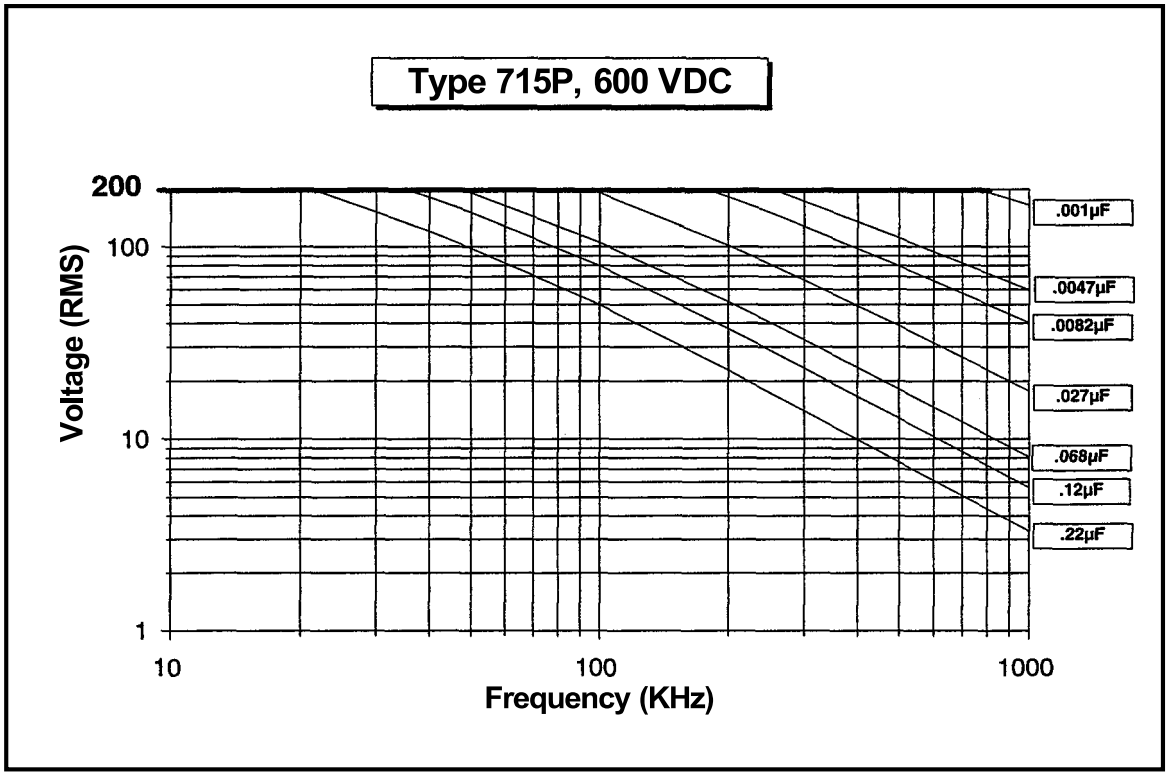
RMS Voltage vs. Frequency @ +85°C



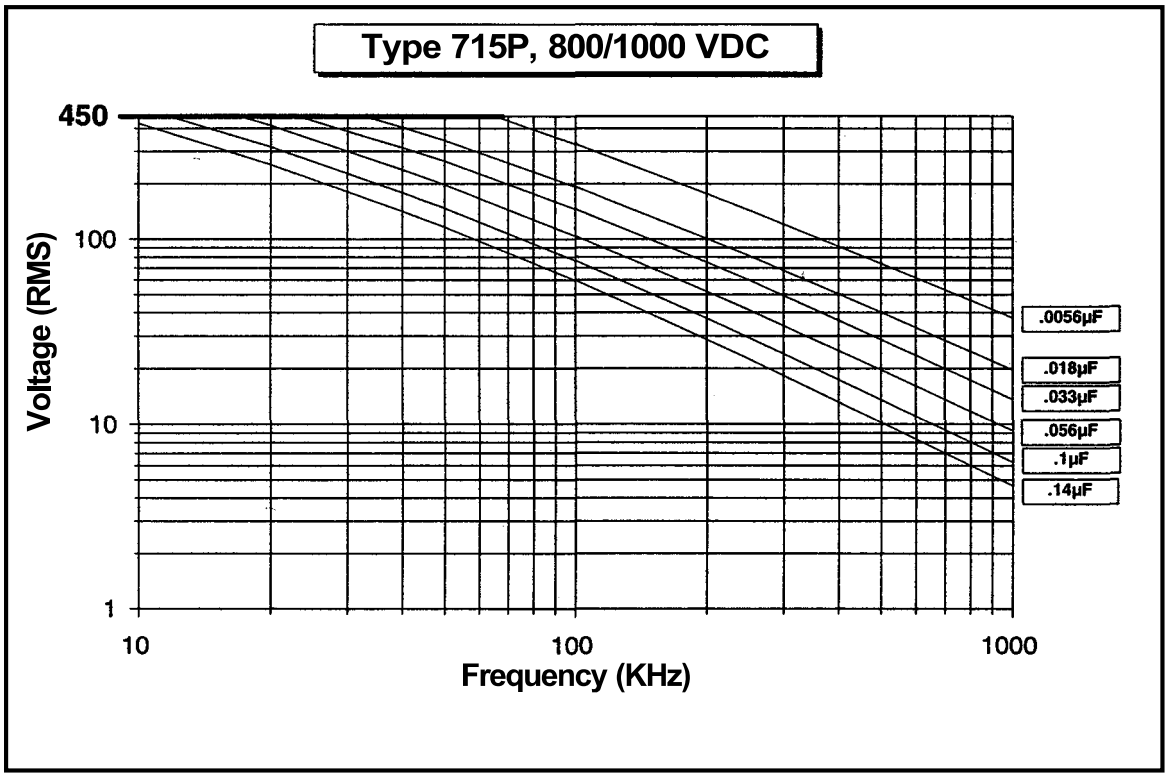


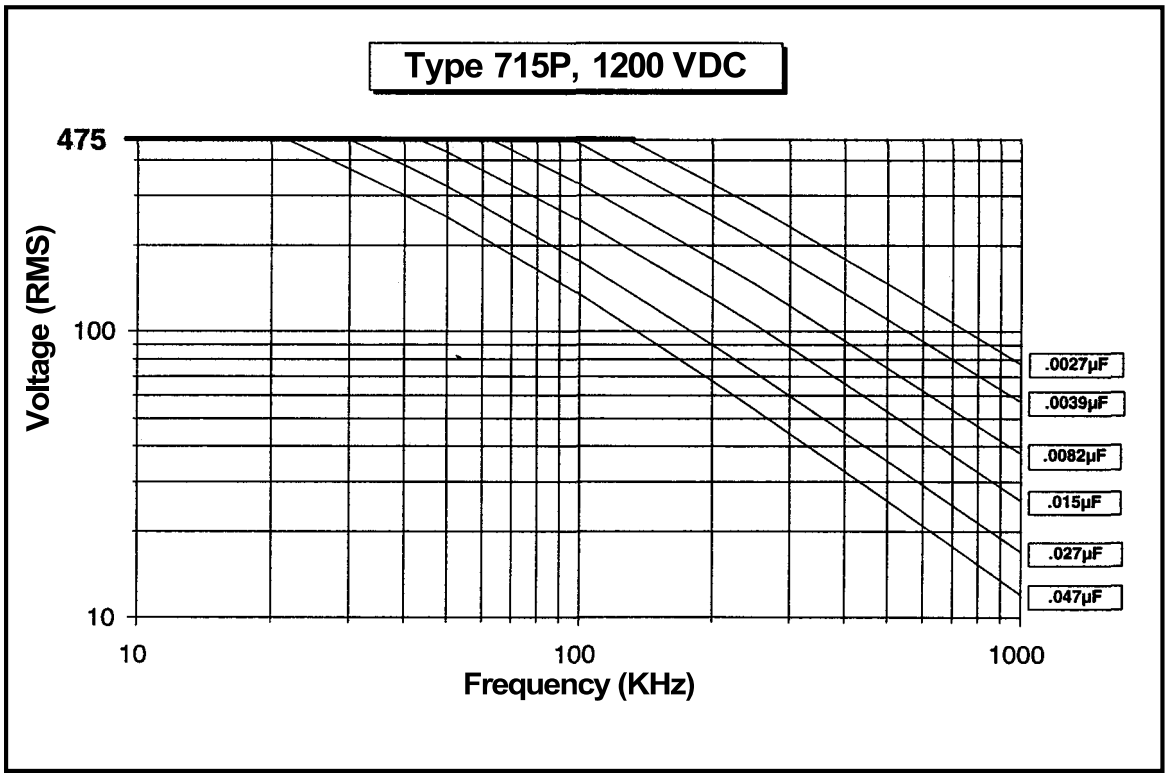
RMS Voltage vs. Frequency @ +85°C



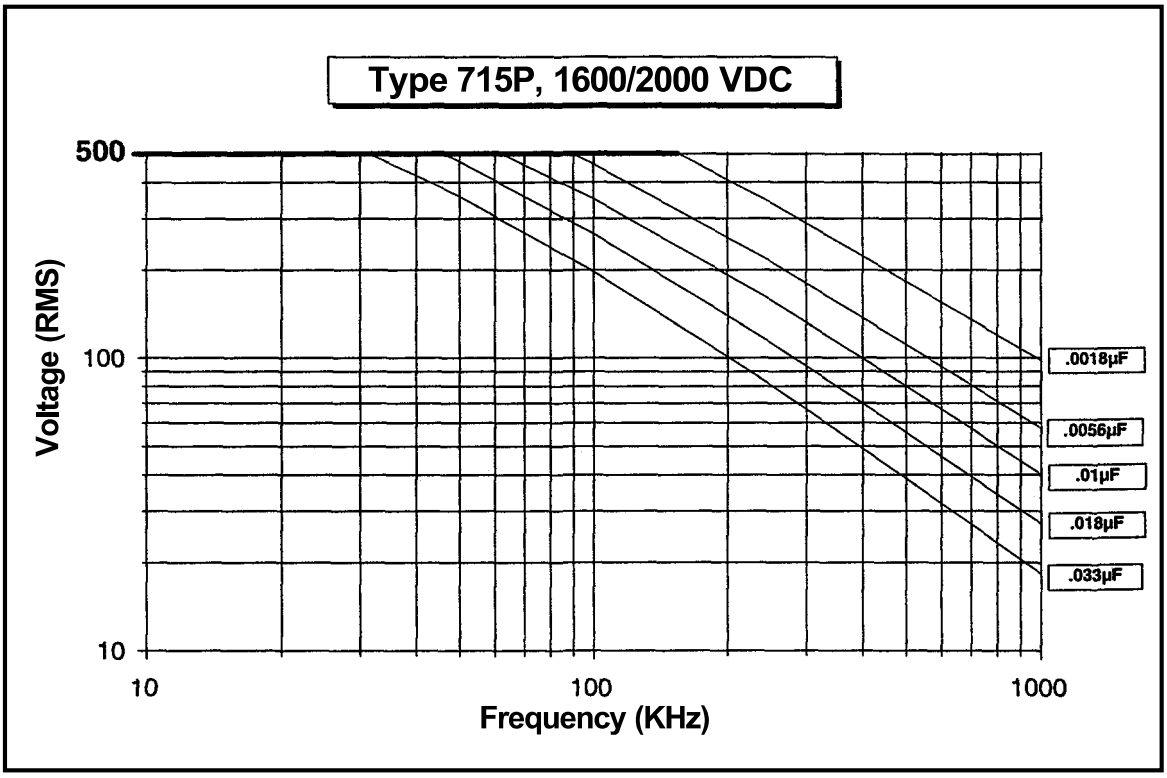


RMS Voltage vs. Frequency @ +85°C

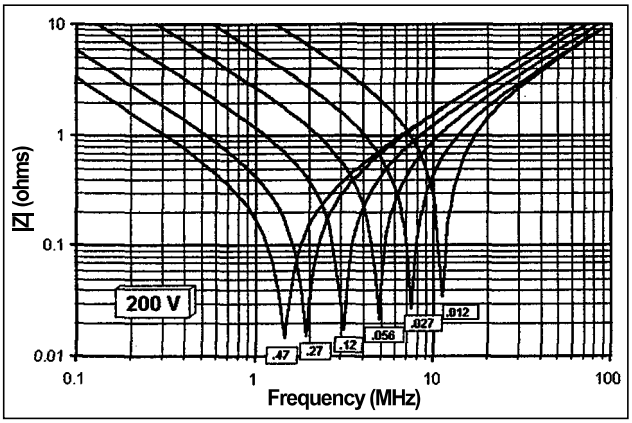


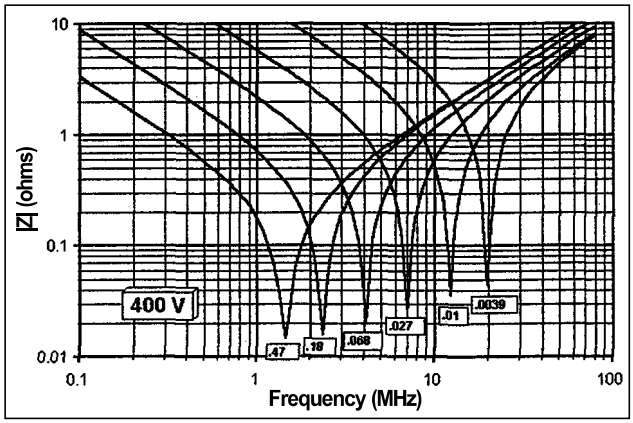


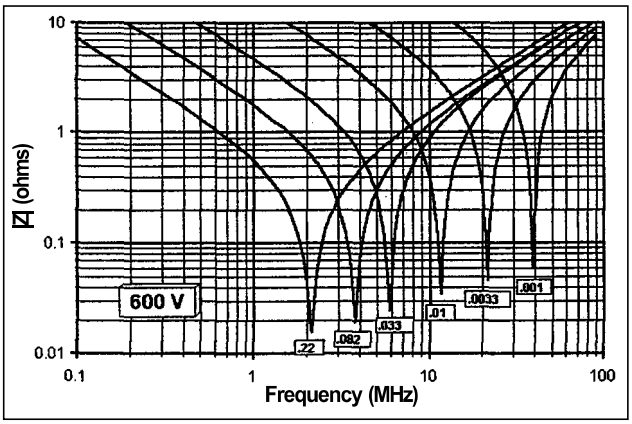
RMS Voltage vs. Frequency @ +85°C

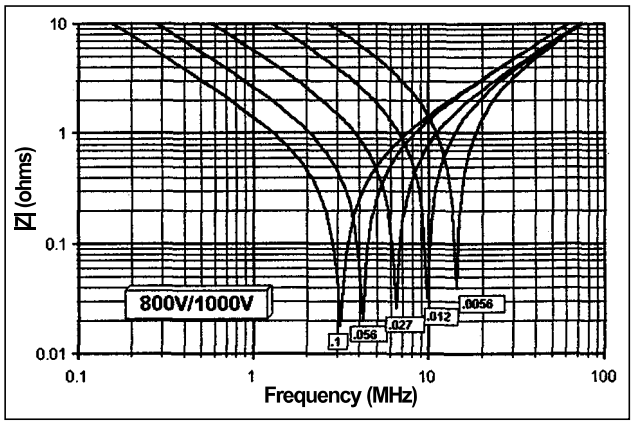


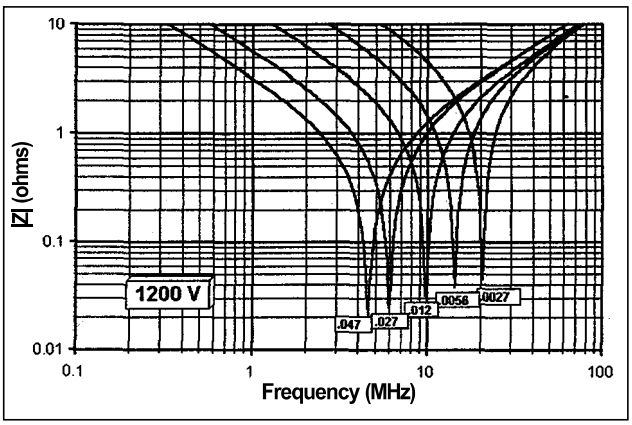
Typical Impedance vs. Frequency

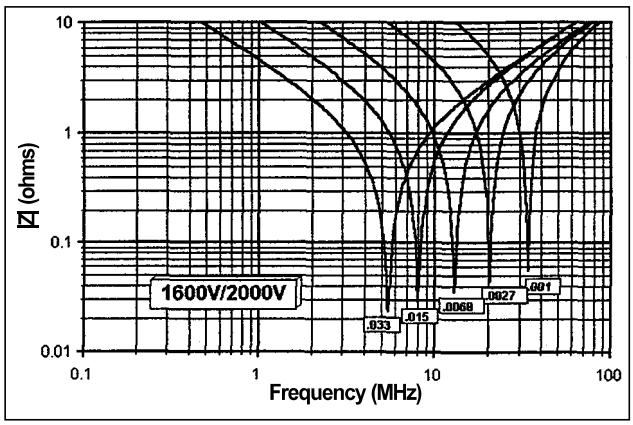












Please note: Capacitance values above are in µF The resonant frequency and impedance shown above apply to units with a 0.250" lead length and are typical values only. Please contact us for data on the 100VDC rated units.

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Type 715P/717P, Orange Drop®, High Voltage, Polypropylene Film/Foil



Type 715P/717P are high AC voltage, film/foil polypropylene capacitors. Well suited for high AC voltage applications requiring corona free performacnce. These capacitors are ideal in high frequency, high pulse current applications and offer excellent stability, virtually linear temperature coefficient.

Highlights

- Very low dissipation factor
- High dV/dt rating

Specifications

Capacitance Range	470 pF to .015 µF
Capacitance Tolerance	±1% to ±10%
Rated Voltage	800/900 Vac (1800/2000 Vdc)
Operating Temperature Range	–55 °C to 85 °C +105 °C with proper voltage derating
Lead Wire	Tinned copper clad steel, .032" (0.8) diameter, #20 AWG
Corona Start Voltage (typical)	800 Vac units: 950 - 1000 V RMS 900 Vac units: 1050 - 1100 V RMS
Dielectric	Polypropylene film; utilizing a floating common of metallized polypropylene, which provides self-healing characteristics
Construction	Non-inductively wound with extended foil, internal series section design
Encapsulations	Conformal coating of flame retardant orange epoxy (meets UL94V-0)
Insulation Resistance	400,000 MΩ minumum at +25 °C 20,000 MΩ minumum at +85 °C 2,000 MΩ minumum at +105 °C
RoHS Compliant	

Part Numbering System

Dimensions in inches, metric (mm) in parenthesis.

715P/717P	222	5	800	L	B	3	(XXXX)
Series	**Capacitance**	**Capacitance Tolerance**	**AC Voltage Rating**	**Case Code**	**Terminal**	**Lead Length**	**Suffix**
715P Round Profile 717P Pressed Profile	222 = 2200 pF	9 = ±10% 5 = ±5% 3 = ±3% 2 = ±2% 1 = ±1%			A = Straight Lead B = Hairpin Crimp C = Captive Crimp * D = Hockey Stick Crimp	1 = 0.187 (4.7) ±0.030 (0.8) 2 = 0.250 (6.4) ±0.030 (0.8) 3 = 1.250 (32) Minimum (Custom lead lengths available)	May be added by factory to denote special construction

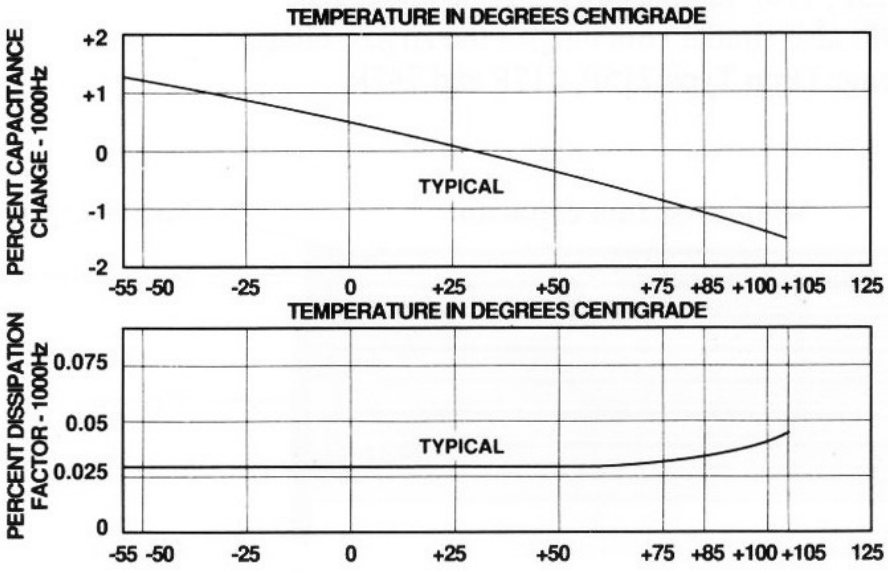
*Terminal C has a lead length of 0.156 (4.0) ±0.020 (0.5) therefore it is not necessary to indicate the lead length digit. The Captive Crimp is designed for circuit boards with hole sizes of .044 (1.1) to .048 (1.2) in diameter.

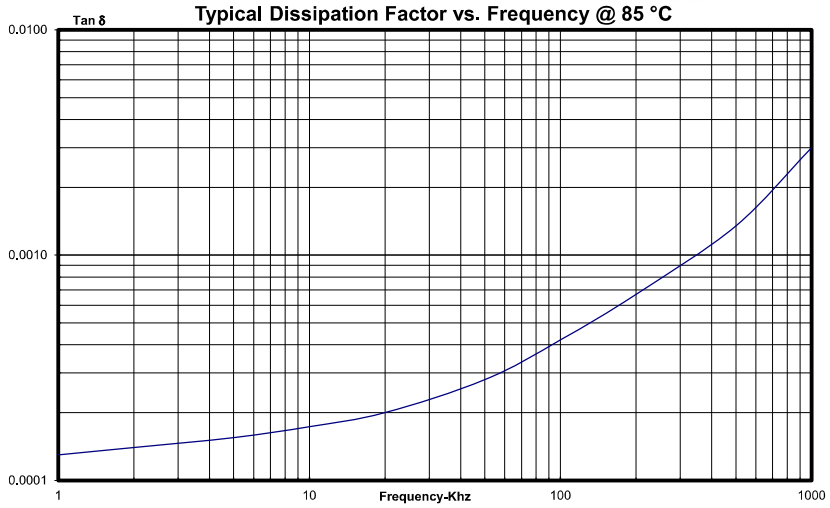
Type 715P/717P, Orange Drop®,High Voltage, Polypropylene Film/Foil

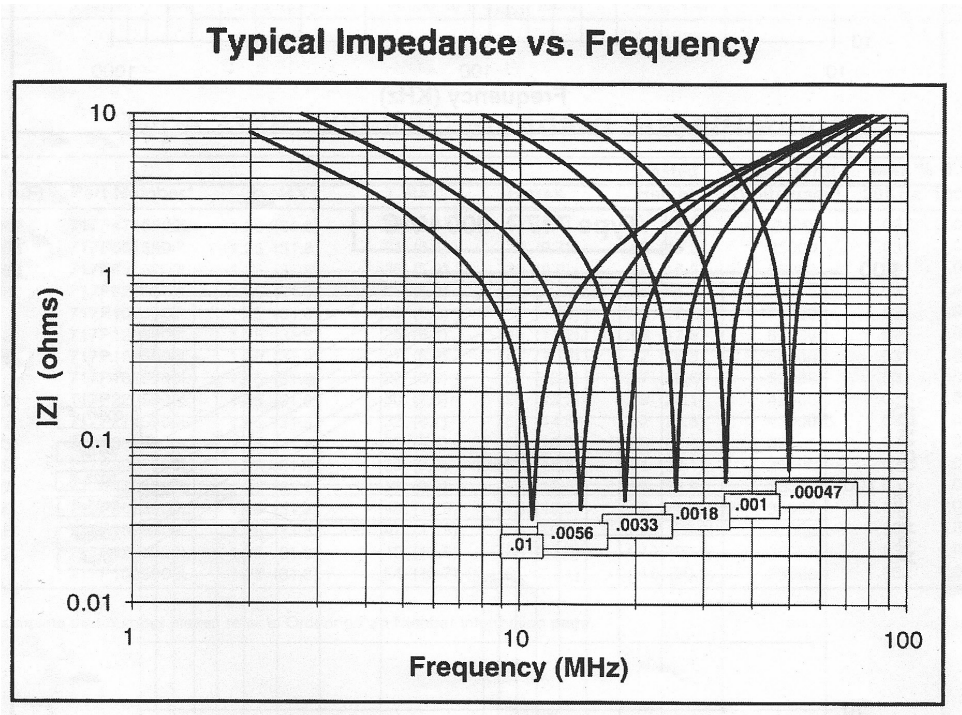
Ratings

Cap. (µF)	Catalog Part Number	L Max	Dia Max	H Max	Seated Height	Max dV/dt (Volts/µsec)	Max % D.F. @ 20 KHz	Max % D.F. @ 100 KHz
Type 715P, 800 Vac Standard Sizes/Ratings								
0.00047	715P4715800L	1.125 (28.5)	.29 (7.4)	.35 (8.9)	.60 (15.3)	95000	0.029	0.039
0.00056	715P5615800L	1.125 (28.5)	.30 (7.6)	.36 (9.2)	.61 (15.5)	87000	0.029	0.040
0.00068	715P6815800L	1.125 (28.5)	.32 (8.1)	.37 (9.4)	.62 (15.8)	79000	0.029	0.040
0.00082	715P8215800L	1.125 (28.5)	.28 (7.1)	.33 (8.4)	.58 (14.7)	72000	0.030	0.043
0.001	715P1025800L	1.125 (28.5)	.28 (7.1)	.33 (8.4)	.58 (14.7)	65000	0.030	0.043
0.0012	715P1225800L	1.125 (28.5)	.29 (7.4)	.35 (8.9)	.60 (15.3)	60000	0.030	0.044
0.0015	715P1525800L	1.125 (28.5)	.31 (7.9)	.36 (9.2)	.61 (15.5)	53000	0.030	0.044
0.0018	715P1825800L	1.125 (28.5)	.32 (8.1)	.38 (9.7)	.63 (16.0)	49000	0.030	0.044
0.0022	715P2225800L	1.125 (28.5)	.34 (8.6)	.40 (10.2)	.65 (16.5)	44000	0.030	0.045
0.0027	715P2725800L	1.125 (28.5)	.36 (9.2)	.42 (10.7)	.67 (17.0)	40000	0.030	0.045
0.0033	715P3325800L	1.125 (28.5)	.38 (9.7)	.44 (11.2)	.69 (17.5)	36000	0.031	0.046
0.0039	715P3925800L	1.125 (28.5)	.41 (10.4)	.46 (11.7)	.71 (18.0)	33000	0.031	0.046
0.0047	715P4725800L	1.125 (28.5)	.43 (10.9)	.49 (12.5)	.74 (18.8)	30000	0.031	0.047
0.0056	715P5625800L	1.125 (28.5)	.46 (11.7)	.52 (13.2)	.77 (19.6)	28000	0.031	0.048
0.0068	715P6825800L	1.125 (28.5)	.49 (12.5)	.55 (14.0)	.80 (20.3)	25000	0.031	0.049
0.0082	715P8225800L	1.125 (28.5)	.53 (13.5)	.58 (14.7)	.83 (21.2)	23000	0.031	0.051
0.01	715P1035800L	1.125 (28.5)	.57 (14.5)	.63 (16.0)	.88 (22.4)	21000	0.032	0.053
0.012	715P1235800L	1.125 (28.5)	.61 (15.5)	.67 (17.0)	.92 (23.4)	19000	0.032	0.055
0.015	715P1535800L	1.125 (28.5)	.67 (17.0)	.72 (18.3)	.97 (24.6)	17000	0.033	0.058
Type 717P, 800 Vac Standard Sizes/Ratings								
0.00047	717P4715800L	1.125 (28.5)	.21 (5.4)	.39 (9.9)	.64 (16.3)	95000	0.029	0.039
0.00056	717P5615800L	1.125 (28.5)	.22 (5.6)	.40 (10.2)	.65 (16.5)	87000	0.029	0.040
0.00068	717P6815800L	1.125 (28.5)	24 (6.1)	.42 (10.7)	.67 (17.0)	79000	0.029	0.040
0.00082	717P8215800L	1.125 (28.5)	.20 (5.1)	.38 (9.7)	.63 (16.0)	72000	0.030	0.043
0.001	717P1025800L	1.125 (28.5)	.20 (5.1)	.38 (9.7)	.63 (16.0)	65000	0.030	0.043
0.0012	717P1225800L	1.125 (28.5)	.21 (5.4)	.39 (9.9)	.64 (16.3)	60000	0.030	0.044
0.0015	717P1525800L	1.125 (28.5)	.31 (7.9)	.41 (10.4)	.66 (16.8)	53000	0.030	0.044
0.0018	717P1825800L	1.125 (28.5)	.23 (5.9)	.42 (10.7)	.67 (17.0)	49000	0.030	0.044
0.0022	717P2225800L	1.125 (28.5)	24 (6.1)	.45 (11.4)	.70 (17.8)	44000	0.030	0.045
0.0027	717P2725800L	1.125 (28.5)	.25 (6.4)	.47 (11.9)	.72 (18.3)	40000	0.030	0.045
0.0033	717P3325800L	1.125 (28.5)	.27 (6.9)	.50 (12.7)	.75 (19.1)	36000	0.031	0.046
0.0039	717P3925800L	1.125 (28.5)	.29 (7.4)	.55 (14.0)	.80 (20.3)	33000	0.031	0.046
0.0047	717P4725800L	1.125 (28.5)	.29 (7.4)	.57 (14.5)	.82 (20.8)	30000	0.031	0.047
0.0056	717P5625800L	1.125 (28.5)	.32 (8.1)	.60 (15.3)	.85 (21.6)	28000	0.031	0.048
0.0068	717P6825800L	1.125 (28.5)	.34 (8.6)	.63 (16.0)	.88 (22.4)	25000	0.031	0.049
0.0082	717P8225800L	1.125 (28.5)	.38 (9.7)	.69 (17.5)	.94 (23.9)	23000	0.031	0.051
0.01	717P1035800L	1.125 (28.5)	.43 (10.9)	.73 (18.5)	.98 (24.9)	21000	0.032	0.053
0.012	717P1235800L	1.125 (28.5)	.44 (11.2)	.79 (20.1)	1.04 (26.4)	19000	0.032	0.055
0.015	717P1535800L	1.125 (28.5)	.50 (12.7)	.85 (21.6)	1.10 (27.9)	17000	0.033	0.058

800 Vac Performance Characteristics

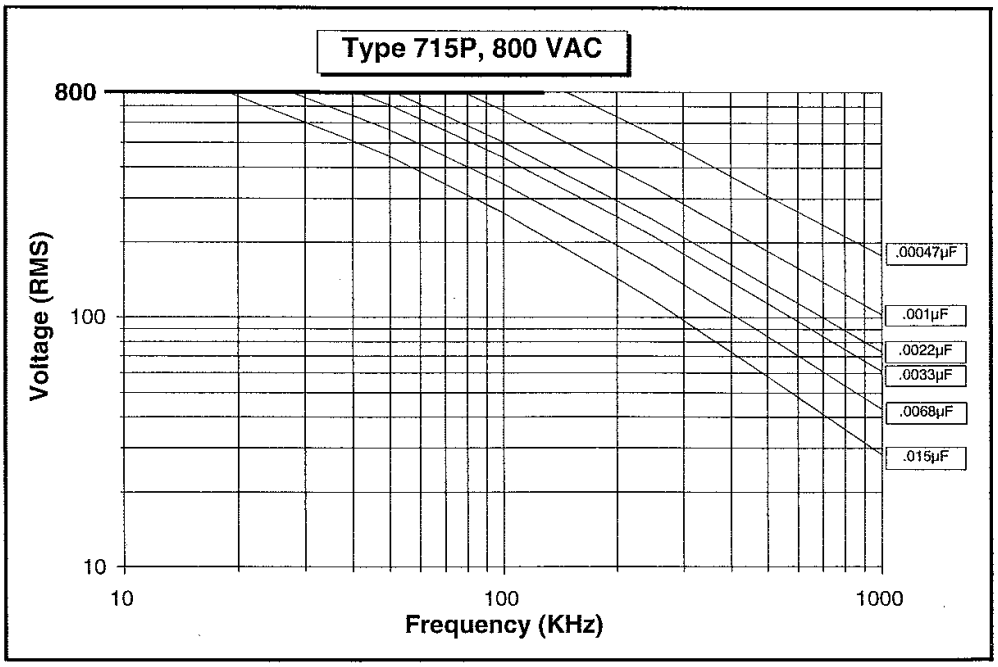


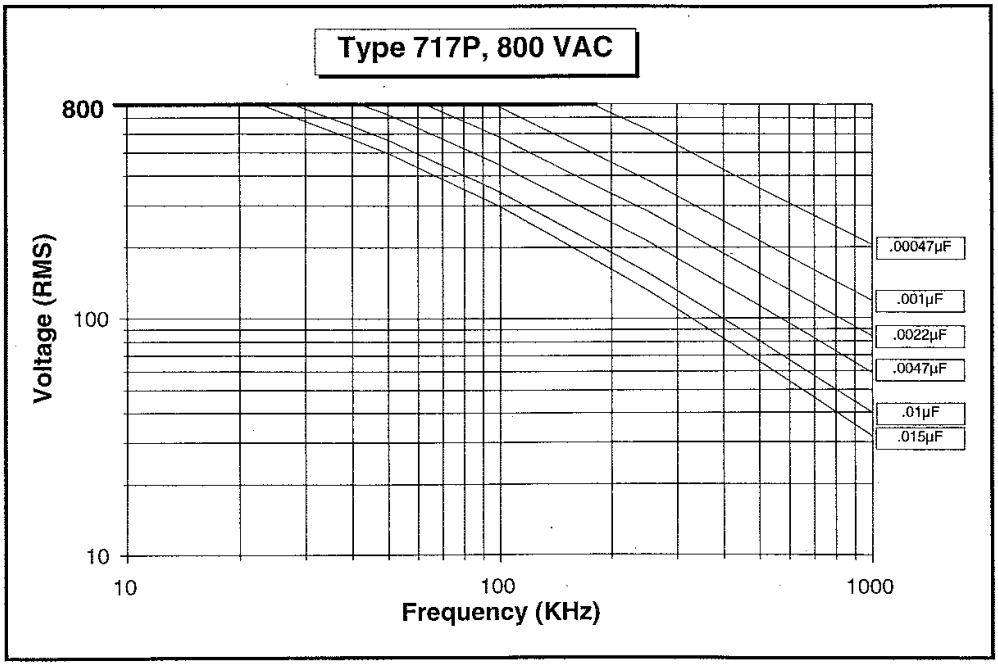




800 Vac Performance Characteristics

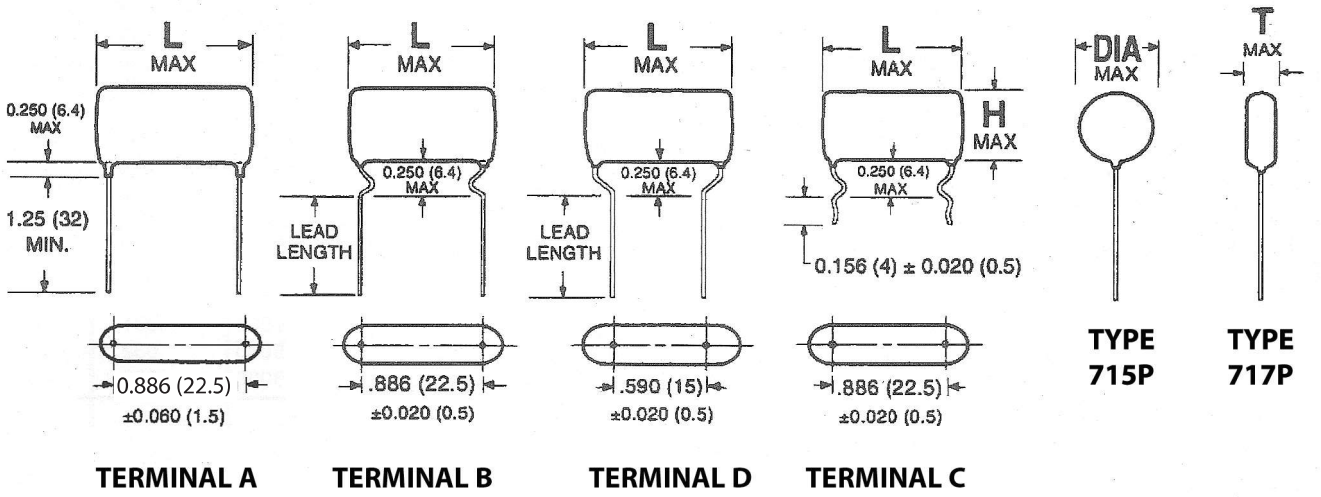
RMS Voltage vs. Frequency @ +85 °C





Type 715P/717P, Orange Drop®, High Voltage, Polypropylene Film/Foil

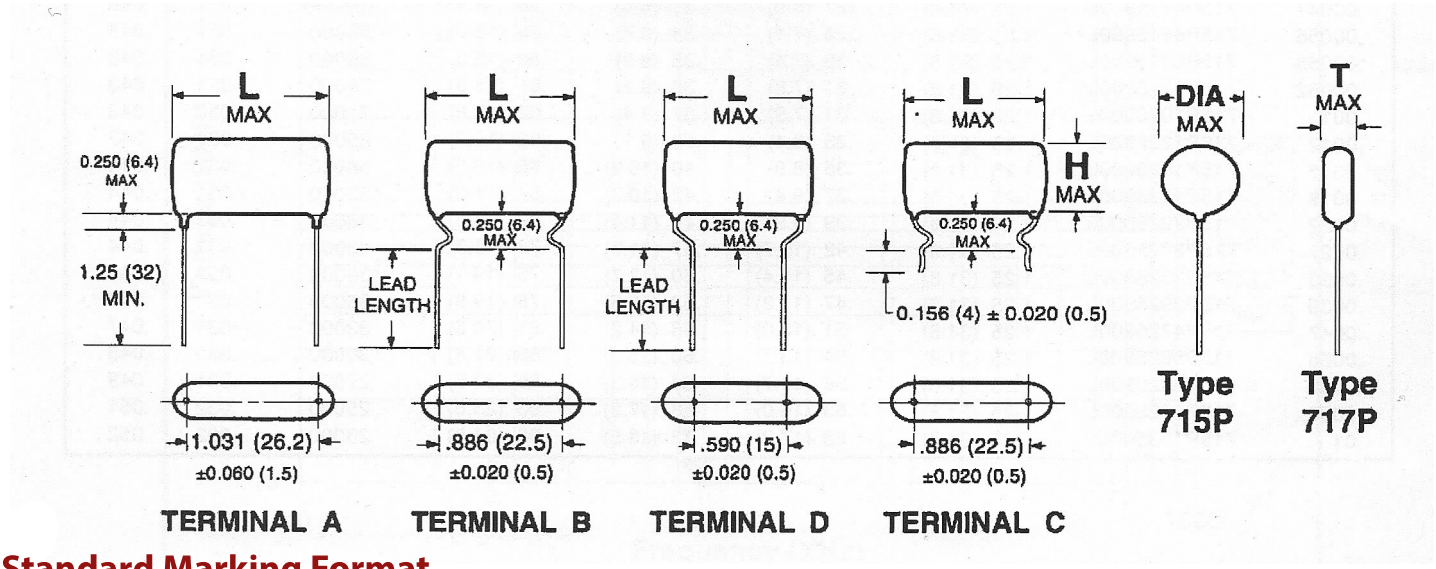
Standard Lead Styles/Lead Spacing 800 Vac



Standard Marking Format

Sample Marking on unit		Description	Tolerance codes per EIA standards	
	CDE	CDE Electronics identification	F	±1%
CDE715P800VAC	**715P**	Type number	G	±2%
222J 9810	**800VAC**	AC Voltage rating, Volts	H	±3%
	222J	Capacitance and tolerance code	J	±5%
	9810	Weekly date code (i.e. 10th wk of 1998)	K	±10%

Standard Lead Styles/Lead Spacing 900 Vac



Standard Marking Format

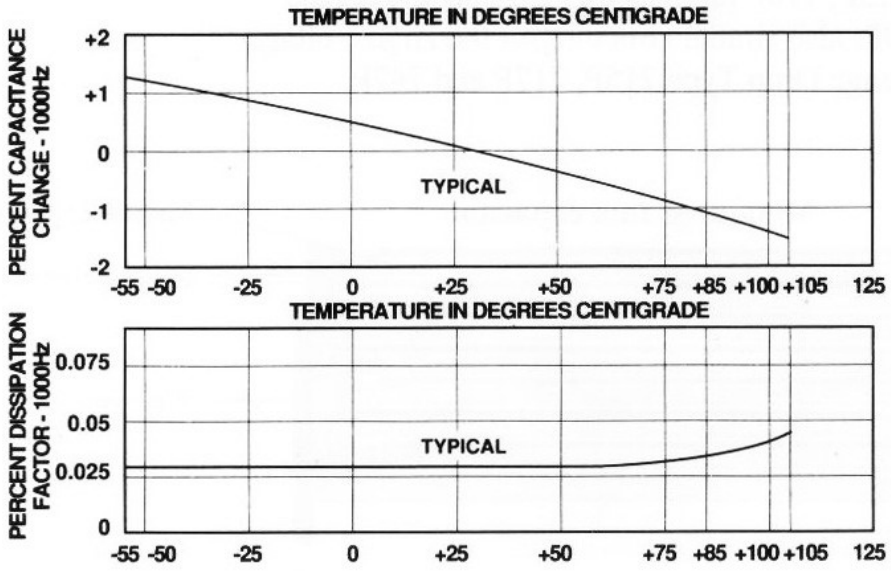
Sample Marking on unit		Description	Tolerance codes per EIA standards	
	CDE	CDE Electronics identification	F	±1%
CDE715P900VAC	**715P**	Type number	G	±2%
222J 9810	**900VAC**	AC Voltage rating, Volts	H	±3%
	222J	Capacitance and tolerance code	J	±5%
	9810	Weekly date code (i.e. 10th wk of 1998)	K	±10%

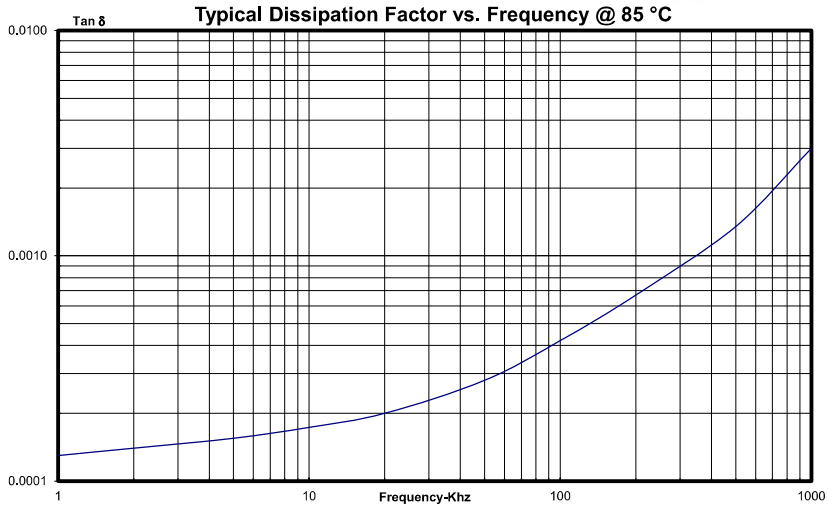
Type 715P/717P, Orange Drop®, High Voltage, Polypropylene Film/Foil

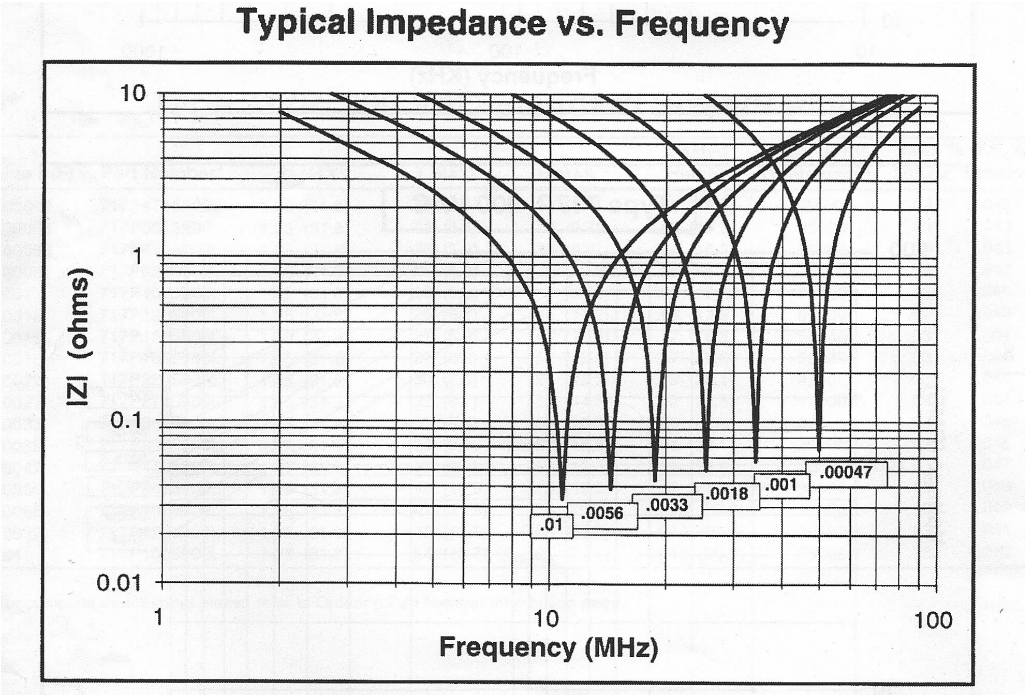
Ratings

Cap. (µF)	Catalog Part Number	L Max	Dia Max	H Max	Seated Height	Max dV/dt (Volts/µsec)	Max % D.F. @ 20 KHz	Max % D.F. @ 100 KHz
Type 715P, 900 Vac Standard Sizes/Ratings								
0.00047	715P4715900L	1.25 (31.8)	.27 (6.9)	.33 (8.4)	.58 (14.8)	104000	0.031	0.043
0.00056	715P5615900L	1.25 (31.8)	.28 (7.1)	.34 (8.7)	.59 (15.0)	95000	0.031	0.043
0.00068	715P6815900L	1.25 (31.8)	.29 (7.4)	.35 (8.9)	.60 (15.3)	86000	0.031	0.043
0.00082	715P8215900L	1.25 (31.8)	.31 (7.9)	.36 (9.2)	.61 (15.5)	78000	0.031	0.043
0.001	715P1025900L	1.25 (31.8)	.31 (7.9)	.37 (9.4)	.62 (15.8)	71000	0.031	0.043
0.0012	715P1225900L	1.25 (31.8)	.33 (8.4)	.38 (9.7)	.63 (16.0)	65000	0.031	0.043
0.0015	715P1525900L	1.25 (31.8)	.35 (8.9)	.40 (10.2)	.65 (16.5)	58000	0.031	0.044
0.0018	715P1825900L	1.25 (31.8)	.37 (9.4)	.42 (10.7)	.67 (17.0)	53000	0.031	0.044
0.0022	715P2225900L	1.25 (31.8)	.39 (9.9)	.45 (11.4)	.69 (17.5)	48000	0.031	0.044
0.0027	715P2725900L	1.25 (31.8)	.42 (10.7)	.47 (11.9)	.70 (17.8)	43000	0.031	0.044
0.0033	715P3325900L	1.25 (31.8)	.45 (11.4)	.50 (12.7)	.72 (18.3)	39000	0.031	0.046
0.0039	715P3925900L	1.25 (31.8)	.47 (11.9)	.53 (13.5)	.75 (19.1)	36000	0.031	0.046
0.0047	715P4725900L	1.25 (31.8)	.51 (13.0)	.56 (14.2)	.81 (20.6)	33000	0.031	0.047
0.0056	715P5625900L	1.25 (31.8)	.54 (13.7)	.60 (15.3)	.85 (21.6)	30000	0.031	0.048
0.0068	715P6825900L	1.25 (31.8)	.58 (14.7)	.64 (16.3)	.89 (22.6)	27000	0.031	0.049
0.0082	715P8225900L	1.25 (31.8)	.63 (16.0)	.69 (17.5)	.93 (23.6)	25000	0.032	0.051
0.01	715P1035900L	1.25 (31.8)	.68 (17.3)	.73 (18.5)	.98 (24.9)	23000	0.032	0.053
Type 717P, 900 Vac Standard Sizes/Ratings								
0.00047	717P4715900L	1.25 (31.8)	.20 (5.1)	.37 (9.4)	.62 (15.8)	104000	0.031	0.043
0.00056	717P5615900L	1.25 (31.8)	.21 (5.4)	.38 (9.7)	.63 (16.0)	95000	0.031	0.043
0.00068	717P6815900L	1.25 (31.8)	.23 (5.9)	.39 (9.9)	.64 (16.3)	86000	0.031	0.043
0.00082	717P8215900L	1.25 (31.8)	.23 (5.9)	.40 (10.2)	.65 (16.5)	78000	0.031	0.043
0.001	717P1025900L	1.25 (31.8)	.23 (5.9)	.43 (10.9)	.68 (17.3)	71000	0.031	0.043
0.0012	717P1225900L	1.25 (31.8)	.25 (6.4)	.44 (11.2)	.69 (17.5)	65000	0.031	0.043
0.0015	717P1525900L	1.25 (31.8)	.27 (6.9)	.47 (11.9)	.72 (18.3)	58000	0.031	0.044
0.0018	717P1825900L	1.25 (31.8)	.27 (6.9)	.52 (13.2)	.77 (19.6)	53000	0.031	0.044
0.0022	717P2225900L	1.25 (31.8)	.30 (7.6)	.54 (13.7)	.79 (20.1)	48000	0.031	0.044
0.0027	717P2725900L	1.25 (31.8)	.32 (7.6)	.57 (14.5)	.82 (20.8)	43000	0.031	0.044
0.0033	717P3325900L	1.25 (31.8)	.33 (8.4)	.63 (16.0)	.88 (22.4)	39000	0.031	0.046
0.0039	717P3925900L	1.25 (31.8)	.36 (9.2)	.66 (16.8)	.91 (23.1)	36000	0.031	0.046
0.0047	717P4725900L	1.25 (31.8)	.39 (9.9)	.69 (17.5)	.94 (23.9)	33000	0.031	0.047
0.0056	717P5625900L	1.25 (31.8)	.43 (10.9)	.73 (18.5)	.98 (24.9)	30000	0.031	0.048
0.0068	717P6825900L	1.25 (31.8)	.47 (11.9)	.78 (19.8)	1.03 (26.2)	27000	0.031	0.049
0.0082	717P8225900L	1.25 (31.8)	.49 (12.5)	.85 (23.1)	1.10 (27.9)	25000	0.032	0.051
0.01	717P1035900L	1.25 (31.8)	.54 (13.7)	.91 (23.1)	1.16 (29.5)	23000	0.032	0.053

900 Vac Performance Characteristics

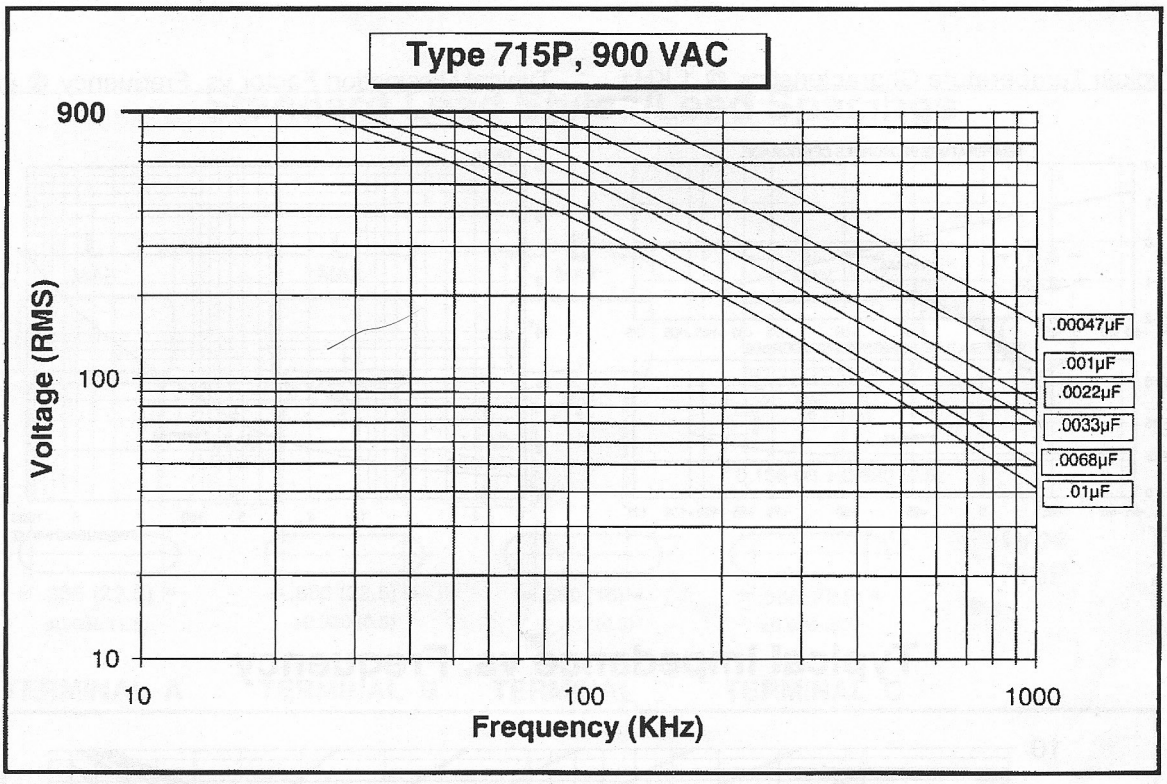


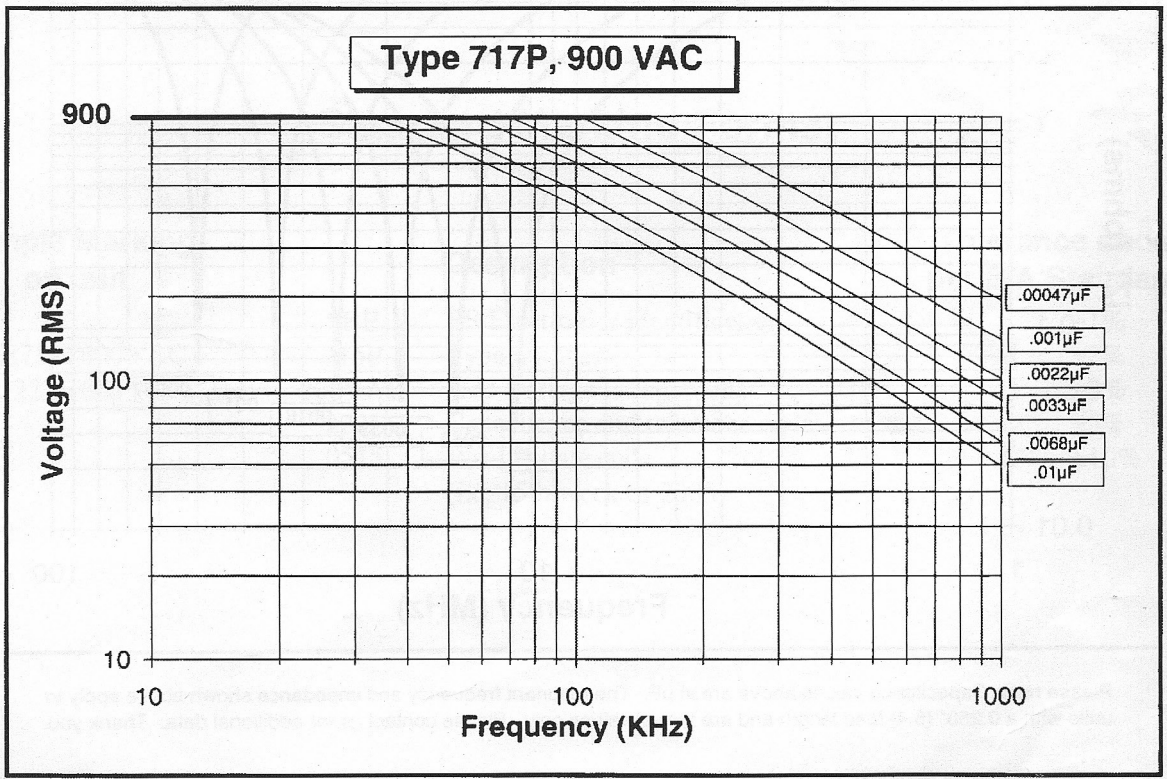




900 Vac Performance Characteristics

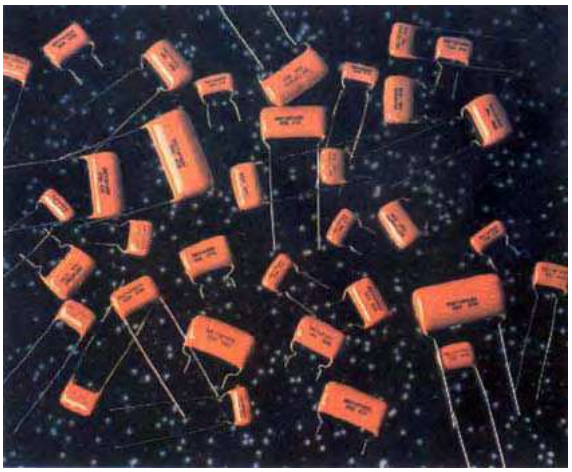
RMS Voltage vs. Frequency @ 85 °C





Type 716P, Orange Drop®, Polypropylene Film/Foil Capacitors

High Performance



Features

- Copper leads.
- Extremely low dissipation factor.
- Superb high frequency response.
- Excellent stability, virtually linear temperature coefficient.
- Various lead spacings, crimp styles and lead lengths available.

Specifications

Capacitance Range:
220 pF to 1.0 µF

Capacitance Tolerance:
±3% to ±10%

Voltage Ratings:
100 to 2000 Volts D-C
70 to 500 Volts A-C

Operating Temperature Range:
-55°C to +85°C
(+105°C with proper voltage derating)

Lead Wire:
Tinned copper.

Dissipation Factor:
See tabulated data.

Insulation Resistance:
400,000 MΩ minimum at +25°C
20,000 MΩ minimum at +85°C
2,000 MΩ minimum at +105°C

Pulse Rise Time, dV/dt:
See tabulated data.

Corona Start Voltage (typical):
See tabulated data.

Encapsulation:
Conformal coating of flame retardant orange epoxy (meets UL94V-0 specifications)

Dielectric:
Polypropylene film.

Construction:
Non-inductively wound with extended foil. Additional details on general specifications page.

Applications:
Switching and high voltage power supplies, inverters, snubbers, resonant converters and electronic lighting ballasts.

Type 716P, Orange Drop®, Polypropylene Film/Foil Capacitors

High Performance

General Specifications

The 715P and 716P series are manufactured with polypropylene film and extended foil. Polypropylene has a very low dissipation factor, low dielectric absorption and exhibits excellent capacitance stability. These characteristics combined with the direct connection of the lead wire to the extended foil electrode makes the 715P and 716P series ideal for high current, high pulse applications.

The 715P series has a round profile and is available in tolerances as close as ±1%. The 716P series has a pressed profile and, in addition, is designed with copper leads, thus adding to it's performance in high frequency, high pulse current applications.

Other specifications are listed below and on the following pages.

Operating Temperature Range:
The standard operating temperature range for polypropylene film is -55°C to +85°C. The 715P and 716P may be operated up to +105°C provided the DC working voltage is reduced by 50%.

For specific derating of the AC voltage when operating above +85°C please contact our design engineering department.

The maximum operating temperature for 715P and 716P polypropylene film capacitors is + 105°C.

Dielectric Withstanding Voltage:
Units rated below 800 VDC shall withstand a DC potential of 250% of rated voltage applied between terminals for not more than 5 seconds; units rated 800 VDC and above shall withstand 200% of rated voltage.

Construction:
Units rated 100 through 600 VDC are single section designs constructed of plain polypropylene film with extended foil. Units rated 800 VDC and above are series-section designs with extended foil and incorporate a floating common of metallized polypropylene. All units are non-inductively wound.

Temperature Coefficient:
The typical temperature coefficient is -180 ppm/°C over the temperature range of -55°C to +85°C.

Humidity Testing:
Units subjected to 95% relative humidity for 72 hours with no voltage applied at +75°C. After 4 hours of drying minimum product of insulation resistance and capacitance shall be 50,000 megohm-microfarads.

DC Voltage Life Test:
Minimum of 500 hours at +85°C at 150% of rated voltage. After test, capacitance shall not have changed by more than 3%, insulation resistance shall not have decreased by more than 25% and dissipation factor shall not have changed by more than 0.03%. Measurements made at 1 KHz.

AC Voltage Life Test:
Minimum of 500 hours at +85°C at 60 Hz. AC test voltage applied at 110% of AC rating. After test, capacitance shall not have changed by more than 3%, insulation resistance shall not have decreased by more than 25%, and dissipation factor shall not have changed by more than 0.03%. Measurements made at 1 KHz.

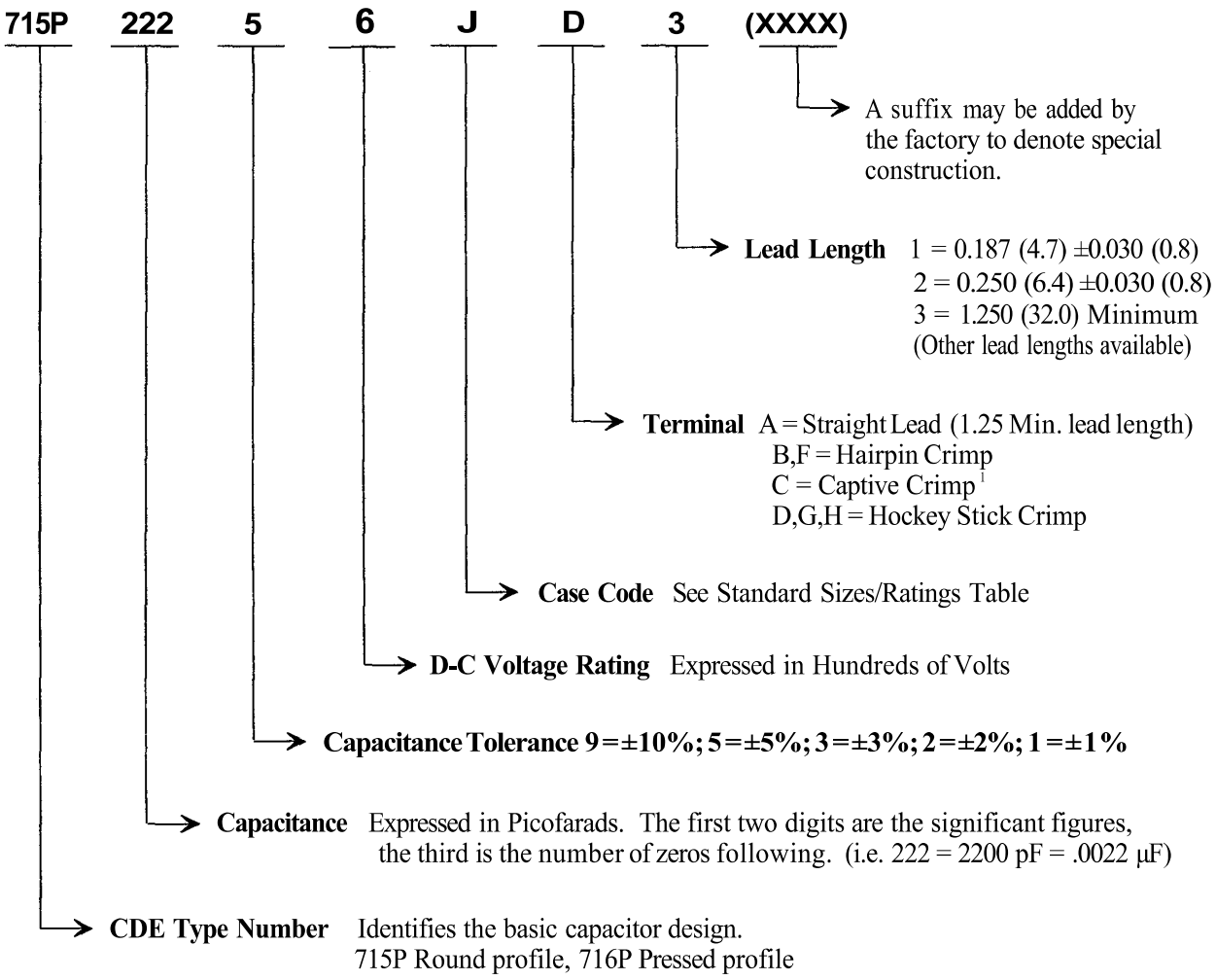
Additional notes on Life Testing:
CDE performs standard 500 hour accelerated life tests, both DC and line frequency AC, to monitor process control over our wide range of products.

We also perform longer term life testing, typically 2000 hours, during development of most products. In addition we do accelerated life testing at 10-250 KHz for our High Performance AC products. For additional life test information please contact us.

Type 716P, Orange Drop,® Polypropylene Film/Foil Capacitors

High Performance

Ordering/Part Number Information



[1] Terminal C has a fixed lead length of 0.156 (4.0) ±0.020 (0.5), therefore it is not necessary to indicate the lead length digit when ordering. Available for "L" case code parts only

Please note;

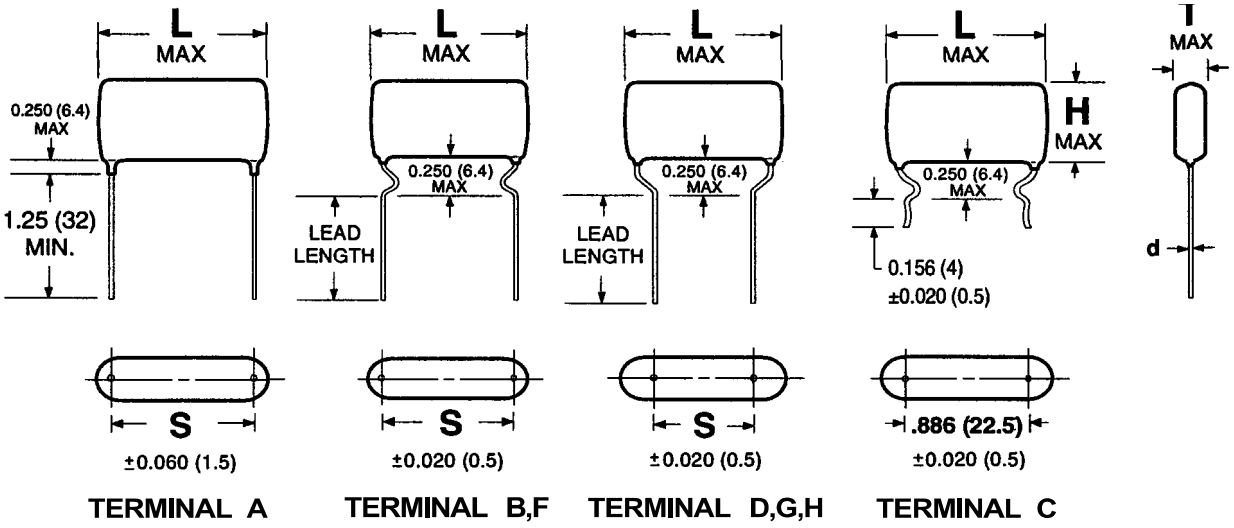
While it is not possible to list every capacitance value, tolerance, or design/size variation available, our flexibility in design and manufacturing gives us the ability to quickly, and cost effectively, provide you with the capacitor you require. Please contact us today with your specific needs!

Dimensions in inches, metric (mm) in parenthesis.

Type 716P, Orange Drop¿Polypropylene Film/Foil Capacitors

High Performance

Standard Lead Styles



Standard Lead Spacings

CASE CODE	S, inches (metric, mm in parentheses)						
	Term. A	Term. B	Term. D	Term. C *	Term. F	Term. G	Term. H
N	0.394 (10)	0.394 (10)	---	---	0.295 (7.5)	0.197 (5)	---
J	0.500 (12.7)	0.500 (12.7)	0.375 (9.5)	---	0.394 (10)	0.295 (7.5)	0.197 (5)
K	0.688 (17.5)	0.688 (17.5)	0.375 (9.5)	---	0.590 (15)	0.394 (10)	0.295 (7.5)
L	1.031 (26.2)	0.969 (24.6)	0.719 (18.3)	0.886 (22.5)	0.886 (22.5)	0.590 (15)	---
M	1.406 (35.7)	1.344 (34.1)	1.094 (27.8)	---	---	1.083 (27.5)	---

* Terminal C is designed for printed circuit boards requiring a lead spacing of 0.886 (22.5) with board hole sizes of 0.044 (1.1) to 0.048 (1.2) in diameter. Available for "L" case code parts only. Please consult us if you have a specific requirement.

Standard Marking Format

Sample Marking on unit

CDE716P600V
222J 9810

Description

CDE	CDE Electronics identification
716P	Type number
600V	D-C Voltage rating, Volts
222J	Capacitance and tolerance code
9810	Weekly date code (i.e. 10th week of 1998)

Tolerance codes per EIA Standards

H	±3%
J	±5%
K	±10%

Type 716P, Orange Drop¿Polypropylene Film/Foil Capacitors

High Performance

Type 716P Standard Sizes/Ratings[2]

Value µF	Part Number[1]	L max	T max	H max	d
100 VDC / 70 VAC*					
.0082	716P82291N	.57 (14.5)	.23 (5.8)	.36 (9.1)	.032 (0.8)
.009	716P90291N	.57 (14.5)	.24 (6.1)	.37 (9.4)	.032 (0.8)
.01	716P10391N	.57 (14.5)	.24 (6.1)	.38 (9.7)	.032 (0.8)
.012	716P12391N	.57 (14.5)	.23 (5.8)	.37 (9.4)	.032 (0.8)
.015	716P15391N	.57 (14.5)	.25 (6.4)	.39 (9.9)	.032 (0.8)
.018	716P18391N	.57 (14.5)	.26 (6.6)	.42 (10.7)	.032 (0.8)
.022	716P22391N	.57 (14.5)	.28 (7.1)	.44 (11.2)	.032 (0.8)
.025	716P25391N	.57 (14.5)	.29 (7 4)	.45 (11.4)	.032 (0:8)
.027	716P27391N	.57 (14.5)	.27 (6.9)	.50 (12.7)	.032 (0.8)
.033	716P33391N	.57 (14.5)	.29 (7 4)	.53 (13.5)	.032 (0.8)
.039	716P39391N	.57 (14.5)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.047	716P47391N	.57 (14.5)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.05	716P50391J	.70 (17.8)	.28 (7 1)	.52 (13.2)	.032 (0.8)
.056	716P56391J	.70 (17.8)	.29 (7 4)	.53 (13.5)	.032 (0.8)
.062	716P62391J	.70 (17.8)	.31 (7.9)	.54 (13.7)	.032 (0.8)
.068	716P68391J	.70 (17.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)
.075	716P75391J	.70 (17.8)	.33 (8.4)	.57 (14.5)	.032 (0.8)
.082	716P82391J	.70 (17.8)	.35 (8.9)	.59 (15.0)	.032 (0.8)
.09	716P90391J	.70 (17.8)	.36 (9.1)	.60 (15.2)	.032 (0.8)
.1	716P10491J	.70 (17.8)	.38 (9.7)	.62 (15.7)	.032 (0.8)
.12	716P12491K	.90 (22.9)	.33 (8.4)	.57 (14.5)	.032 (0.8)
.15	716P15491K	.90 (22.9)	.37 (9.4)	.61 (15.5)	.032 (0.8)
.18	716P18491K	.90 (22.9)	.40 (10.2)	.64 (16.3)	.032 (0.8)
.20	716P20491K	.90 (22.9)	.42 (10.7)	.66 (16.8)	.032 (0.8)
.22	716P22491K	.90 (22.9)	.44 (11.2)	.68 (17.3)	.032 (0.8)
.25	716P25491K	.90 (22.9)	.47 (11.9)	.71 (18.0)	.032 (0.8)
.27	716P27491K	.90 (22.9)	.49 (12.4)	.73 (18.5)	.032 (0.8)
.30	716P30491L	1.25 (31.8)	.41 (10.4)	.65 (16.5)	.040 (1.0)
.33	716P33491L	1.25 (31.8)	.42 (10.7)	.67 (17.0)	.040 (1.0)
200 VDC / 155 VAC*					
.01	716P10392J	.70 (17.8)	.25 (6.4)	.37 (9.4)	.032 (0.8)
.012	716P12392J	.70 (17.8)	.27 (6.9)	.39 (9.9)	.032 (0.8)
.015	716P15392J	.70 (17.8)	.26 (6.6)	.45 (11.4)	.032 (0.8)
.018	716P18392J	.70 (17.8)	.25 (6.4)	.45 (11.4)	.032 (0.8)
.022	716P22392J	.70 (17.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.027	716P27392J	.70 (17.8)	.29 (7 4)	.48 (12.2)	.032 (0.8)
.033	716P33392J	.70 (17.8)	.32 (8.1)	.51 (13.0)	.032 (0.8)
.039	716P39392J	.70 (17.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)
.047	716P47392J	.70 (17.8)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.056	716P56392K	.90 (22.9)	.30 (7.6)	.55 (14.0)	.032 (0.8)
.068	716P68392K	.90 (22.9)	.33 (8.4)	.57 (14.5)	.032 (0.8)
.082	716P82392K	.90 (22.9)	.36 (9.1)	.60 (15.2)	.032 (0.8)
.1	716P10492K	.90 (22.9)	.39 (9.9)	.63 (16.0)	.032 (0.8)
.12	716P12492K	.90 (22.9	.40 (10.2)	.69 (17.5)	.032 (0.8)
.15	716P15492K	.90 (22.9)	.45 (11.4)	.73 (18.5)	.032 (0.8)
.18	716P18492L	1.25 (31.8)	.39 (9.9)	.67 (17.0)	.040 (1.0)
.22	716P22492L	1.25 (31.8)	.43 (10.9)	.71 (18.0)	.040 (1.0)
.27	716P27492L	1.25 (31.8)	.47 (11.9)	.75 (19.1)	.040 (1.0)
.33	716P33492L	1.25 (31.8)	.47 (11.9)	.86 (21.8)	.040 (1.0)
.39	716P39492L	1.25 (31.8)	.51 (13.0)	.90 (22.9)	.040 (1.0)
.47	716P47492L	1.25 (31.8)	.56 (14.2)	.95 (24.1)	.040 (1.0)
.56	716P56492L	1.25 (31.8)	.61 (15.5)	1.00 (25.4)	.040 (1.0)
.68	716P68492M	1.65 (41.9)	.56 (14.2)	.94 (23.9)	.040 (1.0)
.82	716P82492M	1.65 (41.9)	.61 (15.5)	1.00 (25.4)	.040 (1.0)
1.0	716P10592M	1.65 (41.9)	.68 (17.3)	1.07 (27.2)	.040 (1.0)
400 VDC / 200 VAC*					
.001	716P10294J	.70 (17.8)	.25 (6.4)	.47 (11.9)	.032 (0.8)
.0012	716P12294J	.70 (17.8)	.22 (5.6)	.44 (11.2)	.032 (0.8)
.0015	716P15294J	.70 (17.8)	.24 (6.1)	.45 (11.4)	.032 (0.8)
.0018	716P18294J	.70 (17.8)	.25 (6.4)	.46 (11.7)	.032 (0.8)
.0022	716P22294J	.70 (17.8)	.26 (6.6)	.48 (12.2)	.032 (0.8)
.0027	716P27294J	.70 (17.8)	.24 (6.1)	.45 (11.4)	.032 (0.8)
.0033	716P33294J	.70 (17.8)	.24 (6.1)	.45 (11.4)	.032 (0.8)
.0039	716P39294J	.70 (17.8)	.24 (6.1)	.36 (9.1)	.032 (0.8)
.0047	716P47294J	.70 (17.8)	.25 (6.4)	.37 (9.4)	.032 (0.8)
.0056	716P56294J	.70 (17.8)	.24 (6.1)	.44 (11.2)	.032 (0.8)
.0068	716P68294J	.70 (17.8)	.24 (6.1)	.44 (11.2)	.032 (0.8)
.0082	716P82294J	.70 (17.8)	.25 (6.4)	.45 (11.4)	.032 (0.8)
.01	716P10394J	.70 (17.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.012	716P12394J	.70 (17.8)	.29 (7.4)	.48 (12.2)	.032 (0.8)
.015	716P15394J	.70 (17.8)	.31 (7.9)	.50 (12.7)	.032 (0.8)
.018	716P18394K	.90 (22.9)	.28 (7.1)	.47 (11.9)	.032 (0.8)
.022	716P22394K	.90 (22.9)	.30 (7.6)	.49 (12.4)	.032 (0.8)
.027	716P27394K	.90 (22.9)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.033	716P33394K	.90 (22.9)	.33 (8.4)	.57 (14.5)	.032 (0.8)
.039	716P39394K	.90 (22.9)	.36 (9.1)	.60 (15.2)	.032 (0.8)
.047	716P47394K	.90 (22.9)	.39 (9.9)	.62 (15.7)	.032 (0.8)
.056	716P56394K	.90 (22.9)	.40 (10.2)	.68 (17.3)	.032 (0.8)
.068	716P68394K	.90 (22.9)	.43 (10.9)	.72 (18.3)	.032 (0.8)
.082	716P82394L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.040 (1.0)
.1	716P10494L	1.25 (31.8)	.42 (10.7)	.70 (17.8)	.040 (1.0)
.12	716P12494L	1.25 (31.8)	.45 (11.4)	.73 (18.5)	.040 (1.0)
.15	716P15494L	1.25 (31.8)	.46 (11.7)	.84 (21.3)	.040 (1.0)
.18	716P18494L	1.25 (31.8)	.50 (12.7)	.89 (22.6)	.040 (1.0)
.22	716P22494L	1.25 (31.8)	.57 (14.5)	.95 (24.1)	.040 (1.0)
.27	716P27494L	1.25 (31.8)	.63 (16.0)	1.01 (25.7)	.040 (1.0)
.33	716P33494M	1.65 (41.9)	.57 (14.5)	.96 (24.4)	.040 (1.0)
.39	716P39494M	1.65 (41.9)	.62 (15.7)	1.01 (25.7)	.040 (1.0)
.47	716P47494M	1.65 (41.9)	.68 (17.3)	1.07 (27.2)	.040 (1.0)

* Please refer to performance curves for RMS Voltage vs. Frequency characteristics.

[1] To complete part number for proper tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

[2] Type 716P capacitors are available through the CDE Distribution Network on special order.

Dimensions in inches, metric (mm) in parenthesis.

Type 716P, Orange Drop¿Polypropylene Film/Foil Capacitors

High Performance

Type 716P Standard Sizes/Ratings[2]

Value µF	Part Number[1]	L max	T max	H max	d
600 VDC / 200 VAC*					
.001	716P10296J	.70 (17.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.0012	716P12296J	.70 (17.8)	.24 (6.1)	.44 (11.2)	.032 (0.8)
.0015	716P15296J	.70 (17.8)	.26 (6.6)	.45 (11.4)	.032 (0.8)
.0018	716P18296J	.70 (17.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.0022	716P22296J	.70 (17.8)	.28 (7.1)	.48 (12.2)	.032 (0.8)
.0027	716P27296J	.70 (17.8)	.25 (6.4)	.44 (11.2)	.032 (0.8)
.0033	716P33296J	.70 (17.8)	.25 (6.4)	.45 (11.4)	.032 (0.8)
.0039	716P39296J	.70 (17.8)	.26 (6.6)	.46 (11.7)	.032 (0.8)
.0047	716P47296J	.70 (17.8)	.28 (7.1)	.47 (11.9)	.032 (0.8)
.0056	716P56296J	.70 (17.8)	.30 (7.6)	.49 (12.4)	.032 (0.8)
.0068	716P68296J	.70 (17.8)	.32 (8.1)	.51 (13.0)	.032 (0.8)
.0082	716P82296J	.70 (17.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)
.01	716P10396J	.70 (17.8)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.012	716P12396K	.90 (22.9)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.015	716P15396K	.90 (22.9)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.018	716P18396K	.90 (22.9)	.36 (9.1)	.60 (15.2)	.032 (0.8)
.022	716P22396K	.90 (22.9)	.39 (9.9)	.63 (16.0)	.032 (0.8)
.027	716P27396K	.90 (22.9)	.41 (10.4)	.69 (17.5)	.032 (0.8)
.033	716P33396K	.90 (22.9)	.44 (11.2)	.73 (18.5)	.032 (0.8)
.039	716P39396K	.90 (22.9)	.48 (12.2)	.76 (19.3)	.032 (0.8)
.047	716P47396L	1.25 (31.8)	.42 (10.7)	.70 (17.8)	.040 (1.0)
.056	716P56396L	1.25 (31.8)	.45 (11.4)	.73 (18.5)	.040 (1.0)
.068	716P68396L	1.25 (31.8)	.45 (11.4)	.84 (21.3)	.040 (1.0)
.082	716P82396L	1.25 (31.8)	.49 (12.4)	.88 (22.4)	.040 (1.0)
.1	716P10496L	1.25 (31.8)	.54 (13.7)	.93 (23.6)	.040 (1.0)
.12	716P12496L	1.25 (31.8)	.59 (15.0)	.97 (24.6)	.040 (1.0)
.15	716P15496M	1.65 (41.9)	.55 (14.0)	.93 (23.6)	.040 (1.0)
.18	716P18496M	1.65 (41.9)	.59 (15.0)	.98 (24.9)	.040 (1.0)
.22	716P22496M	1.65 (41.9)	.65 (16.5)	1.04 (25.7)	.040 (1.0)
800 VDC / 450 VAC*					
.0056	716P56298L	1.25 (31.8)	.25 (6.4)	.45 (11.4)	.032 (0.8)
.0068	716P68298L	1.25 (31.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.0082	716P82298L	1.25 (31.8)	.29 (7.4)	.48 (12.2)	.032 (0.8)
.01	716P10398L	1.25 (31.8)	.29 (7.4)	.53 (13.5)	.032 (0.8)
.012	716P12398L	1.25 (31.8)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.015	716P15398L	1.25 (31.8)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.018	716P18398L	1.25 (31.8)	.37 (9.4)	.61 (15.5)	.032 (0.8)
.022	716P22398L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.032 (0.8)
.027	716P27398L	1.25 (31.8)	.42 (10.7)	.70 (17.8)	.032 (0.8)
.033	716P33398L	1.25 (31.8)	.46 (11.7)	.74 (18.8)	.032 (0.8)
.039	716P39398L	1.25 (31.8)	.46 (11.7)	.84 (21.3)	.032 (0.8)
.047	716P47398L	1.25 (31.8)	.50 (12.7)	.88 (22.4)	.032 (0.8)
.056	716P56398L	1.25 (31.8)	.54 (13.7)	.93 (23.6)	.032 (0.8)
.068	716P68398L	1.25 (31.8)	.59 (15.0)	.98 (24.9)	.032 (0.8)
.082	716P82398M	1.65 (41.9)	.52 (13.2)	.90 (22.9)	.040 (1.0)
.1	716P10498M	1.65 (41.9)	.57 (14.5)	.96 (24.4)	.040 (1.0)
.12	716P12498M	1.65 (41.9)	.62 (15.7)	1.01 (25.7)	.040 (1.0)
.14	716P14498M	1.65 (41.9)	.67 (17.0)	1.06 (27.0)	.040 (1.0)
1000 VDC / 450 VAC*					
.0056	716P562910L	1.25 (31.8)	.25 (6.4)	.45 (11.4)	.032 (0.8)
.0068	716P682910L	1.25 (31.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.0082	716P822910L	1.25 (31.8)	.29 (7.4)	.48 (12.2)	.032 (0.8)
.01	716P103910L	1.25 (31.8)	.29 (7.4)	.53 (13.5)	.032 (0.8)
.012	716P123910L	1.25 (31.8)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.015	716P153910L	1.25 (31.8)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.018	716P183910L	1.25 (31.8)	.37 (9.4)	.61 (15.5)	.032 (0.8)
.022	716P223910L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.032 (0.8)
.027	716P273910L	1.25 (31.8)	.42 (10.7)	.70 (17.8)	.032 (0.8)
.033	716P333910L	1.25 (31.8)	.46 (11.7)	.74 (18.8)	.032 (0.8)
.039	716P393910L	1.25 (31.8)	.46 (11.7)	.84 (21.3)	.032 (0.8)
.047	716P473910L	1.25 (31.8)	.50 (12.7)	.88 (22.4)	.032 (0.8)
.056	716P563910L	1.25 (31.8)	.54 (13.7)	.93 (23.6)	.032 (0.8)
.068	716P683910L	1.25 (31.8)	.59 (15.0)	.98 (24.9)	.032 (0.8)
.082	716P823910M	1.65 (41.9)	.52 (13.2)	.90 (22.9)	.040 (1.0)
.1	716P104910M	1.65 (41.9)	.57 (14.5)	.96 (24.4)	.040 (1.0)
.12	716P124910M	1.65 (41.9)	.62 (15.7)	1.01 (25.7)	.040 (1.0)
.14	716P144910M	1.65 (41.9)	.67 (17.0)	1.06 (27.0)	.040 (1.0)
1200 VDC / 475 VAC*					
.001	716P102912L	1.25 (31.8)	.23 (5.8)	.45 (11.4)	.032 (0.8)
.0012	716P122912L	1.25 (31.8)	.24 (6.1)	.46 (11.7)	.032 (0.8)
.0015	716P152912L	1.25 (31.8)	.25 (6.4)	.47 (11.9)	.032 (0.8)
.0018	716P182912L	1.25 (31.8)	.27 (6.9)	.49 (12.4)	.032 (0.8)
.0022	716P222912L	1.25 (31.8)	.29 (7.4)	.51 (13.0)	.032 (0.8)
.0027	716P272912L	1.25 (31.8)	.28 (7.1)	.48 (12.2)	.032 (0.8)
.0033	716P332912L	1.25 (31.8)	.30 (7.6)	.49 (12.4)	.032 (0.8)
.0039	716P392912L	1.25 (31.8)	.30 (7.6)	.54 (13.7)	.032 (0.8)
.0047	716P472912L	1.25 (31.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)
.0056	716P562912L	1.25 (31.8)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.0068	716P682912L	1.25 (31.8)	.37 (9.4)	.61 (15.5)	.032 (0.8)
.0082	716P822912L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.032 (0.8)
.01	716P103912L	1.25 (31.8)	.42 (10.7)	.70 (17.8)	.032 (0.8)
.012	716P123912L	1.25 (31.8)	.45 (11.4)	.73 (18.5)	.032 (0.8)
.015	716P153912L	1.25 (31.8)	.46 (11.7)	.84 (21.3)	.032 (0.8)
.018	716P183912L	1.25 (31.8)	.50 (12.7)	.88 (22.4)	.032 (0.8)
.022	716P223912L	1.25 (31.8)	.54 (13.7)	.93 (23.6)	.032 (0.8)
.027	716P273912L	1.25 (31.8)	.60 (15.2)	.99 (25.1)	.032 (0.8)
.033	716P333912M	1.65 (41.9)	.53 (13.5)	.91 (23.1)	.040 (1.0)
.039	716P393912M	1.65 (41.9)	.57 (14.5)	.96 (24.4)	.040 (1.0)
.047	716P473912M	1.65 (41.9)	.62 (15.7)	1.01 (25.7)	.040 (1.0)
.056	716P563912M	1.65 (41.9)	.68 (17.3)	1.07 (27.2)	.040 (1.0)

* Please refer to performance curves for RMS Voltage vs. Frequency characteristics.

[1] To complete part number for proper tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

[2] Type 716P capacitors are available through the CDE Distribution Network on special order.

Dimensions in inches, metric (mm) in parenthesis.

Type 716P, Orange Drop¿Polypropylene Film/Foil Capacitors

High Performance

Type 716P Standard Sizes/Ratings[2]

Value µF	Part Number[1]	L max	T max	H max	d	Value µF	Part Number[1]	L max	T max	H max	d
1600 VDC / 500 VAC*						2000 VDC / 500 VAC*					
.001	716P102916L	1.25 (31.8)	.28 (7.1)	.47 (11.2)	.032 (0.8)	.001	716P102920L	1.25 (31.8)	.28 (71.)	.47 (11.9)	.032 (0.8)
.0012	716P122916L	1.25 (31.8)	.29 (7.4)	.48 (12.2)	.032 (0.8)	.0012	716P122920L	1.25 (31.8)	.29 (7.4)	.48 (12.2)	.032 (0.8)
.0015	716P152916L	1.25 (31.8)	.30 (7.6)	.50 (12.7)	.032 (0.8)	.0015	716P152920L	1.25 (31.8)	.30 (7.6)	.50 (12.7)	.032 (0.8)
.0018	716P182916L	1.25 (31.8)	.31 (7.9)	.55 (14.0)	.032 (0.8)	.0018	716P182920L	1.25 (31.8)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.0022	716P222916L	1.25 (31.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)	.0022	716P222920L	1.25 (31.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)
						.0027	716P272920L	1.25 (31.8)	.35 (8.9)	.59 (15.0)	.032 (0.8)
.0027	716P272916L	1.25 (31.8)	.35 (8.9)	.59 (15.0)	.032 (0.8)	.0033	716P332920L	1.25 (31.8)	.37 (9.4)	.61 (15.5)	.032 (0.8)
.0033	716P332916L	1.25 (31.8)	.37 (9.4)	.61 (15.5)	.032 (0.8)						
.0039	716P392916L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.032 (0.8)	.0039	716P392920L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.032 (0.8)
.0047	716P472916L	1.25 (31.8)	.41 (10.4)	.69 (17.5)	.032 (0.8)	.0047	716P472920L	1.25 (31.8)	.41 (10.4)	.69 (17.5)	.032 (0.8)
						.0056	716P562920L	1.25 (31.8)	.43 (10.9)	.72 (18.3)	.032 (0.8)
.0056	716P562916L	1.25 (31.8)	.43 (10.9)	.72 (18.3)	.032 (0.8)	.0068	716P682920L	1.25 (31.8)	.47 (11.9)	.75 (19.1)	.032 (0.8)
.0068	716P682916L	1.25 (31.8)	.47 (11.9)	.75 (19.1)	.032 (0.8)	.0082	716P822920L	1.25 (31.8)	.47 (11.9)	.85 (21.6)	.032 (0.8)
.0082	716P822916L	1.25 (31.8)	.47 (11.9)	.85 (21.6)	.032 (0.8)	.01	716P103920L	1.25 (31.8)	.51 (13.0)	.90 (22.9)	.032 (0.8)
.01	716P103916L	1.25 (31.8)	.51 (13.0)	.90 (22.9)	.032 (0.8)	.012	716P123920L	1.25 (31.8)	.55 (14.0)	.94 (23.9)	.032 (0.8)
.012	716P123916L	1.25 (31.8)	.55 (14.0)	.94 (23.9)	.032 (0.8)						
						.015	716P153920M	1.65 (41.9)	.49 (12.4)	.87 (22.1)	.040 (1.0)
.015	716P153916M	1.65 (41.9)	.49 (12.4)	.87 (22.1)	.040 (1.0)	.018	716P183920M	1.65 (41.9)	.53 (13.5)	.91 (23.1)	.040 (1.0)
.018	716P183916M	1.65 (41.9)	.53 (13.5)	.91 (23.1)	.040 (1.0)	.022	716P223920M	1.65 (41.9)	.58 (14.7)	.96 (24.4)	.040 (1.0)
.022	716P223916M	1.65 (41.9)	.58 (14.7)	.96 (24.4)	.040 (1.0)	.027	716P273920M	1.65 (41.9)	.63 (16.0)	1.02 (25.9)	.040 (1.0)
.027	716P273916M	1.65 (41.9)	.63 (16.0)	1.02 (25.9)	.040 (1.0)	.033	716P333920M	1.65 (41.9)	.69 (17.5)	1.08 (27.4)	.040 (1.0)
.033	716P333916M	1.65 (41.9)	.69 (17.5)	1.08 (27.4)	.040 (1.0)						

* Please refer to performance curves for RMS Voltage vs. Frequency characteristics.

[1] To complete part number for proper tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

[2] Type 716P capacitors are available through the CDE Distribution Network on special order.

Please note:

It is not possible to list every capacitance value available for each rating, if you require a specific cap value not listed just give us a call. We will supply the details you need.

Dimensions in inches, metric (mm) in parenthesis.

High Performance

Corona, Dissipation Factor Specifications

Corona Start Voltage

D-C Rating	Typical Corona Start Voltage, RMS
100	250
200	300
400, 600	325
800, 1000	600
1200	625
1600, 2000	650

Maximum Dissipation Factor (D.F.) in %

Cap Range (µF)	100V-600V		800V/1000V		1200V		1600V/2000V	
	20KHz	100KHz	20KHz	100KHz	20KHz	100KHz	20KHz	100KHz
.001 - .012	.028	.034	.037	.075	.034	.064	.032	.053
.015 - .027	.029	.038	.037	.078	.035	.067	.037	.078
.033 - .068	.030	.046	.038	.087	.042	.104	.037	.079
.082 - .1	.031	.053	.048	.135	--	--	--	--
.12 - .33	.034	.076	.049	.141	--	--	--	--
.39 - .56	.038	.107	--	--	--	--	--	--
.68 - 1.0	.047	.167	--	--	--	--	--	--

For additional information on Corona and Dissipation Factor please refer to the Technical Reference section of this catalog. For more specific data or assistance with a specific application just give us a call.

dV/dt Specifications

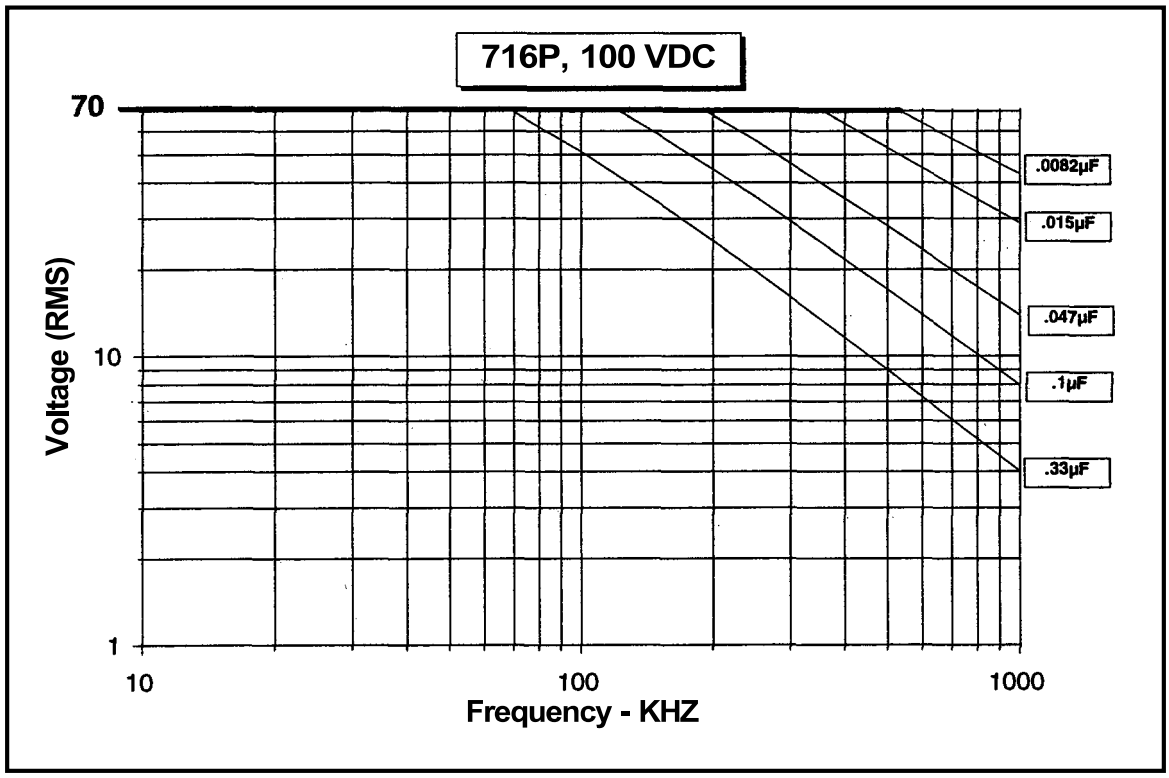
Maximum Pulse Rise Time (dv/dt) in Volts/µsec

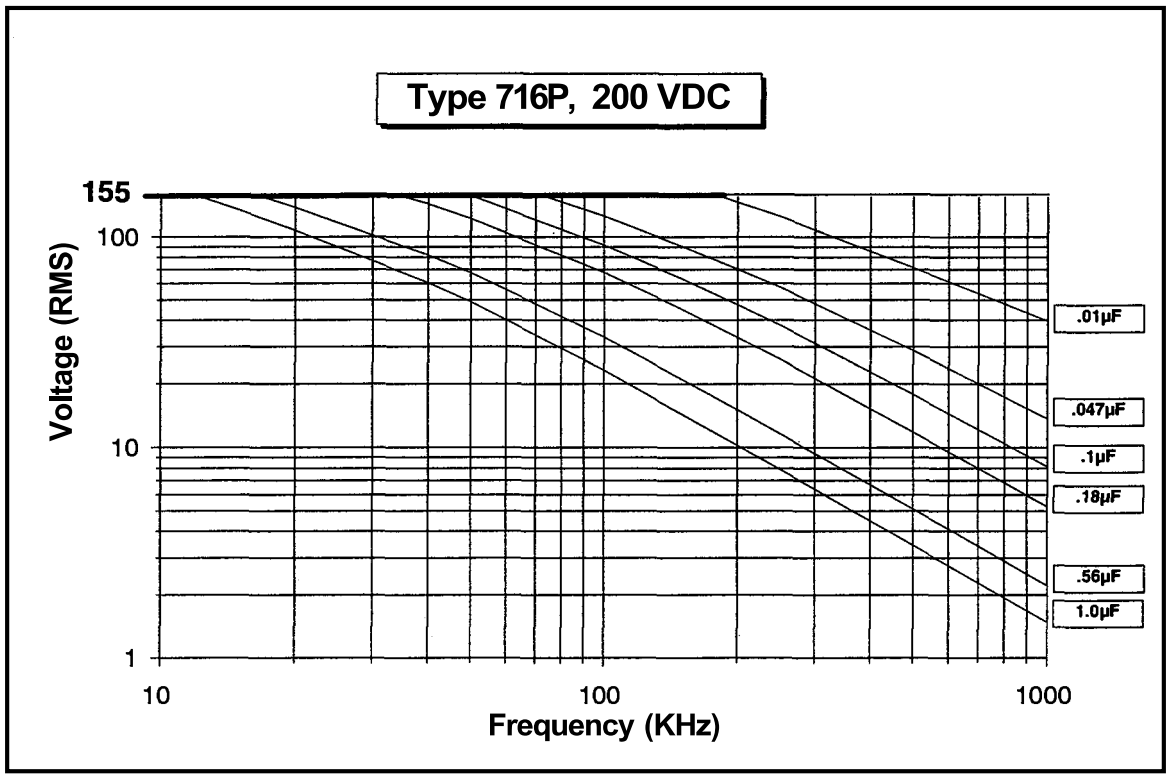
Cap Value (µF)	100V	200V	400V	600V	800V/ 1000V	1200V	1600V/ 2000V
.001	-	-	20700	20700	-	43200	43200
.0012	-	-	18900	18900	-	39500	39500
.0015	-	-	16900	16900	-	35300	35300
.0018	-	-	15400	15400	-	32200	32200
.0022	-	-	14000	14000	-	29100	29100
.0027	-	-	12600	12600	-	25000	26300
.0033	-	-	11400	11400	-	22600	23800
.0039	-	-	10500	10500	-	20800	21900
.0047	-	-	9500	9500	-	18900	19900
.0056	-	-	8700	8700	16400	17400	18300
.0068	-	-	7900	7900	14900	15700	16600
.0082	4100	-	7200	7200	13600	14300	15100
.01	3700	4600	6500	6500	12300	13000	13700
.012	3400	4200	6000	5400	11200	11900	12500
.015	3000	3800	5300	4800	10000	10600	10300
.018	2800	3400	4400	4400	9200	9700	9400
.022	2500	3100	4000	4000	8300	8800	8500
.027	2200	2800	3600	3600	7500	7900	7700
.033	2000	2500	3200	3200	6800	6600	7000
.039	1700	2300	3000	3000	6200	6100	-
.047	1500	2100	2700	2500	5700	5600	-
.056	1400	1800	2500	2300	5200	5100	-
.068	1300	1600	2300	2100	4700	-	-
.082	1100	1500	1900	1900	4000	-	-
.1	1000	1300	1700	1700	3600	-	-
.12	900	1200	1600	1600	3300	-	-
.15	800	1100	1400	1300	-	-	-
.18	700	910	1300	1200	-	-	-
.22	700	820	1200	1100	-	-	-
.27	600	740	1100	-	-	-	-
.33	500	670	880	-	-	-	-
.39	-	620	810	-	-	-	-
.47	-	560	740	-	-	-	-
.56	-	520	-	-	-	-	-
.68	-	430	-	-	-	-	-
.82	-	400	-	-	-	-	-
1.0	-	360	-	-	-	-	-

Note: dV/dt ratings based on measurements made at junction of the wire leads and capacitor body.

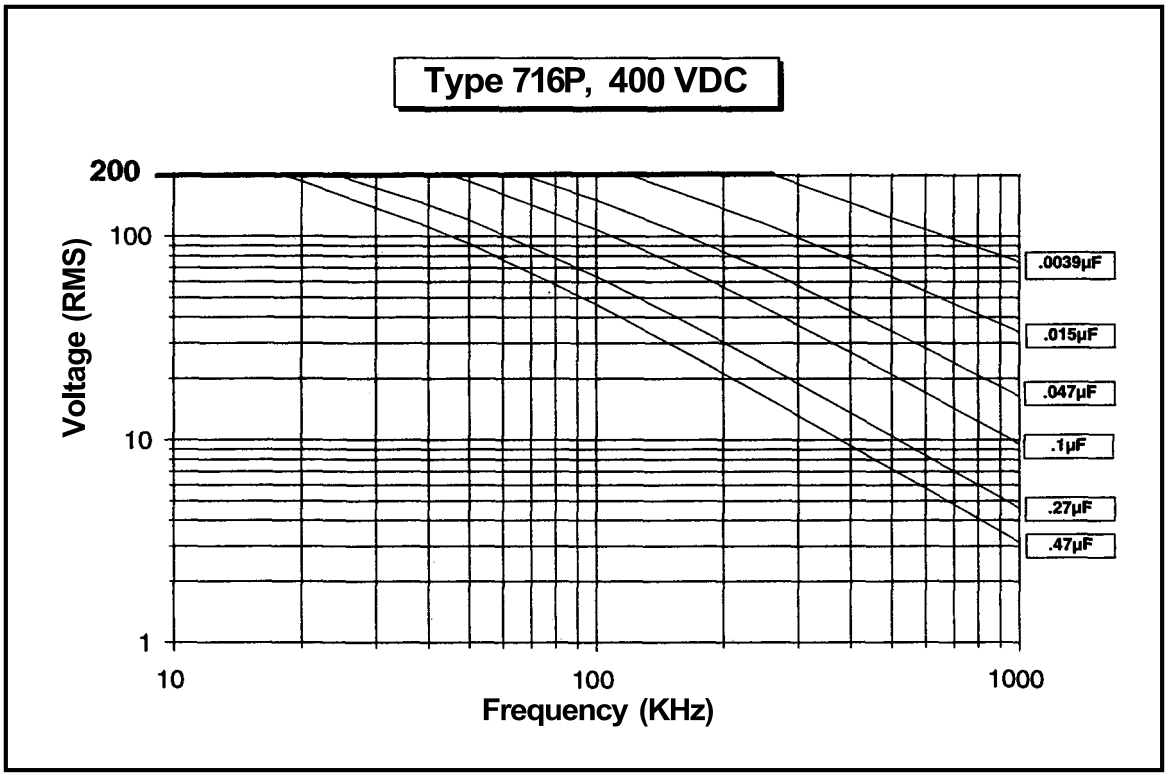
For additional information on Pulse Rise Time (dV/dt) please refer to the Technical Reference section of this catalog. For more specific data or assistance with a specific application just give us a call.

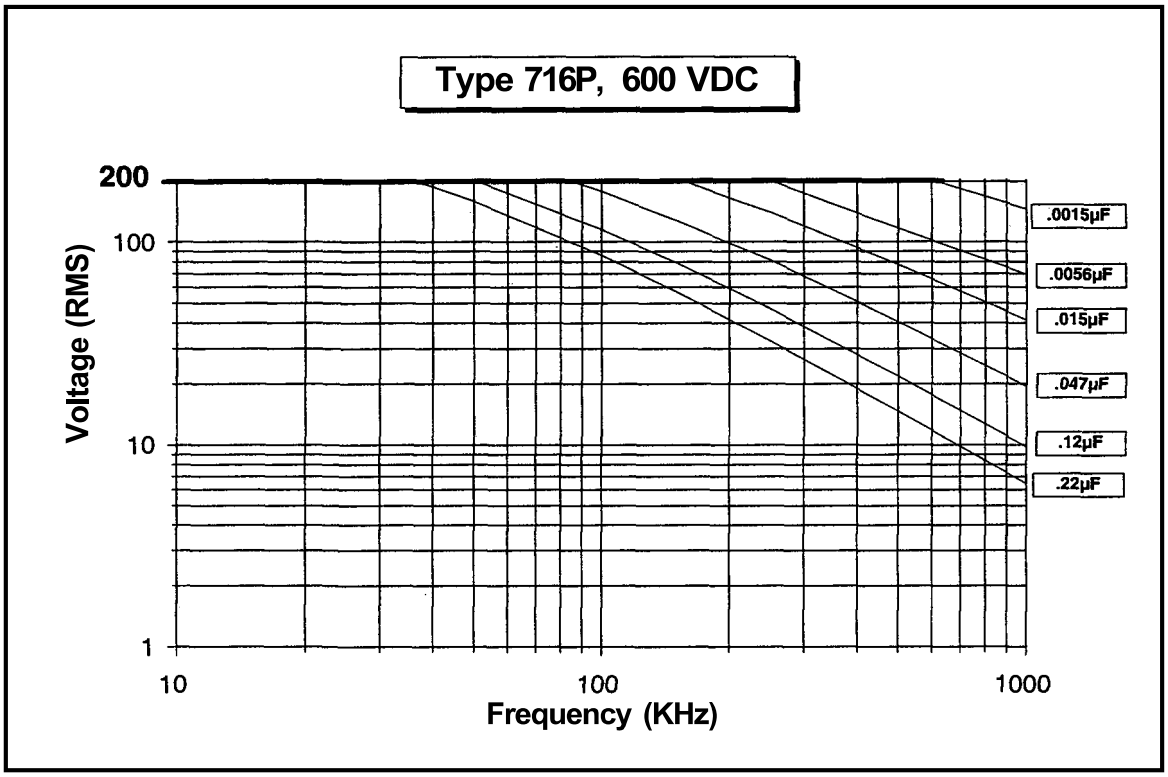
RMS Voltage vs. Frequency @ +85°C





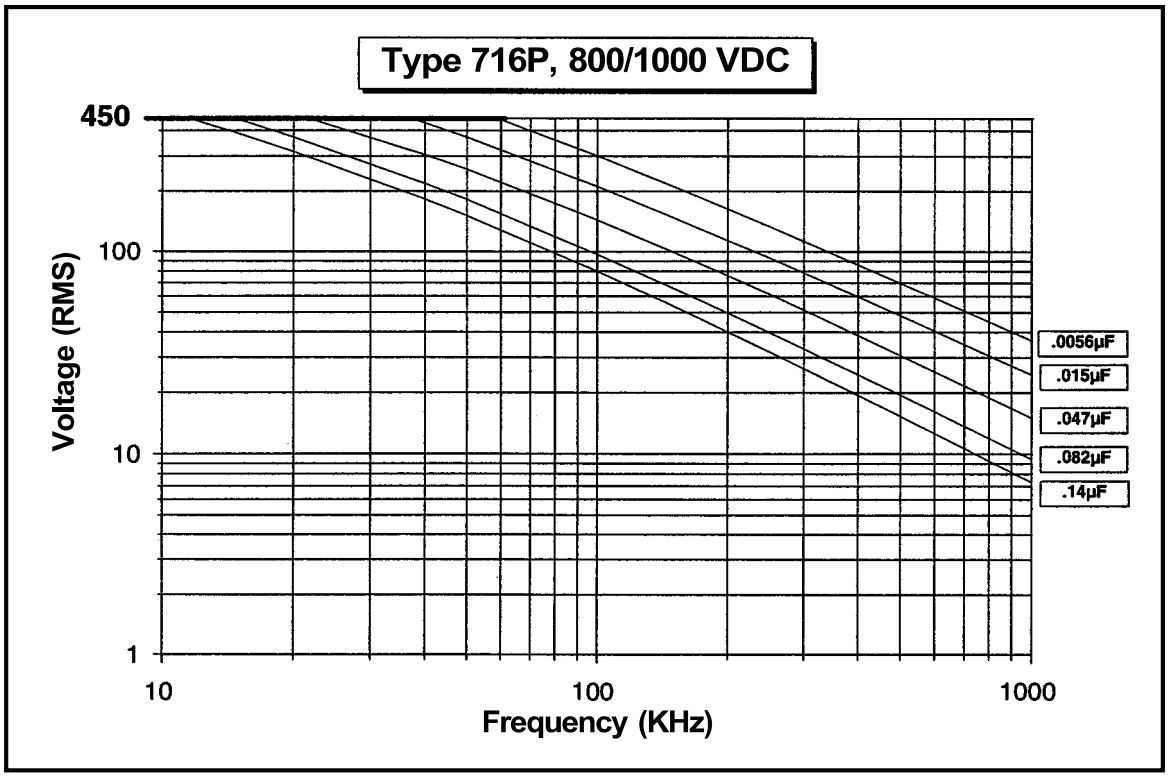
RMS Voltage vs. Frequency @ +85°C

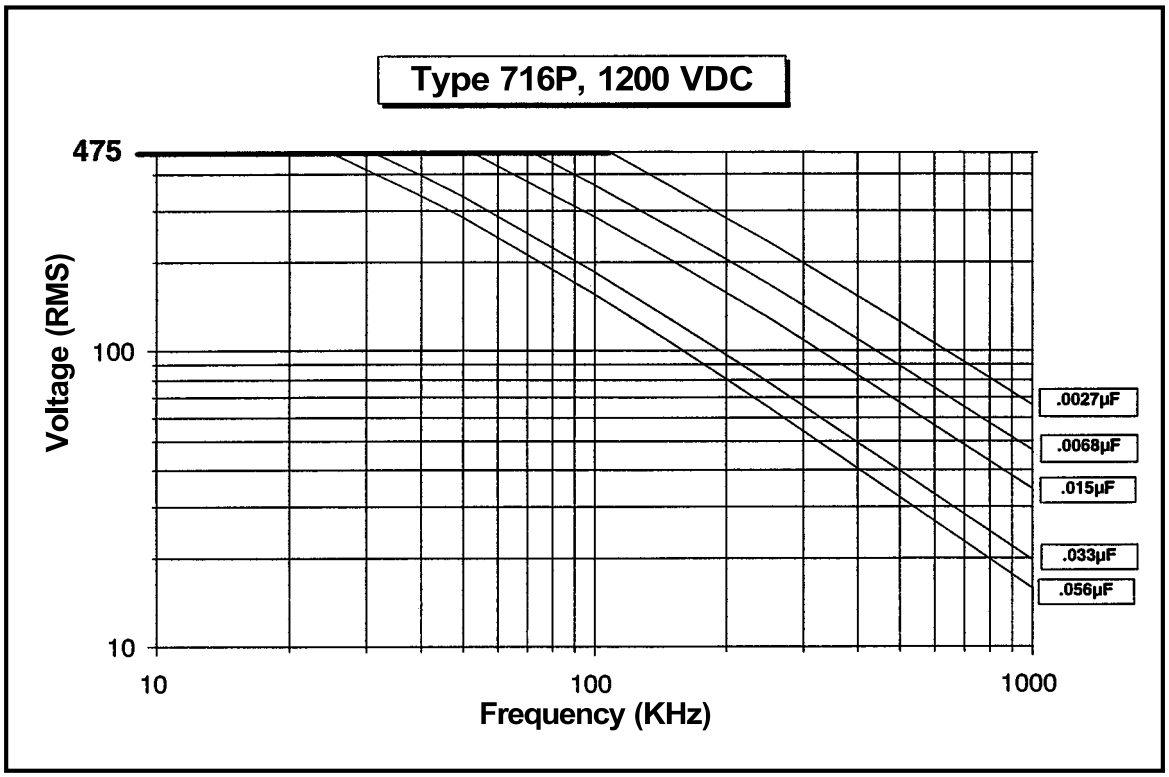




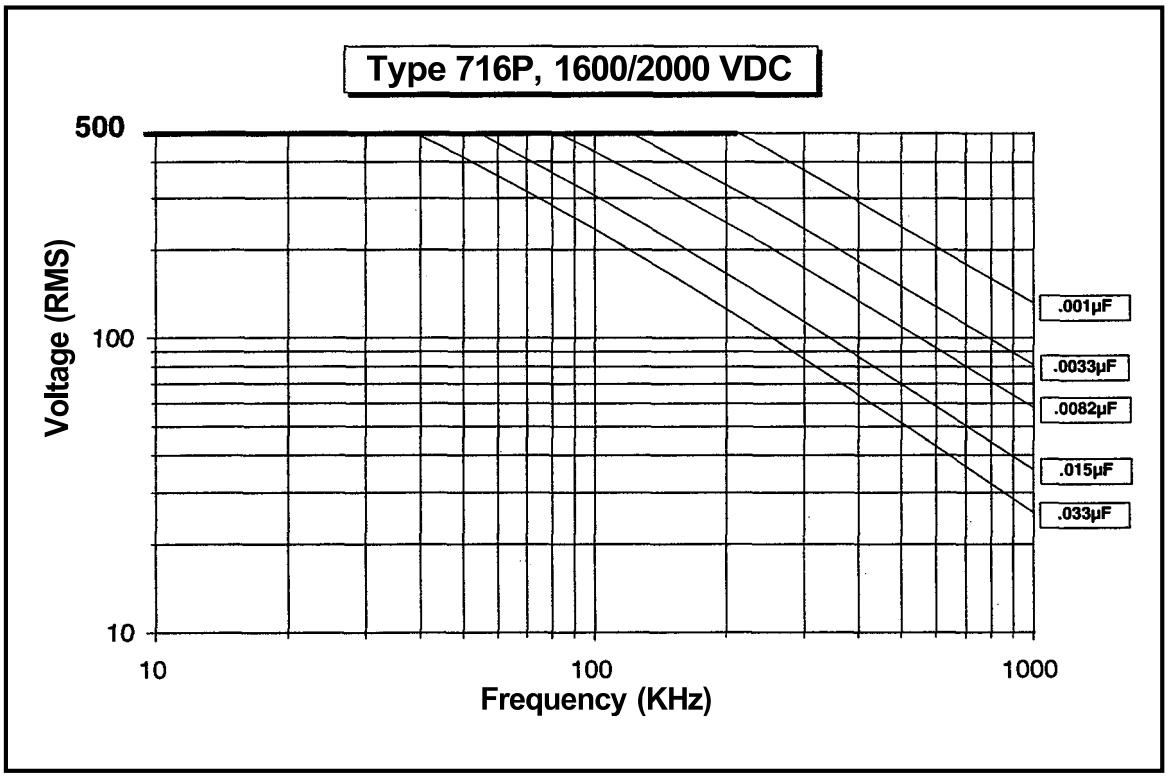
High Performance

RMS Voltage vs. Frequency @ +85°C



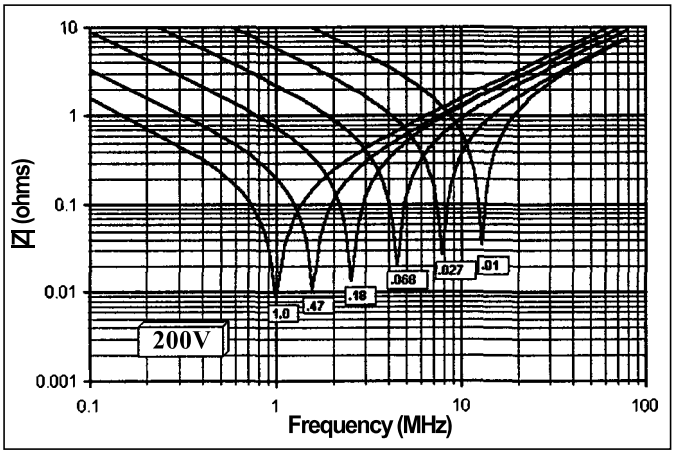


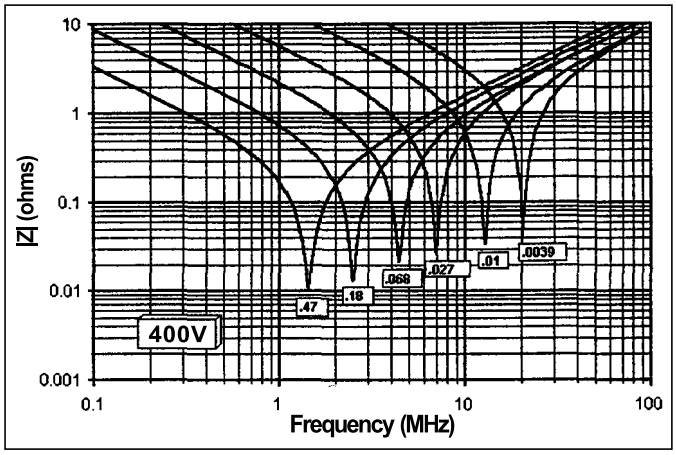
RMS Voltage vs. Frequency @ +85°C

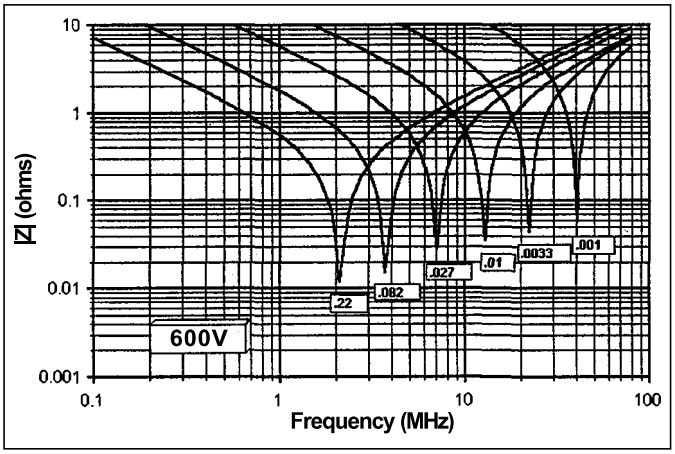


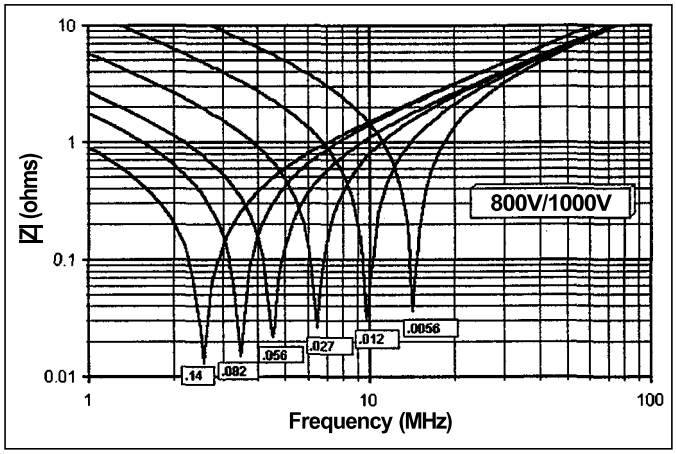
High Performance

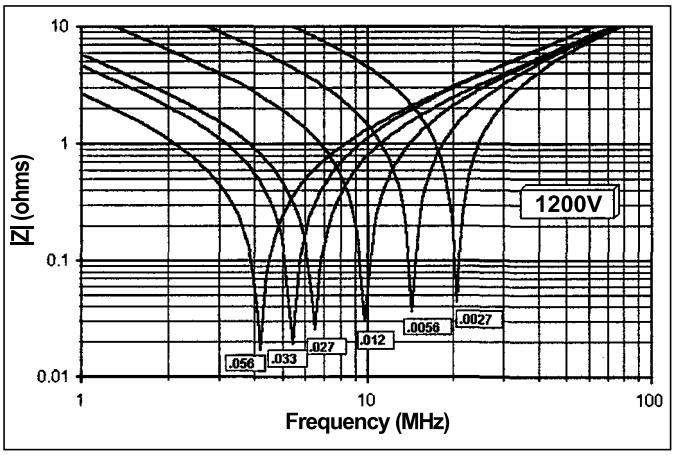
Typical Impedance vs. Frequency

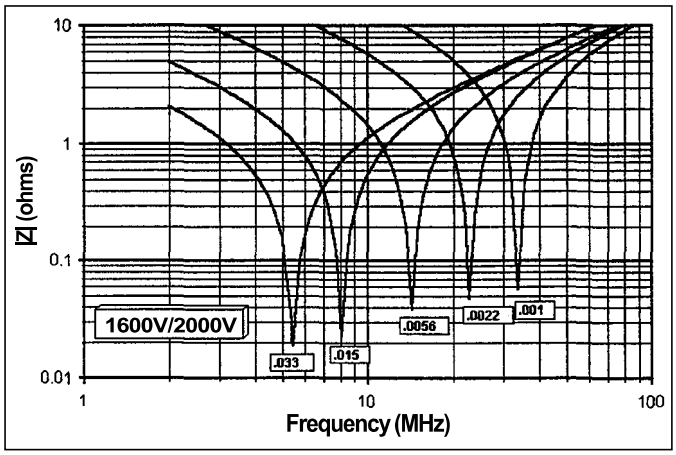










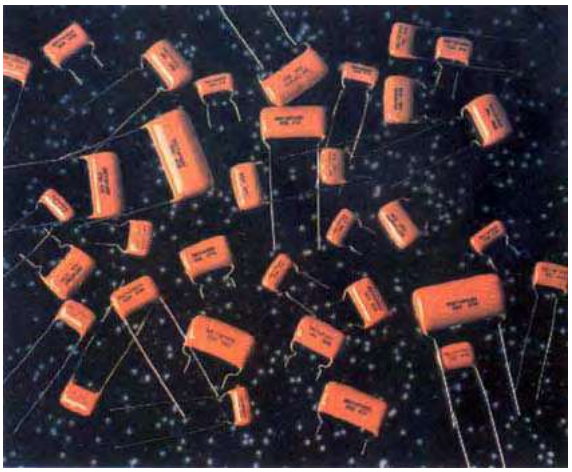


Please note: Capacitance values above are in µF. The resonant frequency and impedance shown above apply to units with a 0.250" lead length and are typical values only. Please contact us for data on the 100VDC rated units.

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Type 716P, Orange Drop®, Polypropylene Film/Foil Capacitors

High Performance



Features

- Copper leads.
- Extremely low dissipation factor.
- Superb high frequency response.
- Excellent stability, virtually linear temperature coefficient.
- Various lead spacings, crimp styles and lead lengths available.

Specifications

Capacitance Range:
220 pF to 1.0 µF

Capacitance Tolerance:
±3% to ±10%

Voltage Ratings:
100 to 2000 Volts D-C
70 to 500 Volts A-C

Operating Temperature Range:
-55°C to +85°C
(+105°C with proper voltage derating)

Lead Wire:
Tinned copper.

Dissipation Factor:
See tabulated data.

Insulation Resistance:
400,000 MΩ minimum at +25°C
20,000 MΩ minimum at +85°C
2,000 MΩ minimum at +105°C

Pulse Rise Time, dV/dt:
See tabulated data.

Corona Start Voltage (typical):
See tabulated data.

Encapsulation:
Conformal coating of flame retardant orange epoxy (meets UL94V-0 specifications)

Dielectric:
Polypropylene film.

Construction:
Non-inductively wound with extended foil. Additional details on general specifications page.

Applications:
Switching and high voltage power supplies, inverters, snubbers, resonant converters and electronic lighting ballasts.

Type 716P, Orange Drop®, Polypropylene Film/Foil Capacitors

High Performance

General Specifications

The 715P and 716P series are manufactured with polypropylene film and extended foil. Polypropylene has a very low dissipation factor, low dielectric absorption and exhibits excellent capacitance stability. These characteristics combined with the direct connection of the lead wire to the extended foil electrode makes the 715P and 716P series ideal for high current, high pulse applications.

The 715P series has a round profile and is available in tolerances as close as ±1%. The 716P series has a pressed profile and, in addition, is designed with copper leads, thus adding to it's performance in high frequency, high pulse current applications.

Other specifications are listed below and on the following pages.

Operating Temperature Range:
The standard operating temperature range for polypropylene film is -55°C to +85°C. The 715P and 716P may be operated up to +105°C provided the DC working voltage is reduced by 50%.

For specific derating of the AC voltage when operating above +85°C please contact our design engineering department.

The maximum operating temperature for 715P and 716P polypropylene film capacitors is + 105°C.

Dielectric Withstanding Voltage:
Units rated below 800 VDC shall withstand a DC potential of 250% of rated voltage applied between terminals for not more than 5 seconds; units rated 800 VDC and above shall withstand 200% of rated voltage.

Construction:
Units rated 100 through 600 VDC are single section designs constructed of plain polypropylene film with extended foil. Units rated 800 VDC and above are series-section designs with extended foil and incorporate a floating common of metallized polypropylene. All units are non-inductively wound.

Temperature Coefficient:
The typical temperature coefficient is -180 ppm/°C over the temperature range of -55°C to +85°C.

Humidity Testing:
Units subjected to 95% relative humidity for 72 hours with no voltage applied at +75°C. After 4 hours of drying minimum product of insulation resistance and capacitance shall be 50,000 megohm-microfarads.

DC Voltage Life Test:
Minimum of 500 hours at +85°C at 150% of rated voltage. After test, capacitance shall not have changed by more than 3%, insulation resistance shall not have decreased by more than 25% and dissipation factor shall not have changed by more than 0.03%. Measurements made at 1 KHz.

AC Voltage Life Test:
Minimum of 500 hours at +85°C at 60 Hz. AC test voltage applied at 110% of AC rating. After test, capacitance shall not have changed by more than 3%, insulation resistance shall not have decreased by more than 25%, and dissipation factor shall not have changed by more than 0.03%. Measurements made at 1 KHz.

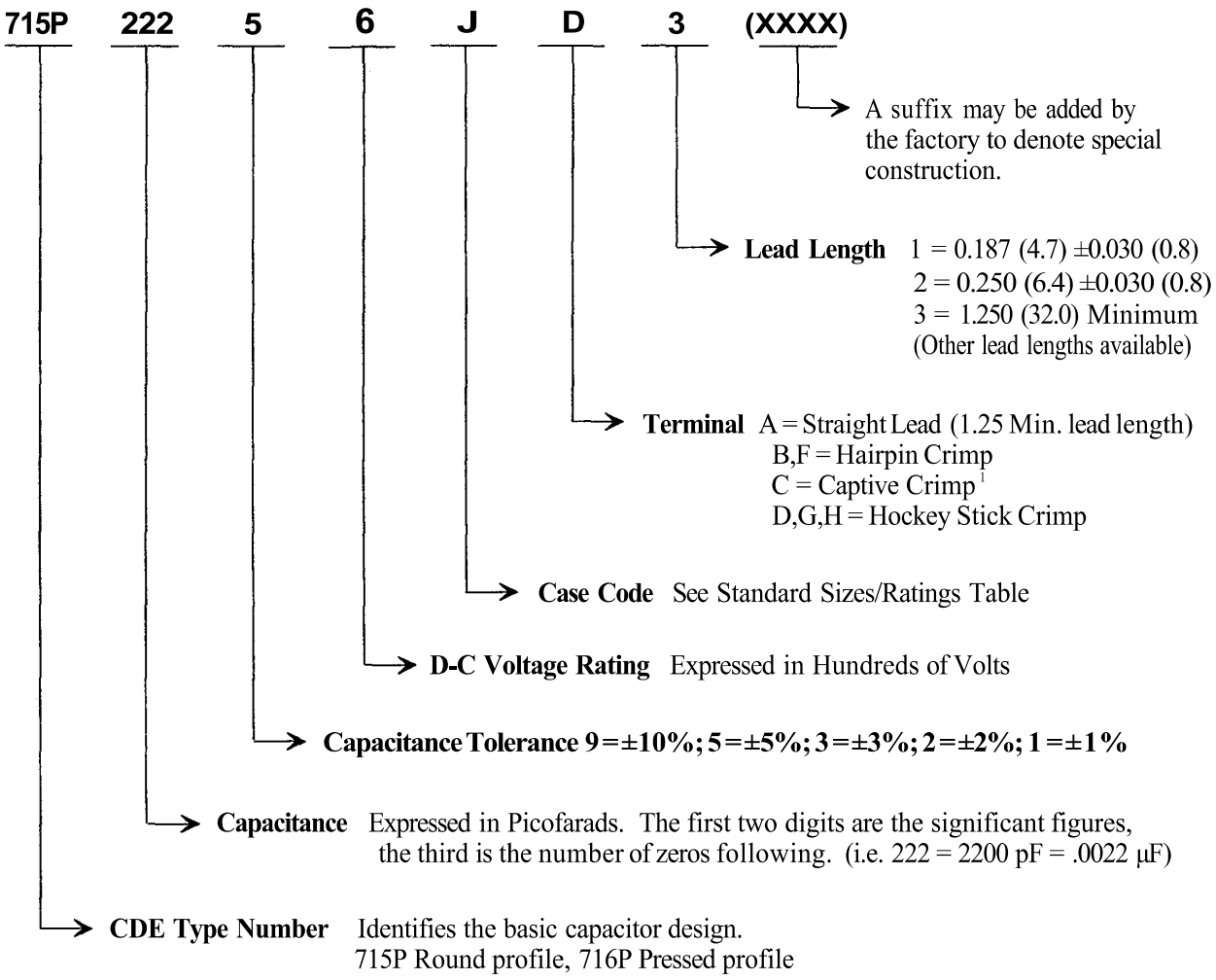
Additional notes on Life Testing:
CDE performs standard 500 hour accelerated life tests, both DC and line frequency AC, to monitor process control over our wide range of products.

We also perform longer term life testing, typically 2000 hours, during development of most products. In addition we do accelerated life testing at 10-250 KHz for our High Performance AC products. For additional life test information please contact us.

Type 716P, Orange Drop,® Polypropylene Film/Foil Capacitors

High Performance

Ordering/Part Number Information



[1] Terminal C has a fixed lead length of 0.156 (4.0) ±0.020 (0.5), therefore it is not necessary to indicate the lead length digit when ordering. Available for "L" case code parts only

Please note;

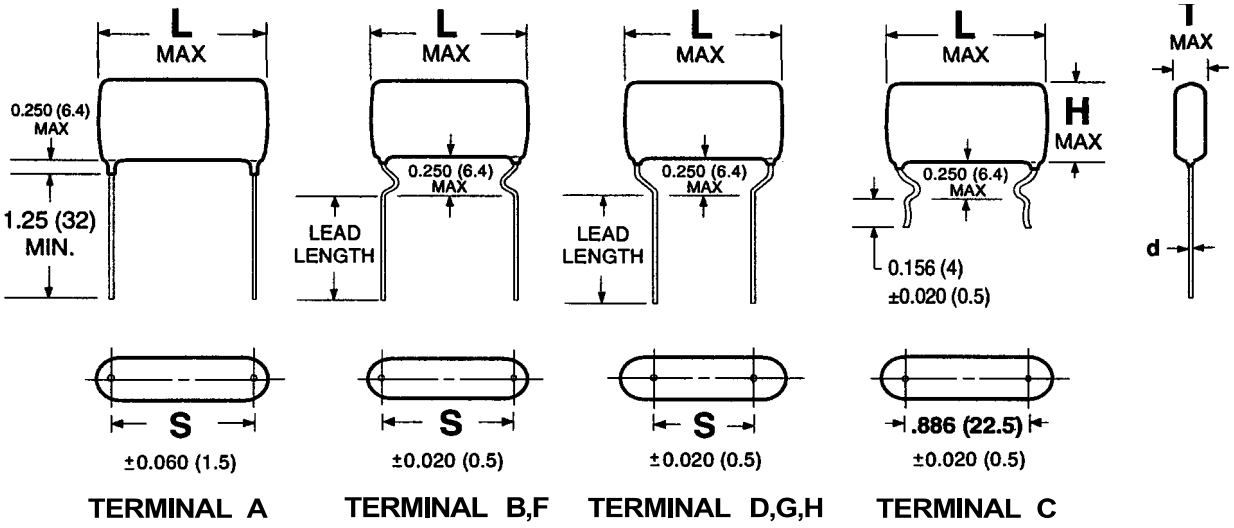
While it is not possible to list every capacitance value, tolerance, or design/size variation available, our flexibility in design and manufacturing gives us the ability to quickly, and cost effectively, provide you with the capacitor you require. Please contact us today with your specific needs!

Dimensions in inches, metric (mm) in parenthesis.

Type 716P, Orange Drop¿Polypropylene Film/Foil Capacitors

High Performance

Standard Lead Styles



Standard Lead Spacings

CASE CODE	S, inches (metric, mm in parentheses)						
	Term. A	Term. B	Term. D	Term. C *	Term. F	Term. G	Term. H
N	0.394 (10)	0.394 (10)	---	---	0.295 (7.5)	0.197 (5)	---
J	0.500 (12.7)	0.500 (12.7)	0.375 (9.5)	---	0.394 (10)	0.295 (7.5)	0.197 (5)
K	0.688 (17.5)	0.688 (17.5)	0.375 (9.5)	---	0.590 (15)	0.394 (10)	0.295 (7.5)
L	1.031 (26.2)	0.969 (24.6)	0.719 (18.3)	0.886 (22.5)	0.886 (22.5)	0.590 (15)	---
M	1.406 (35.7)	1.344 (34.1)	1.094 (27.8)	---	---	1.083 (27.5)	---

* Terminal C is designed for printed circuit boards requiring a lead spacing of 0.886 (22.5) with board hole sizes of 0.044 (1.1) to 0.048 (1.2) in diameter. Available for "L" case code parts only. Please consult us if you have a specific requirement.

Standard Marking Format

Sample Marking on unit

CDE716P600V
222J 9810

Description

CDE	CDE Electronics identification
716P	Type number
600V	D-C Voltage rating, Volts
222J	Capacitance and tolerance code
9810	Weekly date code (i.e. 10th week of 1998)

Tolerance codes per EIA Standards

H	±3%
J	±5%
K	±10%

Type 716P, Orange Drop¿Polypropylene Film/Foil Capacitors

High Performance

Type 716P Standard Sizes/Ratings[2]

Value µF	Part Number[1]	L max	T max	H max	d
100 VDC / 70 VAC*					
.0082	716P82291N	.57 (14.5)	.23 (5.8)	.36 (9.1)	.032 (0.8)
.009	716P90291N	.57 (14.5)	.24 (6.1)	.37 (9.4)	.032 (0.8)
.01	716P10391N	.57 (14.5)	.24 (6.1)	.38 (9.7)	.032 (0.8)
.012	716P12391N	.57 (14.5)	.23 (5.8)	.37 (9.4)	.032 (0.8)
.015	716P15391N	.57 (14.5)	.25 (6.4)	.39 (9.9)	.032 (0.8)
.018	716P18391N	.57 (14.5)	.26 (6.6)	.42 (10.7)	.032 (0.8)
.022	716P22391N	.57 (14.5)	.28 (7.1)	.44 (11.2)	.032 (0.8)
.025	716P25391N	.57 (14.5)	.29 (7 4)	.45 (11.4)	.032 (0:8)
.027	716P27391N	.57 (14.5)	.27 (6.9)	.50 (12.7)	.032 (0.8)
.033	716P33391N	.57 (14.5)	.29 (7 4)	.53 (13.5)	.032 (0.8)
.039	716P39391N	.57 (14.5)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.047	716P47391N	.57 (14.5)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.05	716P50391J	.70 (17.8)	.28 (7 1)	.52 (13.2)	.032 (0.8)
.056	716P56391J	.70 (17.8)	.29 (7 4)	.53 (13.5)	.032 (0.8)
.062	716P62391J	.70 (17.8)	.31 (7.9)	.54 (13.7)	.032 (0.8)
.068	716P68391J	.70 (17.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)
.075	716P75391J	.70 (17.8)	.33 (8.4)	.57 (14.5)	.032 (0.8)
.082	716P82391J	.70 (17.8)	.35 (8.9)	.59 (15.0)	.032 (0.8)
.09	716P90391J	.70 (17.8)	.36 (9.1)	.60 (15.2)	.032 (0.8)
.1	716P10491J	.70 (17.8)	.38 (9.7)	.62 (15.7)	.032 (0.8)
.12	716P12491K	.90 (22.9)	.33 (8.4)	.57 (14.5)	.032 (0.8)
.15	716P15491K	.90 (22.9)	.37 (9.4)	.61 (15.5)	.032 (0.8)
.18	716P18491K	.90 (22.9)	.40 (10.2)	.64 (16.3)	.032 (0.8)
.20	716P20491K	.90 (22.9)	.42 (10.7)	.66 (16.8)	.032 (0.8)
.22	716P22491K	.90 (22.9)	.44 (11.2)	.68 (17.3)	.032 (0.8)
.25	716P25491K	.90 (22.9)	.47 (11.9)	.71 (18.0)	.032 (0.8)
.27	716P27491K	.90 (22.9)	.49 (12.4)	.73 (18.5)	.032 (0.8)
.30	716P30491L	1.25 (31.8)	.41 (10.4)	.65 (16.5)	.040 (1.0)
.33	716P33491L	1.25 (31.8)	.42 (10.7)	.67 (17.0)	.040 (1.0)
200 VDC / 155 VAC*					
.01	716P10392J	.70 (17.8)	.25 (6.4)	.37 (9.4)	.032 (0.8)
.012	716P12392J	.70 (17.8)	.27 (6.9)	.39 (9.9)	.032 (0.8)
.015	716P15392J	.70 (17.8)	.26 (6.6)	.45 (11.4)	.032 (0.8)
.018	716P18392J	.70 (17.8)	.25 (6.4)	.45 (11.4)	.032 (0.8)
.022	716P22392J	.70 (17.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.027	716P27392J	.70 (17.8)	.29 (7 4)	.48 (12.2)	.032 (0.8)
.033	716P33392J	.70 (17.8)	.32 (8.1)	.51 (13.0)	.032 (0.8)
.039	716P39392J	.70 (17.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)
.047	716P47392J	.70 (17.8)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.056	716P56392K	.90 (22.9)	.30 (7.6)	.55 (14.0)	.032 (0.8)
.068	716P68392K	.90 (22.9)	.33 (8.4)	.57 (14.5)	.032 (0.8)
.082	716P82392K	.90 (22.9)	.36 (9.1)	.60 (15.2)	.032 (0.8)
.1	716P10492K	.90 (22.9)	.39 (9.9)	.63 (16.0)	.032 (0.8)
.12	716P12492K	.90 (22.9	.40 (10.2)	.69 (17.5)	.032 (0.8)
.15	716P15492K	.90 (22.9)	.45 (11.4)	.73 (18.5)	.032 (0.8)
200 VDC / 155 VAC*					
.18	716P18492L	1.25 (31.8)	.39 (9.9)	.67 (17.0)	.040 (1.0)
.22	716P22492L	1.25 (31.8)	.43 (10.9)	.71 (18.0)	.040 (1.0)
.27	716P27492L	1.25 (31.8)	.47 (11.9)	.75 (19.1)	.040 (1.0)
.33	716P33492L	1.25 (31.8)	.47 (11.9)	.86 (21.8)	.040 (1.0)
.39	716P39492L	1.25 (31.8)	.51 (13.0)	.90 (22.9)	.040 (1.0)
.47	716P47492L	1.25 (31.8)	.56 (14.2)	.95 (24.1)	.040 (1.0)
.56	716P56492L	1.25 (31.8)	.61 (15.5)	1.00 (25.4)	.040 (1.0)
.68	716P68492M	1.65 (41.9)	.56 (14.2)	.94 (23.9)	.040 (1.0)
.82	716P82492M	1.65 (41.9)	.61 (15.5)	1.00 (25.4)	.040 (1.0)
1.0	716P10592M	1.65 (41.9)	.68 (17.3)	1.07 (27.2)	.040 (1.0)
400 VDC / 200 VAC*					
.001	716P10294J	.70 (17.8)	.25 (6.4)	.47 (11.9)	.032 (0.8)
.0012	716P12294J	.70 (17.8)	.22 (5.6)	.44 (11.2)	.032 (0.8)
.0015	716P15294J	.70 (17.8)	.24 (6.1)	.45 (11.4)	.032 (0.8)
.0018	716P18294J	.70 (17.8)	.25 (6.4)	.46 (11.7)	.032 (0.8)
.0022	716P22294J	.70 (17.8)	.26 (6.6)	.48 (12.2)	.032 (0.8)
.0027	716P27294J	.70 (17.8)	.24 (6.1)	.45 (11.4)	.032 (0.8)
.0033	716P33294J	.70 (17.8)	.24 (6.1)	.45 (11.4)	.032 (0.8)
.0039	716P39294J	.70 (17.8)	.24 (6.1)	.36 (9.1)	.032 (0.8)
.0047	716P47294J	.70 (17.8)	.25 (6.4)	.37 (9.4)	.032 (0.8)
.0056	716P56294J	.70 (17.8)	.24 (6.1)	.44 (11.2)	.032 (0.8)
.0068	716P68294J	.70 (17.8)	.24 (6.1)	.44 (11.2)	.032 (0.8)
.0082	716P82294J	.70 (17.8)	.25 (6.4)	.45 (11.4)	.032 (0.8)
.01	716P10394J	.70 (17.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.012	716P12394J	.70 (17.8)	.29 (7.4)	.48 (12.2)	.032 (0.8)
.015	716P15394J	.70 (17.8)	.31 (7.9)	.50 (12.7)	.032 (0.8)
.018	716P18394K	.90 (22.9)	.28 (7.1)	.47 (11.9)	.032 (0.8)
.022	716P22394K	.90 (22.9)	.30 (7.6)	.49 (12.4)	.032 (0.8)
.027	716P27394K	.90 (22.9)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.033	716P33394K	.90 (22.9)	.33 (8.4)	.57 (14.5)	.032 (0.8)
.039	716P39394K	.90 (22.9)	.36 (9.1)	.60 (15.2)	.032 (0.8)
.047	716P47394K	.90 (22.9)	.39 (9.9)	.62 (15.7)	.032 (0.8)
.056	716P56394K	.90 (22.9)	.40 (10.2)	.68 (17.3)	.032 (0.8)
.068	716P68394K	.90 (22.9)	.43 (10.9)	.72 (18.3)	.032 (0.8)
.082	716P82394L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.040 (1.0)
.1	716P10494L	1.25 (31.8)	.42 (10.7)	.70 (17.8)	.040 (1.0)
.12	716P12494L	1.25 (31.8)	.45 (11.4)	.73 (18.5)	.040 (1.0)
.15	716P15494L	1.25 (31.8)	.46 (11.7)	.84 (21.3)	.040 (1.0)
.18	716P18494L	1.25 (31.8)	.50 (12.7)	.89 (22.6)	.040 (1.0)
.22	716P22494L	1.25 (31.8)	.57 (14.5)	.95 (24.1)	.040 (1.0)
.27	716P27494L	1.25 (31.8)	.63 (16.0)	1.01 (25.7)	.040 (1.0)
.33	716P33494M	1.65 (41.9)	.57 (14.5)	.96 (24.4)	.040 (1.0)
.39	716P39494M	1.65 (41.9)	.62 (15.7)	1.01 (25.7)	.040 (1.0)
.47	716P47494M	1.65 (41.9)	.68 (17.3)	1.07 (27.2)	.040 (1.0)

* Please refer to performance curves for RMS Voltage vs. Frequency characteristics.

[1] To complete part number for proper tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

[2] Type 716P capacitors are available through the CDE Distribution Network on special order.

Dimensions in inches, metric (mm) in parenthesis.

Type 716P, Orange Drop¿Polypropylene Film/Foil Capacitors

High Performance

Type 716P Standard Sizes/Ratings[2]

Value µF	Part Number[1]	L max	T max	H max	d
600 VDC / 200 VAC*					
.001	716P10296J	.70 (17.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.0012	716P12296J	.70 (17.8)	.24 (6.1)	.44 (11.2)	.032 (0.8)
.0015	716P15296J	.70 (17.8)	.26 (6.6)	.45 (11.4)	.032 (0.8)
.0018	716P18296J	.70 (17.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.0022	716P22296J	.70 (17.8)	.28 (7.1)	.48 (12.2)	.032 (0.8)
.0027	716P27296J	.70 (17.8)	.25 (6.4)	.44 (11.2)	.032 (0.8)
.0033	716P33296J	.70 (17.8)	.25 (6.4)	.45 (11.4)	.032 (0.8)
.0039	716P39296J	.70 (17.8)	.26 (6.6)	.46 (11.7)	.032 (0.8)
.0047	716P47296J	.70 (17.8)	.28 (7.1)	.47 (11.9)	.032 (0.8)
.0056	716P56296J	.70 (17.8)	.30 (7.6)	.49 (12.4)	.032 (0.8)
.0068	716P68296J	.70 (17.8)	.32 (8.1)	.51 (13.0)	.032 (0.8)
.0082	716P82296J	.70 (17.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)
.01	716P10396J	.70 (17.8)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.012	716P12396K	.90 (22.9)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.015	716P15396K	.90 (22.9)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.018	716P18396K	.90 (22.9)	.36 (9.1)	.60 (15.2)	.032 (0.8)
.022	716P22396K	.90 (22.9)	.39 (9.9)	.63 (16.0)	.032 (0.8)
.027	716P27396K	.90 (22.9)	.41 (10.4)	.69 (17.5)	.032 (0.8)
.033	716P33396K	.90 (22.9)	.44 (11.2)	.73 (18.5)	.032 (0.8)
.039	716P39396K	.90 (22.9)	.48 (12.2)	.76 (19.3)	.032 (0.8)
.047	716P47396L	1.25 (31.8)	.42 (10.7)	.70 (17.8)	.040 (1.0)
.056	716P56396L	1.25 (31.8)	.45 (11.4)	.73 (18.5)	.040 (1.0)
.068	716P68396L	1.25 (31.8)	.45 (11.4)	.84 (21.3)	.040 (1.0)
.082	716P82396L	1.25 (31.8)	.49 (12.4)	.88 (22.4)	.040 (1.0)
.1	716P10496L	1.25 (31.8)	.54 (13.7)	.93 (23.6)	.040 (1.0)
.12	716P12496L	1.25 (31.8)	.59 (15.0)	.97 (24.6)	.040 (1.0)
.15	716P15496M	1.65 (41.9)	.55 (14.0)	.93 (23.6)	.040 (1.0)
.18	716P18496M	1.65 (41.9)	.59 (15.0)	.98 (24.9)	.040 (1.0)
.22	716P22496M	1.65 (41.9)	.65 (16.5)	1.04 (25.7)	.040 (1.0)
800 VDC / 450 VAC*					
.0056	716P56298L	1.25 (31.8)	.25 (6.4)	.45 (11.4)	.032 (0.8)
.0068	716P68298L	1.25 (31.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.0082	716P82298L	1.25 (31.8)	.29 (7.4)	.48 (12.2)	.032 (0.8)
.01	716P10398L	1.25 (31.8)	.29 (7.4)	.53 (13.5)	.032 (0.8)
.012	716P12398L	1.25 (31.8)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.015	716P15398L	1.25 (31.8)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.018	716P18398L	1.25 (31.8)	.37 (9.4)	.61 (15.5)	.032 (0.8)
.022	716P22398L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.032 (0.8)
.027	716P27398L	1.25 (31.8)	.42 (10.7)	.70 (17.8)	.032 (0.8)
.033	716P33398L	1.25 (31.8)	.46 (11.7)	.74 (18.8)	.032 (0.8)
.039	716P39398L	1.25 (31.8)	.46 (11.7)	.84 (21.3)	.032 (0.8)
.047	716P47398L	1.25 (31.8)	.50 (12.7)	.88 (22.4)	.032 (0.8)
.056	716P56398L	1.25 (31.8)	.54 (13.7)	.93 (23.6)	.032 (0.8)
.068	716P68398L	1.25 (31.8)	.59 (15.0)	.98 (24.9)	.032 (0.8)
.082	716P82398M	1.65 (41.9)	.52 (13.2)	.90 (22.9)	.040 (1.0)
.1	716P10498M	1.65 (41.9)	.57 (14.5)	.96 (24.4)	.040 (1.0)
.12	716P12498M	1.65 (41.9)	.62 (15.7)	1.01 (25.7)	.040 (1.0)
.14	716P14498M	1.65 (41.9)	.67 (17.0)	1.06 (27.0)	.040 (1.0)

Value µF	Part Number[1]	L max	T max	H max	d
1000 VDC / 450 VAC*					
.0056	716P562910L	1.25 (31.8)	.25 (6.4)	.45 (11.4)	.032 (0.8)
.0068	716P682910L	1.25 (31.8)	.27 (6.9)	.46 (11.7)	.032 (0.8)
.0082	716P822910L	1.25 (31.8)	.29 (7.4)	.48 (12.2)	.032 (0.8)
.01	716P103910L	1.25 (31.8)	.29 (7.4)	.53 (13.5)	.032 (0.8)
.012	716P123910L	1.25 (31.8)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.015	716P153910L	1.25 (31.8)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.018	716P183910L	1.25 (31.8)	.37 (9.4)	.61 (15.5)	.032 (0.8)
.022	716P223910L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.032 (0.8)
.027	716P273910L	1.25 (31.8)	.42 (10.7)	.70 (17.8)	.032 (0.8)
.033	716P333910L	1.25 (31.8)	.46 (11.7)	.74 (18.8)	.032 (0.8)
.039	716P393910L	1.25 (31.8)	.46 (11.7)	.84 (21.3)	.032 (0.8)
.047	716P473910L	1.25 (31.8)	.50 (12.7)	.88 (22.4)	.032 (0.8)
.056	716P563910L	1.25 (31.8)	.54 (13.7)	.93 (23.6)	.032 (0.8)
.068	716P683910L	1.25 (31.8)	.59 (15.0)	.98 (24.9)	.032 (0.8)
.082	716P823910M	1.65 (41.9)	.52 (13.2)	.90 (22.9)	.040 (1.0)
.1	716P104910M	1.65 (41.9)	.57 (14.5)	.96 (24.4)	.040 (1.0)
.12	716P124910M	1.65 (41.9)	.62 (15.7)	1.01 (25.7)	.040 (1.0)
.14	716P144910M	1.65 (41.9)	.67 (17.0)	1.06 (27.0)	.040 (1.0)
1200 VDC / 475 VAC*					
.001	716P102912L	1.25 (31.8)	.23 (5.8)	.45 (11.4)	.032 (0.8)
.0012	716P122912L	1.25 (31.8)	.24 (6.1)	.46 (11.7)	.032 (0.8)
.0015	716P152912L	1.25 (31.8)	.25 (6.4)	.47 (11.9)	.032 (0.8)
.0018	716P182912L	1.25 (31.8)	.27 (6.9)	.49 (12.4)	.032 (0.8)
.0022	716P222912L	1.25 (31.8)	.29 (7.4)	.51 (13.0)	.032 (0.8)
.0027	716P272912L	1.25 (31.8)	.28 (7.1)	.48 (12.2)	.032 (0.8)
.0033	716P332912L	1.25 (31.8)	.30 (7.6)	.49 (12.4)	.032 (0.8)
.0039	716P392912L	1.25 (31.8)	.30 (7.6)	.54 (13.7)	.032 (0.8)
.0047	716P472912L	1.25 (31.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)
.0056	716P562912L	1.25 (31.8)	.34 (8.6)	.58 (14.7)	.032 (0.8)
.0068	716P682912L	1.25 (31.8)	.37 (9.4)	.61 (15.5)	.032 (0.8)
.0082	716P822912L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.032 (0.8)
.01	716P103912L	1.25 (31.8)	.42 (10.7)	.70 (17.8)	.032 (0.8)
.012	716P123912L	1.25 (31.8)	.45 (11.4)	.73 (18.5)	.032 (0.8)
.015	716P153912L	1.25 (31.8)	.46 (11.7)	.84 (21.3)	.032 (0.8)
.018	716P183912L	1.25 (31.8)	.50 (12.7)	.88 (22.4)	.032 (0.8)
.022	716P223912L	1.25 (31.8)	.54 (13.7)	.93 (23.6)	.032 (0.8)
.027	716P273912L	1.25 (31.8)	.60 (15.2)	.99 (25.1)	.032 (0.8)
.033	716P333912M	1.65 (41.9)	.53 (13.5)	.91 (23.1)	.040 (1.0)
.039	716P393912M	1.65 (41.9)	.57 (14.5)	.96 (24.4)	.040 (1.0)
.047	716P473912M	1.65 (41.9)	.62 (15.7)	1.01 (25.7)	.040 (1.0)
.056	716P563912M	1.65 (41.9)	.68 (17.3)	1.07 (27.2)	.040 (1.0)

* Please refer to performance curves for RMS Voltage vs. Frequency characteristics.

[1] To complete part number for proper tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

[2] Type 716P capacitors are available through the CDE Distribution Network on special order.

Dimensions in inches, metric (mm) in parenthesis.

Type 716P, Orange Drop¿Polypropylene Film/Foil Capacitors

High Performance

Type 716P Standard Sizes/Ratings[2]

Value µF	Part Number[1]	L max	T max	H max	d	Value µF	Part Number[1]	L max	T max	H max	d
1600 VDC / 500 VAC*						2000 VDC / 500 VAC*					
.001	716P102916L	1.25 (31.8)	.28 (7.1)	.47 (11.2)	.032 (0.8)	.001	716P102920L	1.25 (31.8)	.28 (71.)	.47 (11.9)	.032 (0.8)
.0012	716P122916L	1.25 (31.8)	.29 (7.4)	.48 (12.2)	.032 (0.8)	.0012	716P122920L	1.25 (31.8)	.29 (7.4)	.48 (12.2)	.032 (0.8)
.0015	716P152916L	1.25 (31.8)	.30 (7.6)	.50 (12.7)	.032 (0.8)	.0015	716P152920L	1.25 (31.8)	.30 (7.6)	.50 (12.7)	.032 (0.8)
.0018	716P182916L	1.25 (31.8)	.31 (7.9)	.55 (14.0)	.032 (0.8)	.0018	716P182920L	1.25 (31.8)	.31 (7.9)	.55 (14.0)	.032 (0.8)
.0022	716P222916L	1.25 (31.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)	.0022	716P222920L	1.25 (31.8)	.32 (8.1)	.56 (14.2)	.032 (0.8)
						.0027	716P272920L	1.25 (31.8)	.35 (8.9)	.59 (15.0)	.032 (0.8)
.0027	716P272916L	1.25 (31.8)	.35 (8.9)	.59 (15.0)	.032 (0.8)	.0033	716P332920L	1.25 (31.8)	.37 (9.4)	.61 (15.5)	.032 (0.8)
.0033	716P332916L	1.25 (31.8)	.37 (9.4)	.61 (15.5)	.032 (0.8)						
.0039	716P392916L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.032 (0.8)	.0039	716P392920L	1.25 (31.8)	.38 (9.7)	.67 (17.0)	.032 (0.8)
.0047	716P472916L	1.25 (31.8)	.41 (10.4)	.69 (17.5)	.032 (0.8)	.0047	716P472920L	1.25 (31.8)	.41 (10.4)	.69 (17.5)	.032 (0.8)
						.0056	716P562920L	1.25 (31.8)	.43 (10.9)	.72 (18.3)	.032 (0.8)
.0056	716P562916L	1.25 (31.8)	.43 (10.9)	.72 (18.3)	.032 (0.8)	.0068	716P682920L	1.25 (31.8)	.47 (11.9)	.75 (19.1)	.032 (0.8)
.0068	716P682916L	1.25 (31.8)	.47 (11.9)	.75 (19.1)	.032 (0.8)	.0082	716P822920L	1.25 (31.8)	.47 (11.9)	.85 (21.6)	.032 (0.8)
.0082	716P822916L	1.25 (31.8)	.47 (11.9)	.85 (21.6)	.032 (0.8)	.01	716P103920L	1.25 (31.8)	.51 (13.0)	.90 (22.9)	.032 (0.8)
.01	716P103916L	1.25 (31.8)	.51 (13.0)	.90 (22.9)	.032 (0.8)	.012	716P123920L	1.25 (31.8)	.55 (14.0)	.94 (23.9)	.032 (0.8)
.012	716P123916L	1.25 (31.8)	.55 (14.0)	.94 (23.9)	.032 (0.8)						
						.015	716P153920M	1.65 (41.9)	.49 (12.4)	.87 (22.1)	.040 (1.0)
.015	716P153916M	1.65 (41.9)	.49 (12.4)	.87 (22.1)	.040 (1.0)	.018	716P183920M	1.65 (41.9)	.53 (13.5)	.91 (23.1)	.040 (1.0)
.018	716P183916M	1.65 (41.9)	.53 (13.5)	.91 (23.1)	.040 (1.0)	.022	716P223920M	1.65 (41.9)	.58 (14.7)	.96 (24.4)	.040 (1.0)
.022	716P223916M	1.65 (41.9)	.58 (14.7)	.96 (24.4)	.040 (1.0)	.027	716P273920M	1.65 (41.9)	.63 (16.0)	1.02 (25.9)	.040 (1.0)
.027	716P273916M	1.65 (41.9)	.63 (16.0)	1.02 (25.9)	.040 (1.0)	.033	716P333920M	1.65 (41.9)	.69 (17.5)	1.08 (27.4)	.040 (1.0)
.033	716P333916M	1.65 (41.9)	.69 (17.5)	1.08 (27.4)	.040 (1.0)						

* Please refer to performance curves for RMS Voltage vs. Frequency characteristics.

[1] To complete part number for proper tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

[2] Type 716P capacitors are available through the CDE Distribution Network on special order.

Please note:

It is not possible to list every capacitance value available for each rating, if you require a specific cap value not listed just give us a call. We will supply the details you need.

Dimensions in inches, metric (mm) in parenthesis.

High Performance

Corona, Dissipation Factor Specifications

Corona Start Voltage

D-C Rating	Typical Corona Start Voltage, RMS
100	250
200	300
400, 600	325
800, 1000	600
1200	625
1600, 2000	650

Maximum Dissipation Factor (D.F.) in %

Cap Range (µF)	100V-600V		800V/1000V		1200V		1600V/2000V	
	20KHz	100KHz	20KHz	100KHz	20KHz	100KHz	20KHz	100KHz
.001 - .012	.028	.034	.037	.075	.034	.064	.032	.053
.015 - .027	.029	.038	.037	.078	.035	.067	.037	.078
.033 - .068	.030	.046	.038	.087	.042	.104	.037	.079
.082 - .1	.031	.053	.048	.135	--	--	--	--
.12 - .33	.034	.076	.049	.141	--	--	--	--
.39 - .56	.038	.107	--	--	--	--	--	--
.68 - 1.0	.047	.167	--	--	--	--	--	--

For additional information on Corona and Dissipation Factor please refer to the Technical Reference section of this catalog. For more specific data or assistance with a specific application just give us a call.

dV/dt Specifications

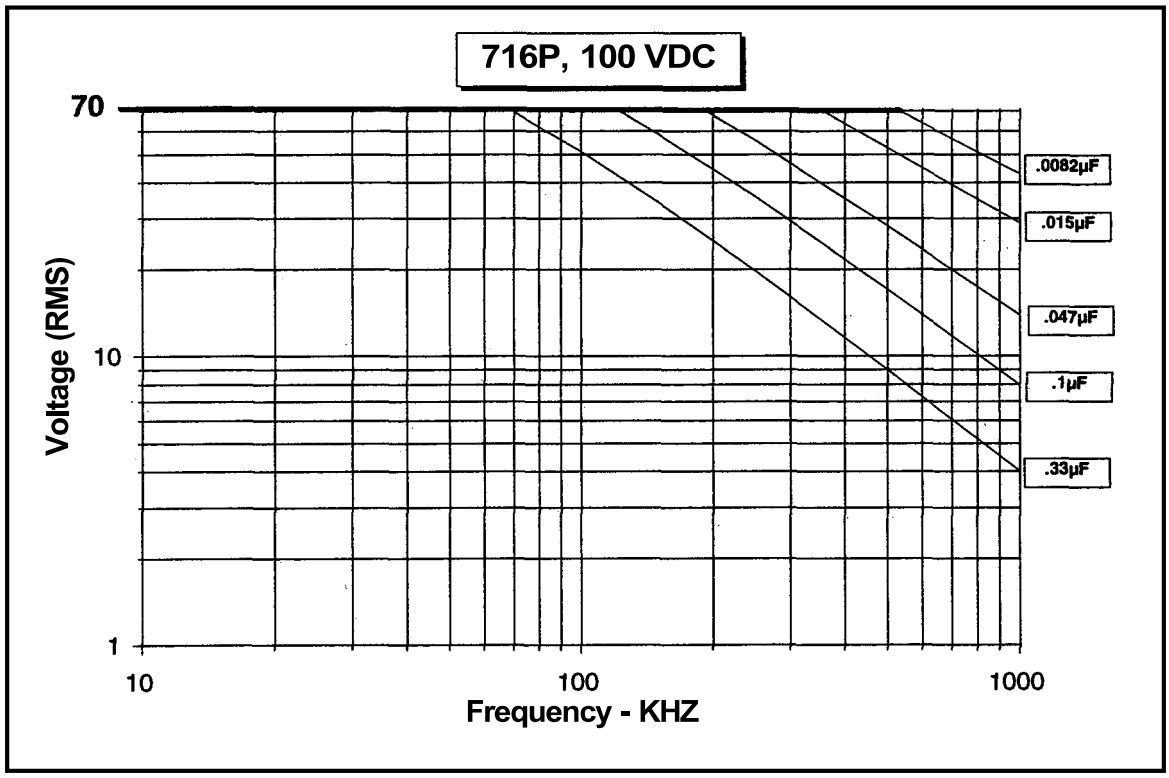
Maximum Pulse Rise Time (dv/dt) in Volts/µsec

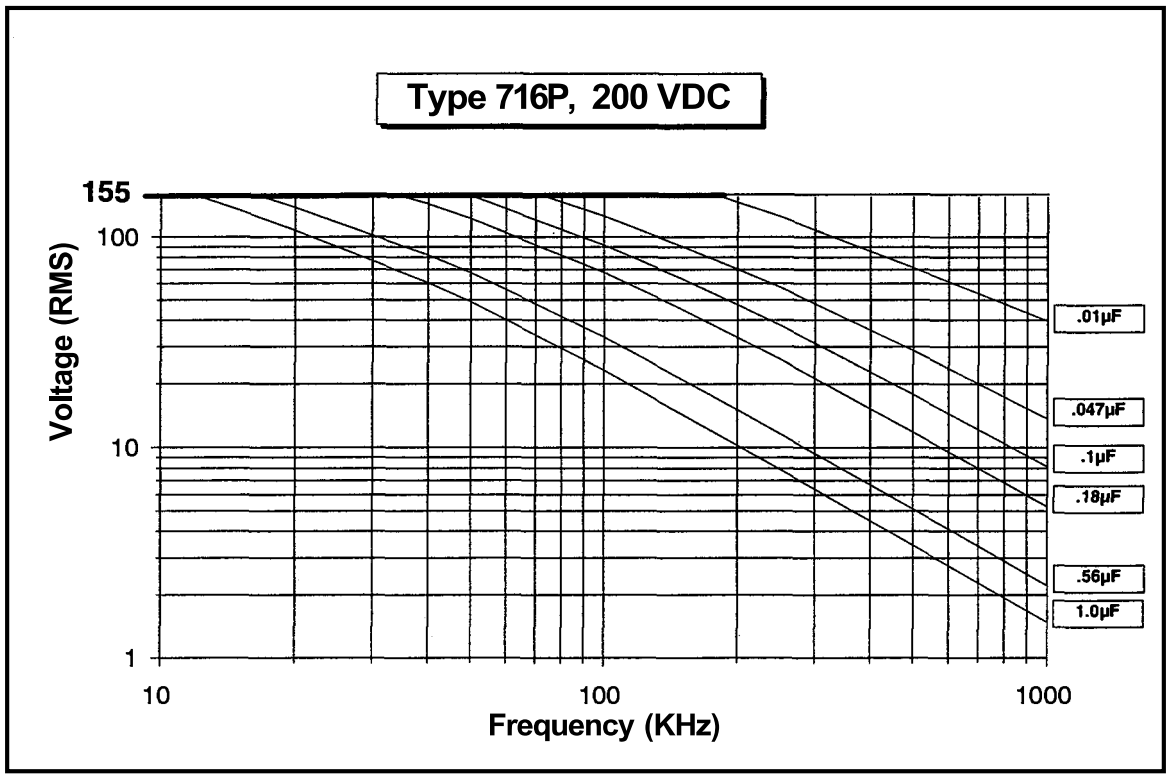
Cap Value (µF)	100V	200V	400V	600V	800V/ 1000V	1200V	1600V/ 2000V
.001	-	-	20700	20700	-	43200	43200
.0012	-	-	18900	18900	-	39500	39500
.0015	-	-	16900	16900	-	35300	35300
.0018	-	-	15400	15400	-	32200	32200
.0022	-	-	14000	14000	-	29100	29100
.0027	-	-	12600	12600	-	25000	26300
.0033	-	-	11400	11400	-	22600	23800
.0039	-	-	10500	10500	-	20800	21900
.0047	-	-	9500	9500	-	18900	19900
.0056	-	-	8700	8700	16400	17400	18300
.0068	-	-	7900	7900	14900	15700	16600
.0082	4100	-	7200	7200	13600	14300	15100
.01	3700	4600	6500	6500	12300	13000	13700
.012	3400	4200	6000	5400	11200	11900	12500
.015	3000	3800	5300	4800	10000	10600	10300
.018	2800	3400	4400	4400	9200	9700	9400
.022	2500	3100	4000	4000	8300	8800	8500
.027	2200	2800	3600	3600	7500	7900	7700
.033	2000	2500	3200	3200	6800	6600	7000
.039	1700	2300	3000	3000	6200	6100	-
.047	1500	2100	2700	2500	5700	5600	-
.056	1400	1800	2500	2300	5200	5100	-
.068	1300	1600	2300	2100	4700	-	-
.082	1100	1500	1900	1900	4000	-	-
.1	1000	1300	1700	1700	3600	-	-
.12	900	1200	1600	1600	3300	-	-
.15	800	1100	1400	1300	-	-	-
.18	700	910	1300	1200	-	-	-
.22	700	820	1200	1100	-	-	-
.27	600	740	1100	-	-	-	-
.33	500	670	880	-	-	-	-
.39	-	620	810	-	-	-	-
.47	-	560	740	-	-	-	-
.56	-	520	-	-	-	-	-
.68	-	430	-	-	-	-	-
.82	-	400	-	-	-	-	-
1.0	-	360	-	-	-	-	-

Note: dV/dt ratings based on measurements made at junction of the wire leads and capacitor body.

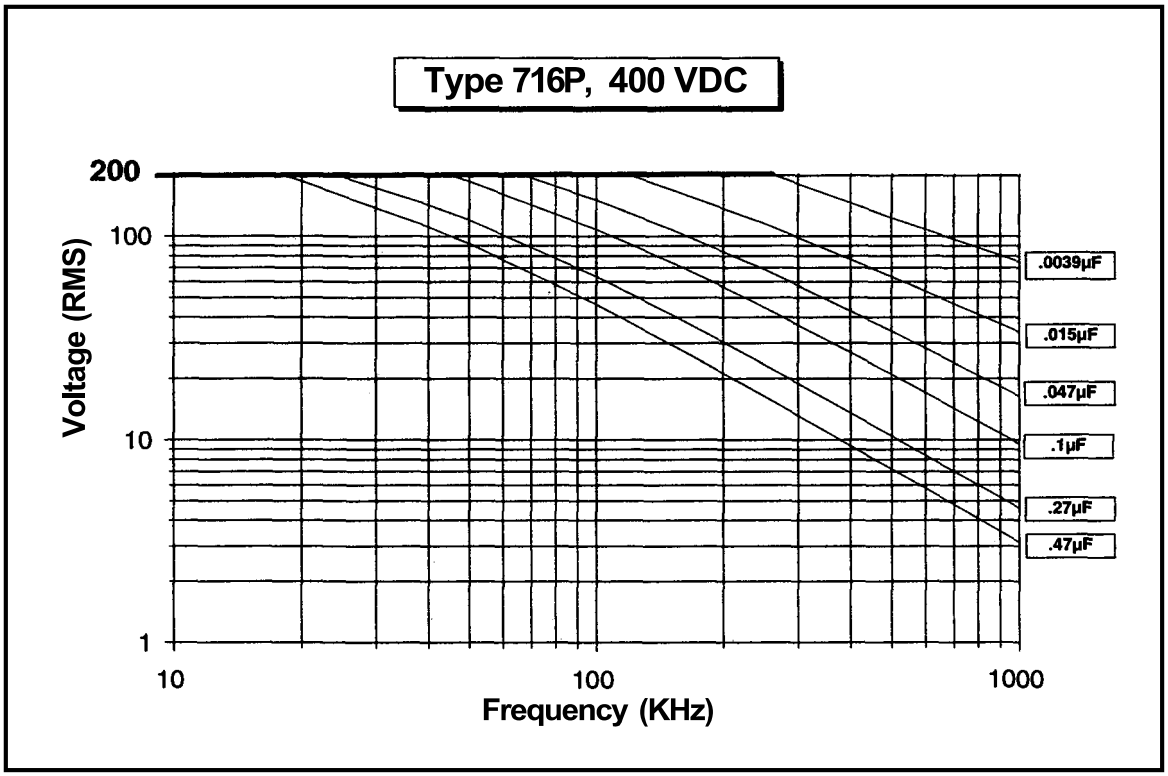
For additional information on Pulse Rise Time (dV/dt) please refer to the Technical Reference section of this catalog. For more specific data or assistance with a specific application just give us a call.

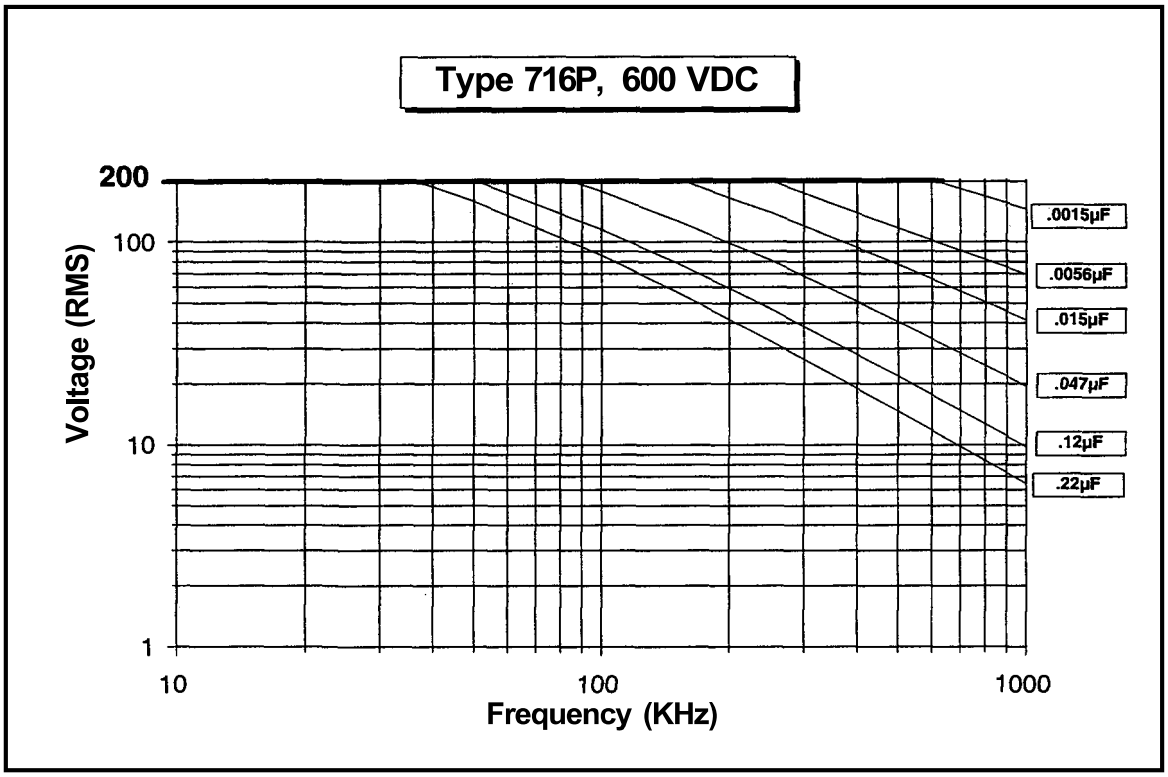
RMS Voltage vs. Frequency @ +85°C





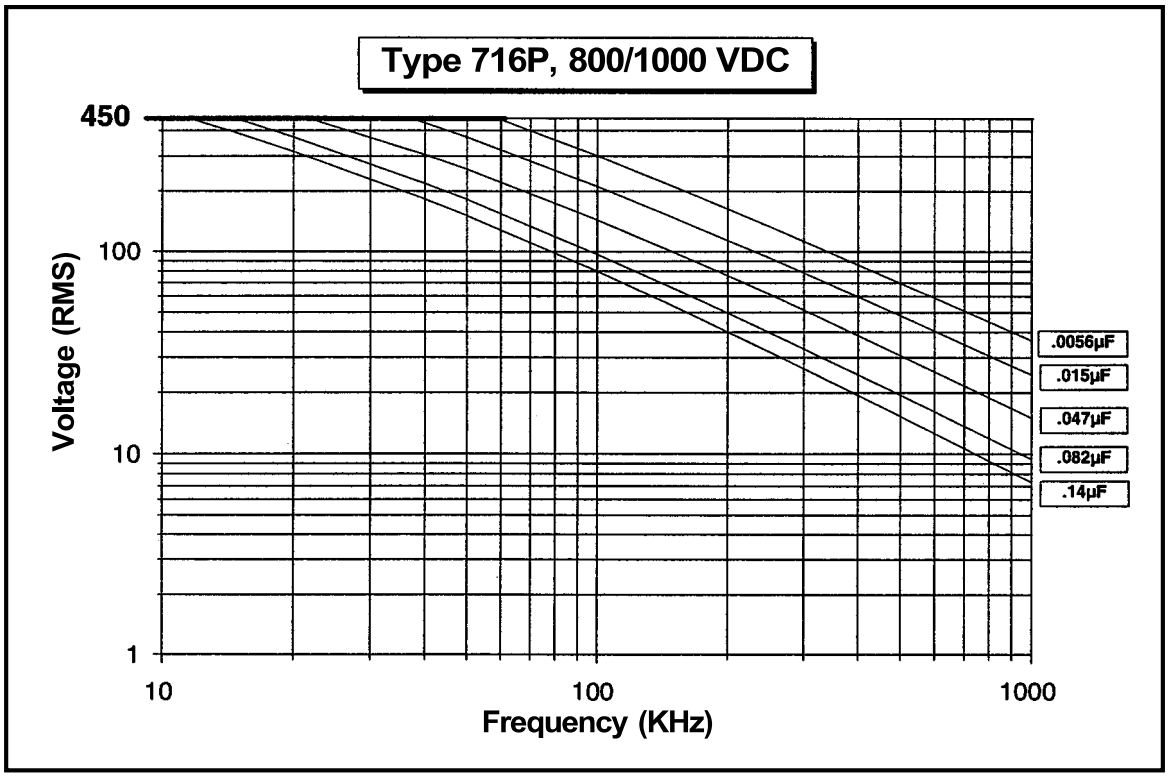
RMS Voltage vs. Frequency @ +85°C

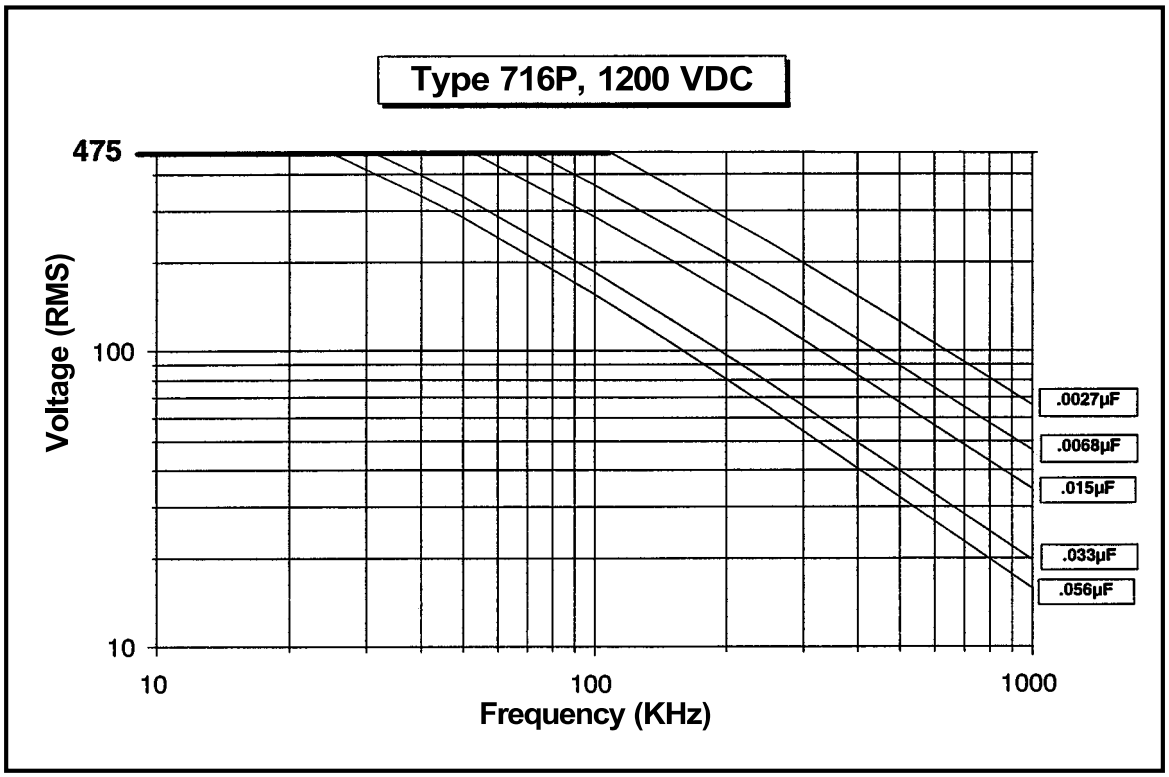




High Performance

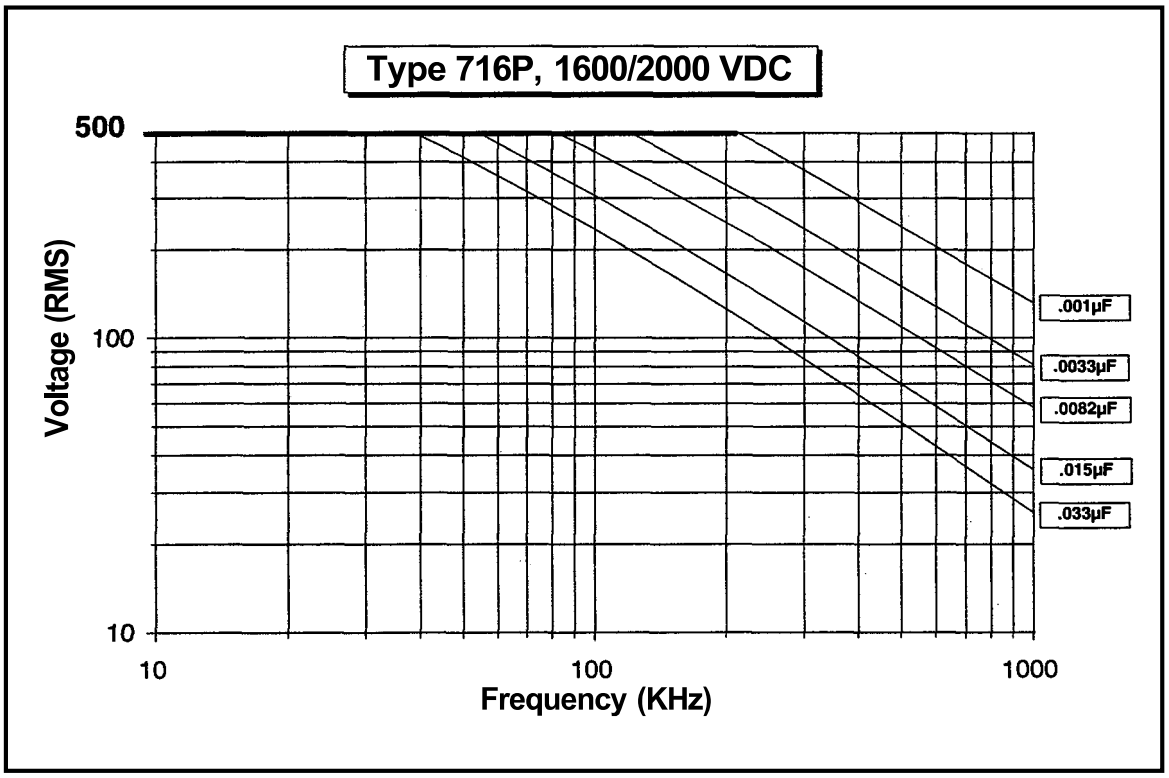
RMS Voltage vs. Frequency @ +85°C



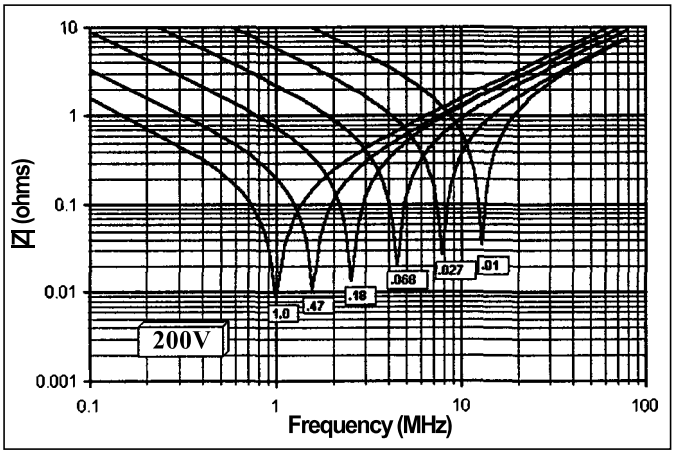


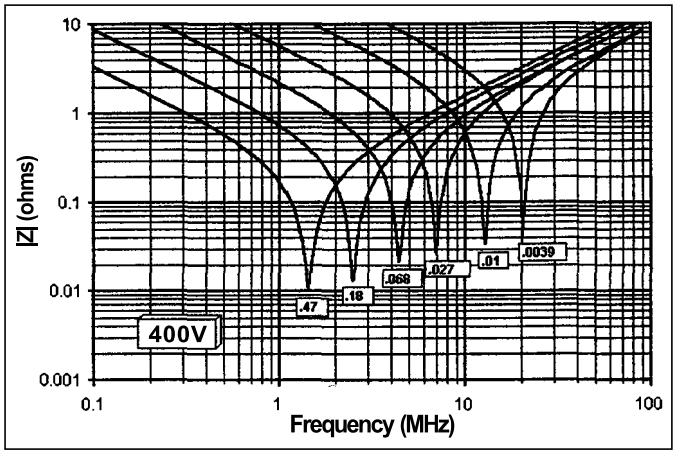
High Performance

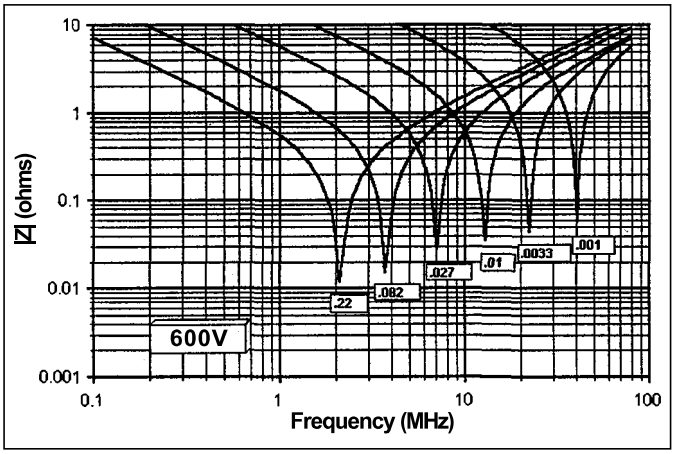
RMS Voltage vs. Frequency @ +85°C

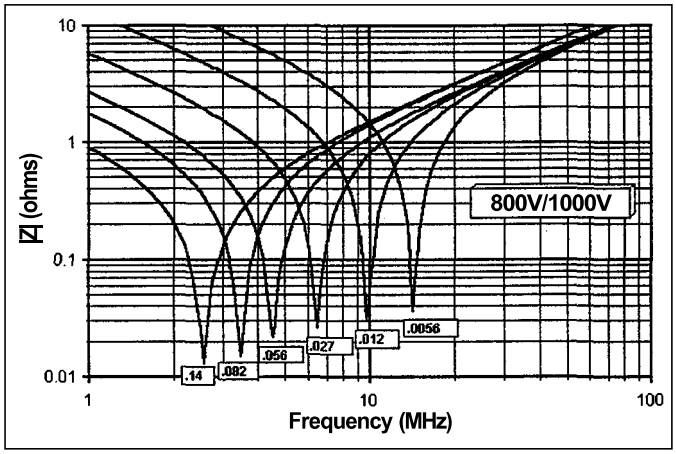


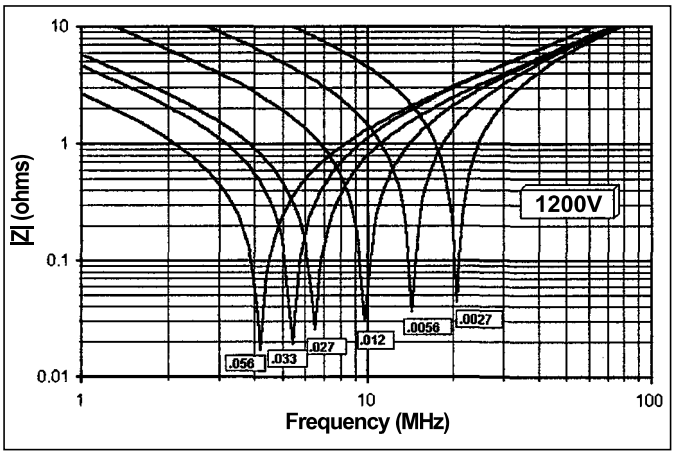
Typical Impedance vs. Frequency

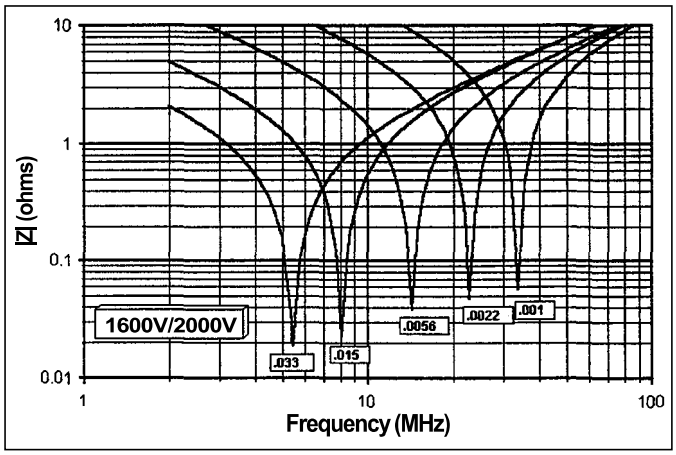












Please note: Capacitance values above are in µF. The resonant frequency and impedance shown above apply to units with a 0.250" lead length and are typical values only. Please contact us for data on the 100VDC rated units.

Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.

Type 718P/719P Orange Drop®
Radial Lead
High AC Voltage
Polypropylene
Film/Foil Capacitors



Specifications

Capacitance Range:
560 pF to 0.012 µF

Capacitance Tolerance:
718P: ±1% to ±10%
719P: ±3% to ±10%

Voltage Rating:
1500 VAC/5000 VDC

Operating Temperature
Units may be operated at full rated voltage from -55°C to +105°C. Please contact SBE application engineering to discuss thermal management in your application.

Dissipation Factor:
See ratings table.

Pulse Rise Time, dV/dt:
See ratings table.

Insulation Resistance:
At +25°C: 400,000 MΩ minimum
At +85°C: 20,000 MΩ minimum
At +105°C: 2,000 MΩ minimum

Corona Inception Voltage (typical):
1625 – 1650 Volts RMS

Encapsulation:
Conformal coating of flame retardant Orange epoxy (meets UL94V-0 specifications).

Lead Wire (d):
Tinned Copper. #20 AWG, 0.032 (0.8) diameter or #18 AWG, 0.040 (1.0) diameter. See ratings table for specific wire size.

Dielectric/Construction:
Polypropylene film with extended foil; utilizing a floating common of metallized polypropylene, which provides self-healing characteristics. This series-section, hybrid design is non-inductively wound.

In addition to the information provided here CDE also offers complete design and manufacturing of specific capacitance values, custom form factors, special lead terminations, etc.

Dimensions are in inches, millimeters are in parenthesis.

Ordering/Part Number Information

719P 222 5 1500 M B 3 – XXX

- **XXX** → A suffix may be added to denote special construction, marking, packaging, test requirements, etc.
- **3** → **Lead Length**: 1 = 0.187 (4.7) ±0.030 (0.8); 2 = 0.250 (6.4) ±0.030 (0.8); 3 = 1.250 (32) Minimum; Other specific lead lengths available upon request
- **B** → **Lead Style**: A = Straight Lead; B = Hairpin Crimp; D = Hockey Stick Crimp
- **M** → **Case Code**: Set code for factory reference.
- **1500** → **AC Voltage Rating**
- **5** → **Capacitance Tolerance**: 9 = ±10%; 5 = ±5%; 3 = ±3%; 2 = ±2%; 1 = ±1%
- **222** → **Capacitance**: Expressed in Picofarads. The first two digits are the significant figures, the third is the number of zeros following (i.e. 222 = 2200 pF = 0.0022 µF)
- **719P** → **CDE Type Number**: Identifies basic capacitor design. 71 = 8P = Round profile; 719P = Pressed profile

Standard Marking Format

Sample Marking on unit	Description	
CDE719P1500VAC 222J 0515	CDE	- CDE Identification
	719P	- Type Number
	1500VAC	- AC Voltage Rating
	222J	- Capacitance and Tolerance Code
	0515	- Weekly Date Code (i.e. 15th week of 2005)

Tolerance codes per EIA standards

F	±1%
G	±2%
H	±3%
J	±5%
K	±10%

Dimensions are in inches, millimeters are in parenthesis.

Application Notes & Considerations

Corona:

Corona is a small but locally intense electrical discharge that injects charge into the insulating film adjacent to edges of foil/metallization or a location where air is trapped between foil/metallization and the film. The discharge is caused by a voltage gradient large enough to ionize molecules in either the film or small air pockets. Each discharge does some small but cumulative damage to the film. Corona is a very important consideration for AC and/or pulse applications where the cumlative damage can rapidly accrue and cause dielectric failure. For a plain film & foil part this will result in a short circuit. However, for a capacitor employing metallized film the "clearing" around the dielectric failure site results in progressive capacitance loss. The 718P/719P series utilizes a hybrid film/foil design approach, incorporating the use of extended foil for direct connection of the lead wires and a floating metallized common.

Corona Inception Voltage (CIV) is the peak-to-peak voltage at which corona discharge begins; it is also commonly referred to as Corona Start Voltage (CSV). It is traditionally expressed as the RMS value of a sine wave with the above peak-to-peak value. It is not practical to try and list all the facts and issues associated with corona, therefore we highly encourage you to contact us to discuss your application and the importance of carefully considering the effects of corona.

dV/dt (Pulse Rise Time):

Pulse Rise Time, commonly referred to as dV/dt, is the maximum guaranteed repetitive rate of voltage change [slew rate] a capacitor can withstand without damage during the lifetime of an application, expressed in Volts/µsec or KV/µsec. dV/dt also expresses current pulse capability without requiring a nearly impossible pulse current measurement. Pulse current is only an issue for a pure metallized capacitor where pulse currents above the rated value can destroy the connection to the metallization. With leads welded directly to extended foil, film /foil capacitor dV/dt is only limited by corona inception [AC voltage rating] and application circuit inductance. CDE's dV/dt ratings are provided to assure capacitors are NEVER operated in corona to assure highest possible reliability in pulse applications.

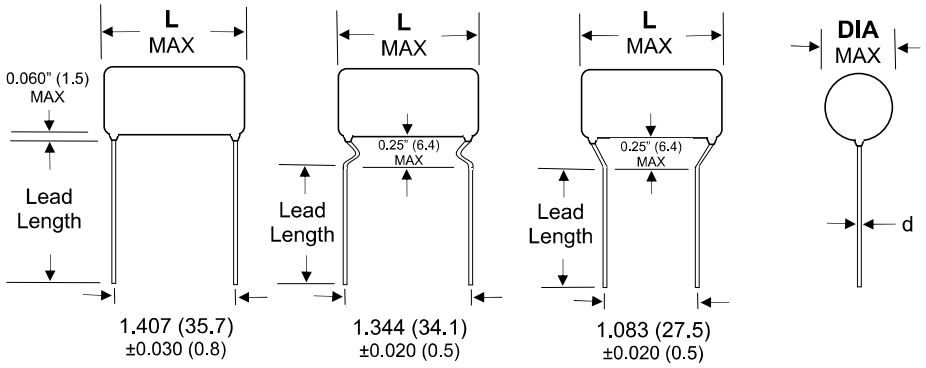
As mentioned above we strongly encourage you to contact us with your questions and/or specific requirements.

CDE's Design Philosophy:

The CDE approach is to design and manufacture capacitors to outlast the life of the product they are installed in. Our units are designed and rated to operate continuously at the maximum limits stated in our specifications. There are times when an application will push these limits. Our expertise lies in understanding the limits of film capacitors and we welcome the opportunity to assist you in understanding these limits also!

Type 718P/719P, Orange Drop®, High Voltage Polypropylene Film/Foil

Lead Styles/Lead Spacings



Type 718P, 1500 VAC/5000 VDC Sizes/Ratings

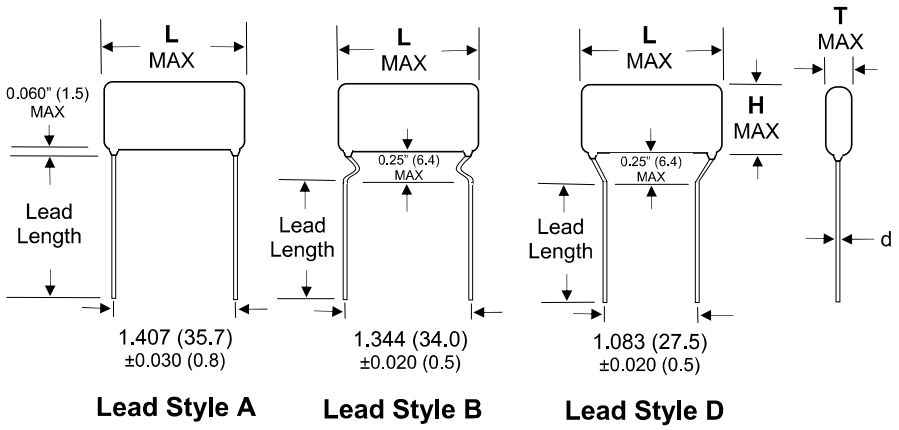
Cap Value (µF)	Part Number*	L MAX	DIA MAX	Wire (d)	Max dV/dt (Volts/µsec)	Peak I Amps	Max % D.F. 10KHz	Max % D.F. 100KHz	Max ESR (mΩ) 10KHz	Max ESR (mΩ) 100KHz
.00056	718P56151500M	1.60 (40.6)	0.30 (7.6)	0.032 (0.8)	357000	200	0.021	0.029	6106	812
.00068	718P68151500M	1.60 (40.6)	0.31 (7.9)	0.032 (0.8)	324000	220	0.021	0.029	5028	669
.00082	718P82151500M	1.60 (40.6)	0.33 (8.4)	0.032 (0.8)	295000	242	0.021	0.029	4170	555
.001	718P10251500M	1.60 (40.6)	0.35 (8.9)	0.032 (0.8)	267000	266	0.021	0.029	3419	455
.0012	718P12251500M	1.60 (40.6)	0.36 (9.1)	0.032 (0.8)	244000	292	0.021	0.029	2850	380
.0015	718P15251500M	1.60 (40.6)	0.39 (9.9)	0.032 (0.8)	218000	326	0.021	0.029	2280	304
.0016	718P16251500M	1.60 (40.6)	0.39 (9.9)	0.032 (0.8)	211000	338	0.021	0.029	2137	285
.0018	718P18251500M	1.60 (40.6)	0.41 (10.4)	0.032 (0.8)	199000	358	0.021	0.029	1900	254
.0020	718P20251500M	1.60 (40.6)	0.42 (10.7)	0.032 (0.8)	189000	378	0.021	0.029	1710	228
.0022	718P22251500M	1.60 (40.6)	0.44 (11.2)	0.032 (0.8)	180000	396	0.021	0.029	1555	208
.0023	718P23251500M	1.60 (40.6)	0.44 (11.2)	0.032 (0.8)	176000	404	0.021	0.029	1487	199
.0024	718P24251500M	1.60 (40.6)	0.45 (11.4)	0.032 (0.8)	172000	414	0.021	0.029	1425	190
.0025	718P25251500M	1.60 (40.6)	0.46 (11.7)	0.032 (0.8)	169000	422	0.021	0.029	1368	183
.0027	718P27251500M	1.60 (40.6)	0.47 (11.9)	0.032 (0.8)	162000	438	0.021	0.029	1267	169
.0028	718P28251500M	1.60 (40.6)	0.48 (12.2)	0.032 (0.8)	159000	446	0.021	0.029	1222	163
.0030	718P30251500M	1.60 (40.6)	0.49 (12.4)	0.032 (0.8)	154000	462	0.021	0.029	1140	153
.0033	718P33251500M	1.60 (40.6)	0.50 (12.7)	0.032 (0.8)	147000	484	0.021	0.029	1037	139
.0036	718P36251500M	1.60 (40.6)	0.52 (13.2)	0.032 (0.8)	141000	506	0.021	0.029	950	127
.0039	718P39251500M	1.60 (40.6)	0.54 (13.7)	0.032 (0.8)	135000	528	0.021	0.029	877	118
.0040	718P40251500M	1.60 (40.6)	0.54 (13.7)	0.032 (0.8)	133000	534	0.021	0.029	855	115
.0043	718P43251500M	1.60 (40.6)	0.56 (14.2)	0.032 (0.8)	129000	554	0.021	0.029	796	107
.0047	718P47251500M	1.60 (40.6)	0.58 (14.7)	0.040 (1.0)	123000	578	0.021	0.029	728	97
.0050	718P50251500M	1.60 (40.6)	0.59 (15.0)	0.040 (1.0)	119000	596	0.021	0.029	684	92
.0051	718P51251500M	1.60 (40.6)	0.60 (15.2)	0.040 (1.0)	118000	602	0.021	0.029	671	90
.0056	718P56251500M	1.60 (40.6)	0.62 (15.7)	0.040 (1.0)	113000	632	0.021	0.029	611	82
.0060	718P60251500M	1.60 (40.6)	0.63 (16.0)	0.040 (1.0)	109000	654	0.021	0.029	570	77
.0062	718P62251500M	1.60 (40.6)	0.64 (16.3)	0.040 (1.0)	107000	664	0.021	0.029	552	74
.0068	718P68251500M	1.60 (40.6)	0.67 (17.0)	0.040 (1.0)	102000	696	0.021	0.029	503	68
.0070	718P70251500M	1.60 (40.6)	0.68 (17.3)	0.040 (1.0)	101000	706	0.021	0.029	489	66
.0075	718P75251500M	1.60 (40.6)	0.70 (17.8)	0.040 (1.0)	97000	730	0.021	0.029	456	61
.0080	718P80251500M	1.60 (40.6)	0.71 (18.0)	0.040 (1.0)	94000	754	0.021	0.029	428	58
.0082	718P82251500M	1.60 (40.6)	0.72 (18.3)	0.040 (1.0)	93000	764	0.021	0.029	417	56
.0090	718P90251500M	1.60 (40.6)	0.75 (19.1)	0.040 (1.0)	89000	800	0.021	0.029	380	51
.0091	718P91251500M	1.60 (40.6)	0.75 (19.1)	0.040 (1.0)	88000	806	0.021	0.029	376	51
.0093	718P93251500M	1.60 (40.6)	0.76 (19.3)	0.040 (1.0)	88000	806	0.021	0.029	368	50
.01	718P10351500M	1.60 (40.6)	0.78 (19.8)	0.040 (1.0)	84000	844	0.022	0.029	342	46
.012	718P12351500M	1.60 (40.6)	0.85 (21.6)	0.040 (1.0)	77000	924	0.022	0.029	285	39

* For complete part number please refer to Ordering/Part Number Information page.

Dimensions are in inches, millimeters are in parenthesis.

Type 718P/719P, Orange Drop®, High Voltage Polypropylene Film/Foil

Lead Styles/Lead Spacings

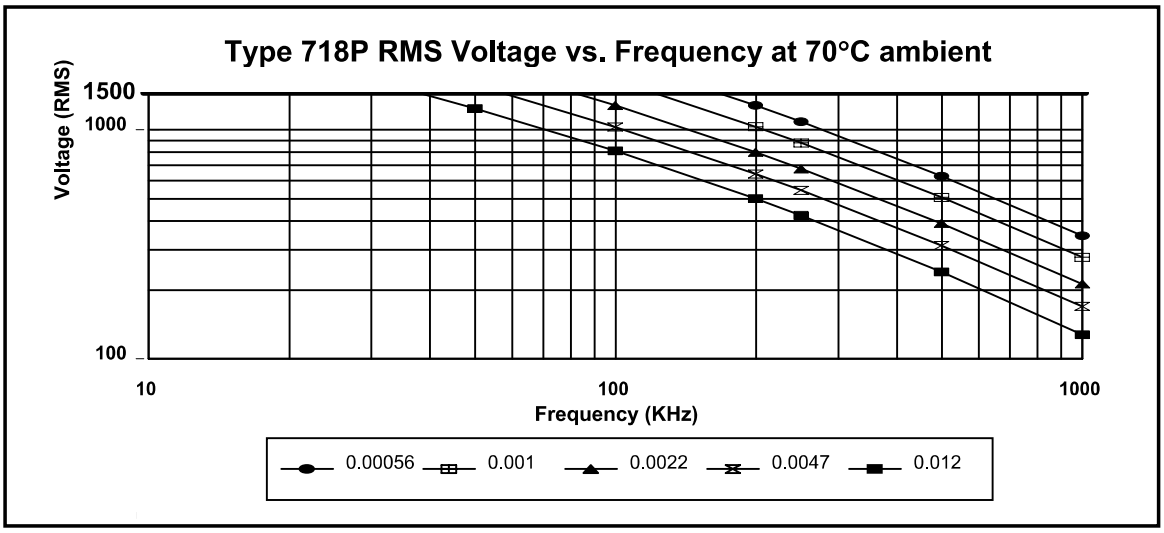


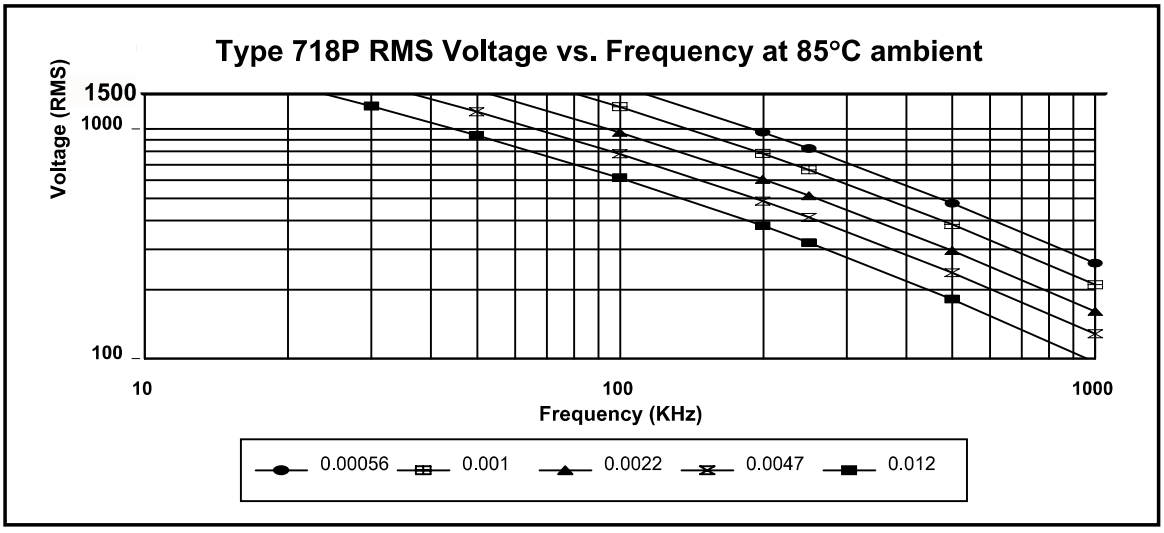
Type 719P, 1500 VAC/5000 VDC Sizes/Ratings

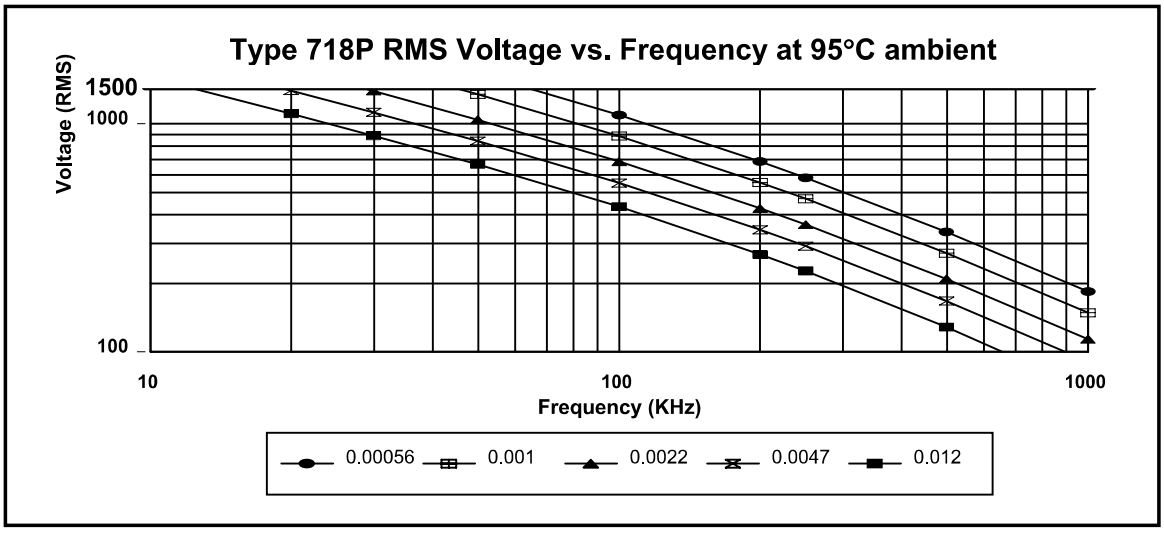
Cap Value (µF)	Part Number*	L MAX	T MAX	H MAX	Wire (d)	Max dV/dt (Volts/µsec)	Peak I Amps	Max % D.F. 10KHz	Max % D.F. 100KHz	Max ESR (mΩ) 10KHz	Max ESR (mΩ) 100KHz
.001	719P10251500M	1.60 (40.6)	0.22 (5.6)	0.42 (10.7)	0.032 (0.8)	267000	266	0.021	0.029	3419	455
.0011	719P11251500M	1.60 (40.6)	0.23 (5.8)	0.43 (10.9)	0.032 (0.8)	254000	280	0.021	0.029	3109	414
.0012	719P12251500M	1.60 (40.6)	0.24 (6.1)	0.43 (10.9)	0.032 (0.8)	244000	292	0.021	0.029	2850	380
.0015	719P15251500M	1.60 (40.6)	0.26 (6.6)	0.46 (11.7)	0.032 (0.8)	218000	326	0.021	0.029	2280	304
.0016	719P16251500M	1.60 (40.6)	0.27 (6.9)	0.47 (11.9)	0.032 (0.8)	211000	338	0.021	0.029	2137	285
.0018	719P18251500M	1.60 (40.6)	0.29 (7.4)	0.48 (12.2)	0.032 (0.8)	199000	358	0.021	0.029	1900	254
.0020	719P20251500M	1.60 (40.6)	0.30 (7.6)	0.50 (12.7)	0.032 (0.8)	189000	378	0.021	0.029	1710	228
.0022	719P22251500M	1.60 (40.6)	0.31 (7.9)	0.51 (13.0)	0.032 (0.8)	180000	396	0.021	0.029	1555	208
.0023	719P23251500M	1.60 (40.6)	0.32 (8.1)	0.52 (13.2)	0.032 (0.8)	176000	404	0.021	0.029	1487	199
.0024	719P24251500M	1.60 (40.6)	0.33 (8.4)	0.52 (13.2)	0.032 (0.8)	172000	414	0.021	0.029	1425	190
.0025	719P25251500M	1.60 (40.6)	0.33 (8.4)	0.53 (13.5)	0.032 (0.8)	169000	422	0.021	0.029	1368	183
.0027	719P27251500M	1.60 (40.6)	0.35 (8.9)	0.54 (13.7)	0.032 (0.8)	162000	438	0.021	0.029	1267	169
.0028	719P28251500M	1.60 (40.6)	0.35 (8.9)	0.55 (14.0)	0.032 (0.8)	159000	446	0.021	0.029	1222	163
.0030	719P30251500M	1.60 (40.6)	0.36 (9.1)	0.56 (14.2)	0.032 (0.8)	154000	462	0.021	0.029	1140	154
.0033	719P33251500M	1.60 (40.6)	0.38 (9.7)	0.58 (14.7)	0.032 (0.8)	147000	484	0.021	0.029	1037	139
.0036	719P36251500M	1.60 (40.6)	0.40 (10.2)	0.59 (15.0)	0.032 (0.8)	141000	506	0.021	0.029	950	127
.0039	719P39251500M	1.60 (40.6)	0.41 (10.4)	0.61 (15.5)	0.032 (0.8)	135000	528	0.021	0.029	877	118
.0040	719P40251500M	1.60 (40.6)	0.42 (10.7)	0.61 (15.5)	0.032 (0.8)	133000	534	0.021	0.029	855	115
.0043	719P43251500M	1.60 (40.6)	0.43 (10.9)	0.63 (16.0)	0.032 (0.8)	129000	554	0.021	0.029	796	107
.0047	719P47251500M	1.60 (40.6)	0.43 (10.9)	0.67 (17.0)	0.040 (1.0)	123000	578	0.021	0.029	728	97
.0050	719P50251500M	1.60 (40.6)	0.44 (11.2)	0.69 (17.5)	0.040 (1.0)	119000	596	0.021	0.029	684	92
.0051	719P51251500M	1.60 (40.6)	0.45 (11.4)	0.69 (17.5)	0.040 (1.0)	118000	602	0.021	0.029	671	90
.0056	719P56251500M	1.60 (40.6)	0.47 (11.9)	0.71 (18.0)	0.040 (1.0)	113000	632	0.021	0.029	611	82
.0060	719P60251500M	1.60 (40.6)	0.49 (12.4)	0.73 (18.5)	0.040 (1.0)	109000	654	0.021	0.029	570	77
.0062	719P62251500M	1.60 (40.6)	0.49 (12.4)	0.74 (18.8)	0.040 (1.0)	107000	664	0.021	0.029	552	74
.0068	719P68251500M	1.60 (40.6)	0.52 (13.2)	0.76 (19.3)	0.040 (1.0)	102000	696	0.021	0.029	503	68
.0070	719P70251500M	1.60 (40.6)	0.53 (13.5)	0.77 (19.6)	0.040 (1.0)	101000	706	0.021	0.029	489	66
.0075	719P75251500M	1.60 (40.6)	0.54 (13.7)	0.79 (20.1)	0.040 (1.0)	97000	730	0.021	0.029	456	61
.0080	719P80251500M	1.60 (40.6)	0.56 (14.2)	0.81 (20.6)	0.040 (1.0)	94000	754	0.021	0.029	428	58
.0082	719P82251500M	1.60 (40.6)	0.57 (14.5)	0.82 (20.8)	0.040 (1.0)	93000	764	0.021	0.029	417	56
.0090	719P90251500M	1.60 (40.6)	0.60 (15.2)	0.84 (21.3)	0.040 (1.0)	89000	800	0.021	0.029	380	51
.0091	719P91251500M	1.60 (40.6)	0.60 (15.2)	0.85 (21.6)	0.040 (1.0)	88000	806	0.021	0.029	376	51
.0093	719P93251500M	1.60 (40.6)	0.61 (15.5)	0.85 (21.6)	0.040 (1.0)	88000	806	0.021	0.029	368	50
.01	719P10351500M	1.60 (40.6)	0.63 (16.0)	0.88 (22.4)	0.040 (1.0)	84000	844	0.022	0.029	342	46
.012	719P12351500M	1.60 (40.6)	0.70 (17.8)	0.94 (23.9)	0.040 (1.0)	77000	924	0.022	0.029	285	39

* For complete part number please refer to Ordering/Part Number Information page.

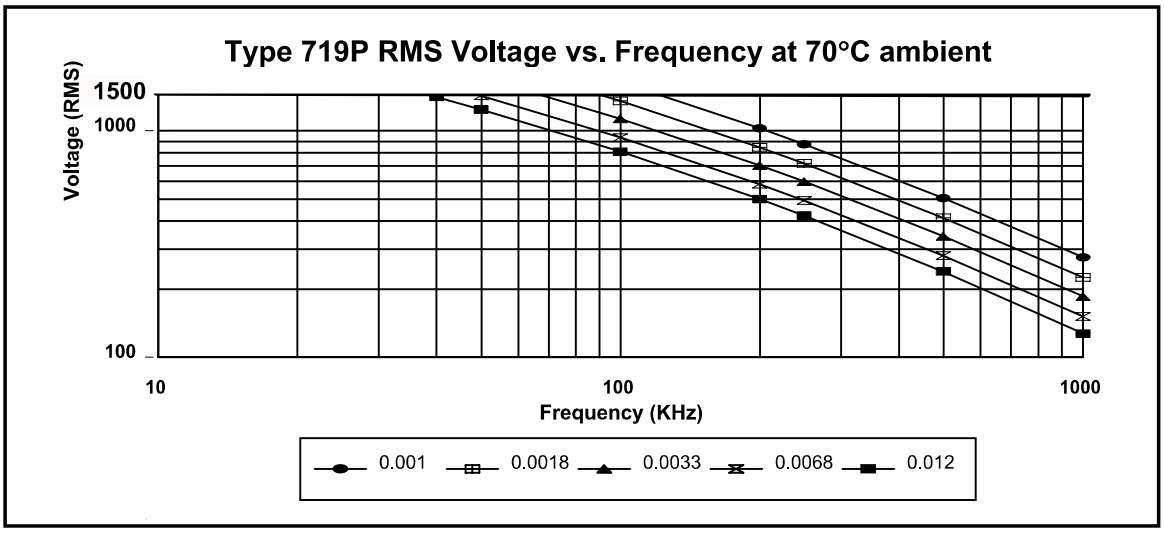
Dimensions are in inches, millimeters are in parenthesis.

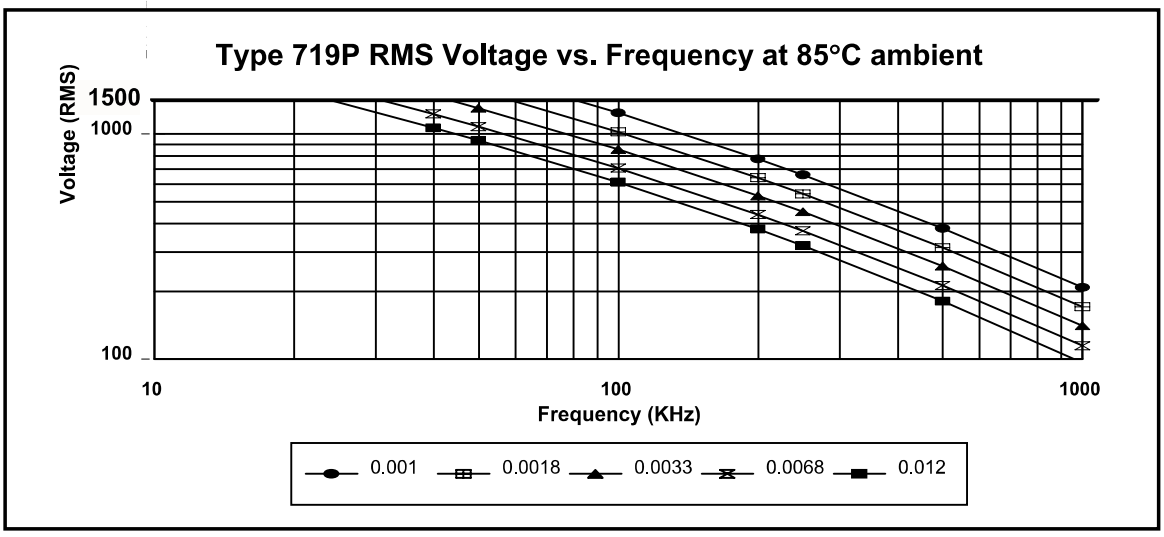


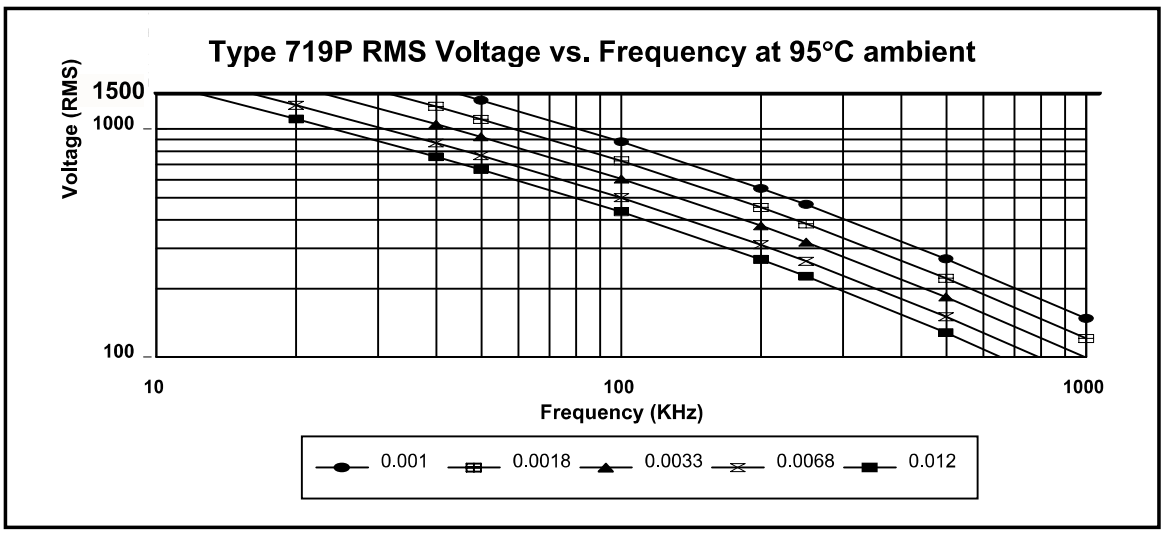




Please refer to Page 8 for important information regarding these performance curves







Please refer to Page 8 for important information regarding these performance curves

RMS Voltage vs. Frequency Performance Curve Data And Thermal Considerations

With today's demanding and complex applications it is more critical than ever to have a comprehensive understanding of thermal issues. Because thermal environments vary considerably, our approach is to provide RMS voltage versus frequency performance curves based on the following parameters to be utilized as a guideline in specifying the appropriate part:

- +70°C, +85°C, and +95°C ambient temperatures
- Pure convection cooling
- All heat dissipation from the lead wire is added to the capacitor
- Increased lead wire dissipation at high frequencies is included [skin effect losses]

The ambient temperature is the air temperature adjacent to the capacitor within the application enclosure at the highest exterior temperature permitted by the end user. Since the maximum allowable temperature for polypropylene is +105°C, our performance curves are based on a power level that raises the temperature +20°C from ambient to the hot spot within the capacitor.

We realize that the environment assumed by our performance curves is highly unlikely to represent that of a real application. We also understand that a "pure convection" environment is also highly improbable. There will almost always be a circuit board and other adjacent components that will impede convection based air circulation, and the capacitor under discussion will not be the only "heat generating" device present! Because of all this "variability" our performance curves are calculated conservatively.

Considerations:

The application power level can be compared to the performance curves at a given frequency by the following calculation:

$$(\text{Actual VAC}/\text{Rated VAC})^2 = \text{Power level relative to performance curve power}$$

Temperature rise is directly related to power; power is related to the voltage squared.

Since the maximum allowable temperature for polypropylene is +105 °C we strongly recommend that you check the case temperature of the capacitor under worst case conditions. The capacitor surface temperature should be less than:

$$\text{Capacitor surface temperature} < 0.67 * (105 - \text{T ambient}) + \text{T ambient}$$

Please contact us for more detailed information and methods to optimize allowable voltage in your electrical/thermal environment. We always welcome an engineer-to-engineer discussion of your particular situation!

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Type 725M Orange Drop® Metallized Polypropylene Film Capacitors



Features

- Radial-lead
- Pressed profile, compact size
- Non-inductively wound
- Very low ESR/ESL
- Self-healing properties

Specifications

Capacitance Range:
.01 to 4.7 µF

Capacitance Tolerance:
±5%, ±10%
(other tolerances available upon request)

Voltage Ratings:
160 to 630 Volts D-C
100 to 250 Volts A-C

Operating Temperature Range:
-55°C to +85°C (at full voltage)

Voltage Derating:
At +105°C, 50% of +85°C rating.

Dissipation Factor:
0.1% Maximum @ 1 KHz, +25°C
(contact us for additional details on specific capacitance and voltage ratings.)

Corona Start Voltage (typical):

160 VDC units:	250 Volts RMS
250 VDC units:	275 Volts RMS
400 VDC units:	300 Volts RMS
630 VDC units:	325 Volts RMS

Insulation Resistance:

At +25°C:	200,000 MΩ for C ≤ 0.5 µF
	100,000 MΩ-µF for C > 0.5 µF
At +85°C:	10,000 MΩ for C ≤ 0.5 µF
	5,000 MΩ-µF for C > 0.5 µF

Pulse Rise Time (dV/dt):
See standard ratings table. dV/dt rating is in Volts/µsec.

Encapsulation:
Conformal coating of orange, flame retardant epoxy. Meets UL94V-0 specifications.

Lead Wire:
Tinned copper-clad steel, .032 (0.8) diameter, #20 AWG.

Dielectric/Construction:
Metallized Polypropylene film, single section design. Non-inductively wound.

Dimensions in inches, metric (mm) in parenthesis.

Ordering/Part Number Information

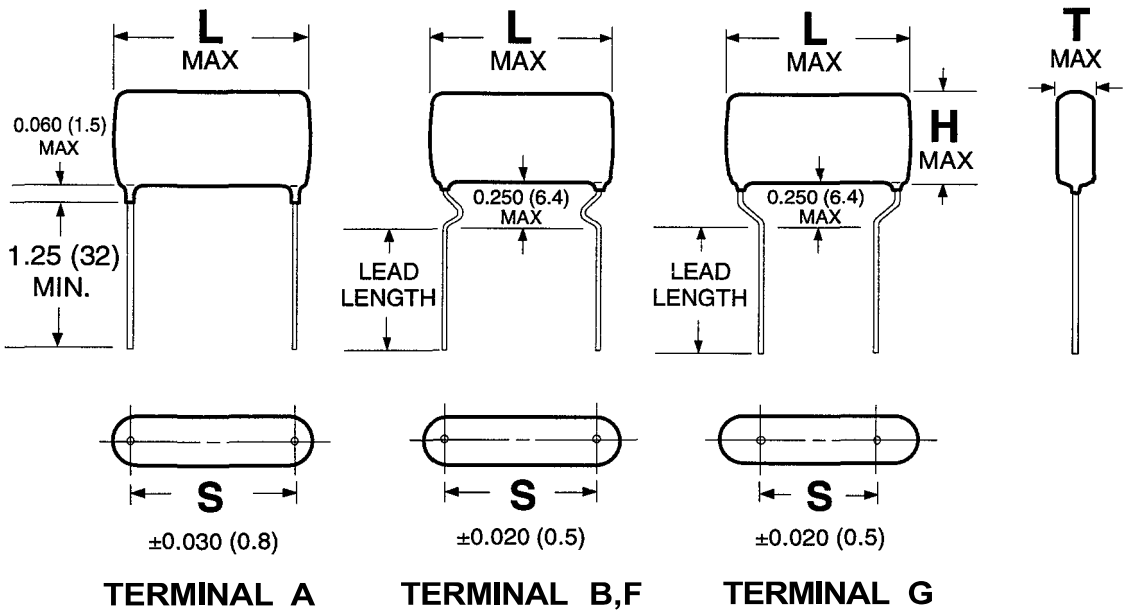
725M 334 9 2 J B 3 (XXXX)

- **(XXXX)** — A suffix may be added by the factory to denote special construction.
- **3** — **Lead Length** 1 = 0.187 (4.7) ± 0.030 (0.8); 2 = 0.250 (6.4) ± 0.030 (0.8); 3 = 1.250 (32) Minimum. Custom lead lengths available upon request.
- **B** — **Terminal** A = Straight Lead; B,F = Hairpin Crimp; G = Hockey Stick Crimp
- **J** — **Case Code** See Standard Sizes/Ratings Table
- **2** — **D-C Voltage Rating** 1 = 160 VDC; 2 = 250 VDC; 4 = 400 VDC; 6 = 630 VDC
- **9** — **Capacitance Tolerance** 9 = ±10%; 5 = ±5%
- **334** — **Capacitance** Expressed in Picofarads. The first two digits are the significant figures, the third is the number of zeros following. (i.e. 334 = 330000 pF = .33 µF)
- **725M** — **CDE Type Number** Identifies the basic capacitor design.

Standard Marking Format

Sample Marking on unit	Description	Tolerance codes per EIA Standards
CDE725M250V 334K 9910	CDE - CDE Electronics identification 725M - Type number 250V- D-C Voltage rating, Volts 334K - Capacitance and tolerance code 9910 - Weekly date code (i.e. 10th week of 1999)	J ±5% K ±10%

Standard Lead Styles



Standard Lead Spacings

CASE CODE	S			
	Term. A	Term. B	Term. F	Term. G
N	0.394 (10.0)	0.394 (10.0)	0.295 (7.5)	0.197 (5.0)
J	0.590 (15.0)	0.590 (15.0)	0.394 (10.0)	0.295 (7.5)
R	0.886 (22.5)	0.886 (22.5)	0.590 (15.0)	0.394 (10.0)
L	1.083 (27.5)	1.083 (27.5)	0.886 (22.5)	0.590 (15.0)

Type 725M Standard Sizes/Ratings

Value (µF)	Part Number[1]	L MAX	T MAX	H MAX	dV/dt Volts/µsec	Value (µF)	Part Number[1]	L MAX	T MAX	H MAX	dV/dt Volts/µsec
160 VDC / 100 VAC*						**250 VDC / 160 VAC***					
0.1	725M10491N	.52 (13.2)	.21 (5.3)	.39 (9.9)	55	0.056	725M56392N	.52 (13.2)	.21 (5.3)	.35 (8.9)	54
0.12	725M12491N	.52 (13.2)	.26 (6.6)	.43 (10.9)	64	0.062	725M62392N	.52 (13.2)	.21 (5.3)	.38 (9.7)	61
0.15	725M15491N	.52 (13.2)	.22 (5.9)	.49 (12.4)	73	0.068	725M68392N	.52 (13.2)	.22 (5.6)	.39 (9.9)	68
0.18	725M18491N	.52 (13.2)	.24 (6.1)	.51 (13.0)	79	0.075	725M75392N	.52 (13.2)	.21 (5.3)	.42 (10.7)	73
						0.082	725M82392N	.52 (13.2)	.22 (5.6)	.43 (10.9)	77
0.22	725M22491J	.73 (18.5)	.20 (5.1)	.46 (11.7)	30	0.09	725M90392N	.52 (13.2)	.23 (5.8)	.44 (11.2)	83
0.25	725M25491J	.73 (18.5)	.21 (5.3)	.48 (12.2)	33	0.1	725M10492N	.52 (13.2)	.24 (6.1)	.45 (11.4)	88
0.27	725M27491J	.73 (18.5)	.21 (5.3)	.48 (12.2)	35	0.12	725M12492N	.52 (13.2)	.26 (6.6)	.47 (11.9)	95
0.3	725M30491J	.73 (18.5)	.22 (5.6)	.49 (12.4)	37	0.15	725M15492N	.52 (13.2)	.29 (7.4)	.50 (12.7)	103
0.33	725M33491J	.73 (18.5)	.23 (5.8)	.50 (12.7)	38						
0.39	725M39491J	.73 (18.5)	.25 (6.4)	.52 (13.2)	41	0.18	725M18492J	.73 (18.5)	.21 (5.3)	.48 (12.2)	42
0.43	725M43491J	.73 (18.5)	.26 (6.6)	.54 (13.7)	42	0.22	725M22492J	.73 (18.5)	.23 (5.8)	.50 (12.7)	46
0.47	725M47491J	.73 (18.5)	.28 (7.1)	.55 (14.0)	43	0.25	725M25492J	.73 (18.5)	.25 (6.4)	.52 (13.2)	48
0.5	725M50491J	.73 (18.5)	.28 (7.1)	.56 (14.2)	44	0.27	725M27492J	.73 (18.5)	.26 (6.6)	.53 (13.5)	50
0.56	725M56491J	.73 (18.5)	.30 (7.6)	.57 (14.5)	45	0.3	725M30492J	.73 (18.5)	.27 (6.9)	.54 (13.7)	51
0.62	725M62491J	.73 (18.5)	.32 (8.1)	.59 (15.0)	46	0.33	725M33492J	.73 (18.5)	.28 (7.1)	.55 (14.0)	53
0.68	725M68491J	.73 (18.5)	.33 (8.4)	.60 (15.2)	47	0.39	725M39492J	.73 (18.5)	.31 (7.9)	.58 (14.7)	55
						0.43	725M43492J	.73 (18.5)	.32 (8.1)	.60 (15.2)	56
0.75	725M75491R	1.03 (26.2)	.27 (6.9)	.54 (13.7)	25						
0.82	725M82491R	1.03 (26.2)	.28 (7.1)	.55 (14.0)	26	0.47	725M47492R	1.03 (26.2)	.26 (6.6)	.53 (13.5)	30
0.9	725M90491R	1.03 (26.2)	.29 (7.4)	.57 (14.5)	27	0.5	725N50492R	1.03 (26.2)	.27 (6.9)	.54 (13.7)	30
1.0	725M10591R	1.03 (26.2)	.31 (7.9)	.58 (14.7)	27	0.56	725M56492R	1.03 (26.2)	.28 (7.1)	.56 (14.2)	31
1.2	725M12591R	1.03 (26.2)	.34 (8.6)	.61 (15.5)	28	0.62	725M62492R	1.03 (26.2)	.30 (7.6)	.57 (14.5)	32
1.5	725M15591R	1.03 (26.2)	.38 (9.7)	.65 (16.5)	29	0.68	725M68492R	1.03 (26.2)	.29 (7.4)	.63 (16.0)	33
1.8	725M18591R	1.03 (26.2)	.42 (10.7)	.69 (17.5)	30	0.75	725M75492R	1.03 (26.2)	.31 (7.9)	.64 (16.3)	33
2.0	725M20591R	1.03 (26.2)	.44 (11.2)	.72 (18.3)	30	0.82	725M82492R	1.03 (26.2)	.32 (8.1)	.66 (16.8)	34
2.2	725M22591R	1.03 (26.2)	.44 (11.2)	.78 (19.8)	30	0.9	725M90492R	1.03 (26.2)	.34 (8.6)	.67 (17.0)	34
						1.0	725M10592R	1.03 (26.2)	.36 (9.1)	.69 (17.5)	35
2.5	725M25591L	1.23 (31.2)	.44 (11.2)	.71 (18.0)	24	1.2	725M12592R	1.03 (26.2)	.39 (9.9)	.73 (18.5)	36
2.7	725M27591L	1.23 (31.2)	.46 (11.7)	.73 (18.5)	24						
3.0	725M30591L	1.23 (31.2)	.48 (12.2)	.76 (19.3)	24	1.5	725M15592L	1.23 (31.2)	.39 (9.9)	.73 (18.5)	28
3.3	725M33591L	1.23 (31.2)	.51 (13.0)	.78 (19.8)	24	1.8	725M18592L	1.23 (31.2)	.43 (10.9)	.77 (19.6)	29
3.6	725M36591L	1.23 (31.2)	.53 (13.5)	.81 (21.6)	24	2.0	725M20592L	1.23 (31.2)	.45 (11.4)	.79 (20.1)	29
3.9	725M39591L	1.23 (31.2)	.52 (13.2)	.87 (22.1)	24	2.2	725M22592L	1.23 (31.2)	.48 (12.2)	.82 (20.8)	29
4.3	725M43591L	1.23 (31.2)	.55 (14.0)	.90 (22.9)	25	2.5	725M25592L	1.23 (31.2)	.51 (13.0)	.85 (21.6)	29
4.7	725M47591L	1.23 (31.2)	.58 (14.7)	.92 (23.4)	25	2.7	725M27592L	1.23 (31.2)	.53 (13.5)	.88 (22.4)	29
						3.0	725M30592L	1.23 (31.2)	.57 (14.5)	.91 (23.1)	30
						3.3	725M33592L	1.23 (31.2)	.60 (15.2)	.94 (23.9)	30

* 60 Hz., RMS

[1] To complete part number for specific tolerance, terminal style and lead length please refer to Ordering/Part Number Information page.

Type 725M, Orange Drop®, Metallized Polypropylene Film Capacitors

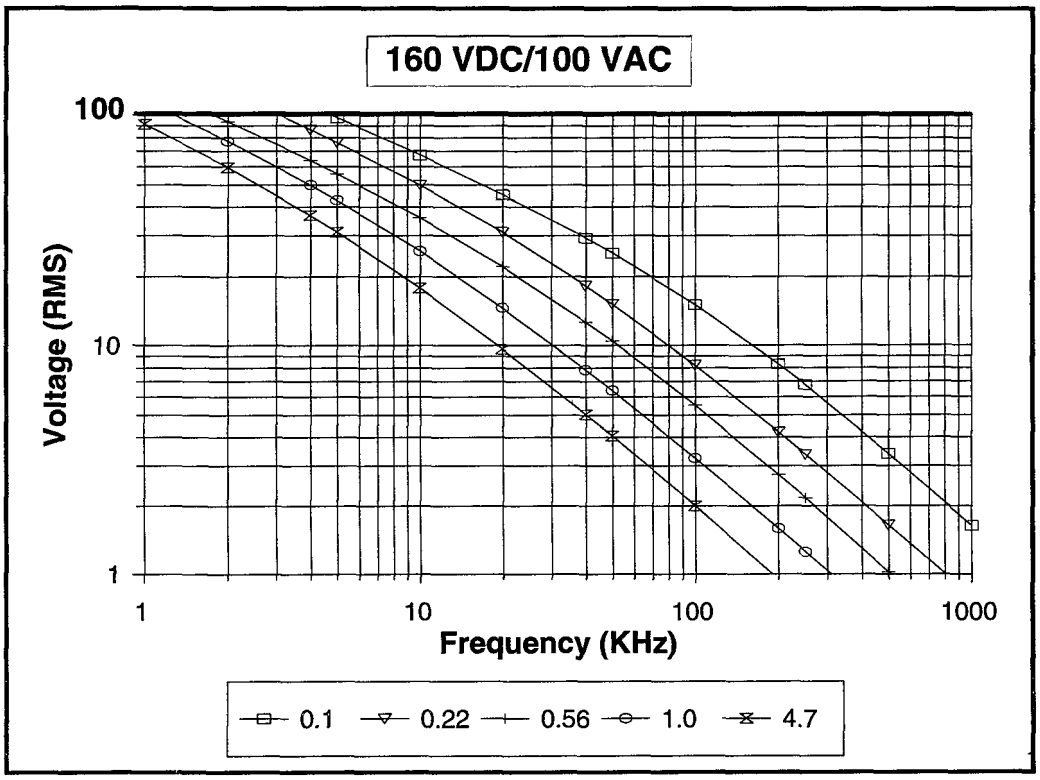
Type 725M Standard Sizes/Ratings

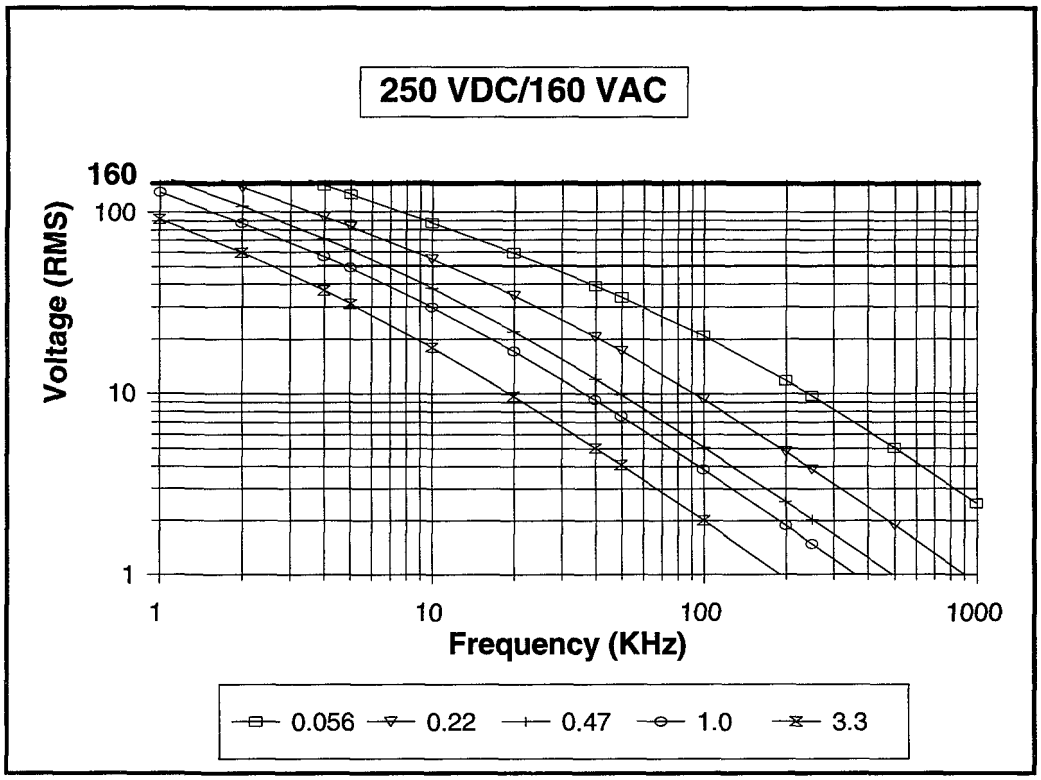
Value (µF)	Part Number[1]	L MAX	T MAX	H MAX	dV/dt Volts/µsec	Value (µF)	Part Number[1]	L MAX	T MAX	H MAX	dV/dt Volts/µsec
400 VDC / 220 VAC*						630 VDC / 250 VAC*					
0.027	725M27394N	.52 (13.2)	.21 (5.3)	.36 (9.1)	90	0.01	725M10396N	.52 (13.2)	.21 (5.3)	.35 (8.9)	161
0.033	725M33394N	.52 (13.2)	.21 (5.3)	.42 (10.7)	110	0.012	725M12396N	.52 (13.2)	.23 (5.8)	.37 (9.4)	196
0.039	725M39394N	.52 (13.2)	.23 (5.8)	.43 (10.9)	124	0.015	725M15396N	.52 (13.2)	.23 (5.8)	.43 (10.9)	232
0.043	725M43394N	.52 (13.2)	.24 (6.1)	.44 (11.2)	132	0.018	725M18396N	.52 (13.2)	.25 (6.4)	.45 (11.4)	256
0.047	725M47394N	.52 (13.2)	.24 (6.1)	.45 (11.4)	138	0.022	725M22396N	.52 (13.2)	.27 (6.9)	.48 (12.2)	279
0.05	725M50394N	.52 (13.2)	.25 (6.4)	.46 (11.7)	142	0.025	725M25396N	.52 (13.2)	.29 (7.4)	.49 (12.4)	291
0.056	725M56394N	.52 (13.2)	.27 (6.9)	.47(11.9)	149	0.027	725M27396N	.52 (13.2)	.27 (6.9)	.55 (14.0)	297
0.062	725M62394N	.52 (13.2)	.28 (7.1)	.49 (12.4)	155	0.033	725M33396N	.52 (13.2)	.30 (7.6)	.58 (14.7)	312
0.068	725M68394N	.52 (13.2)	.27 (6.9)	.54 (13.7)	159	0.039	725M39396N	.52 (13.2)	.33 (8.4)	.60 (15.2)	322
0.075	725M75394N	.52 (13.2)	.28 (7.1)	.55 (14.0)	164	0.043	725M43396N	.52 (13.2)	.35 (8.9)	.62 (15.7)	328
0.082	725M82394N	.52 (13.2)	.29 (7.4)	.57(14.5)	166	0.047	725M47396N	.52 (13.2)	.36 (9.1)	.64 (16.3)	332
0.09	725M90394N	.52 (13.2)	.31 (7.9)	.58 (14.7)	171	0.05	725M50396N	.52 (13.2)	.37 (9.4)	.65 (16.1)	335
						0.056	725M56396N	.52 (13.2)	.40 (10.2)	.67 (17.0)	340
0.1	725M10494J	.73 (18.5)	.22 (5.6)	.49 (12.4)	61	0.062	725M62396N	.52 (13.2)	.42 (10.7)	.69 (17.5)	344
0.12	725M12494J	.73 (18.5)	.24 (6.1)	.51 (13.0)	66						
0.15	725M15494J	.73 (18.5)	.27 (6.9)	.54 (13.7)	72	0.068	725M68396J	.73 (18.5)	.27 (6.9)	.54 (13.7)	115
0.18	725M18494J	.73 (18.5)	.29 (7.4)	.56 (14.2)	75	0.075	725M75396J	.73 (18.5)	.28 (7.1)	.56 (14.2)	118
0.22	725M22494J	.73 (18.5)	.32 (8.1)	.60 (15.2)	78	0.082	725M82396J	.73 (18.5)	.30 (7.6)	.57 (14.5)	120
0.25	725M25494J	.73 (18.5)	.34 (8.6)	.62 (15.7)	80	0.09	725M90396J	.73 (18.5)	.31 (7.9)	.58 (14.7)	123
0.27	725M27494J	.73 (18.5)	.36 (9.1)	.63 (16.0)	81	0.1	725M10496J	.73 (18.5)	.33 (8.4)	.60 (15.2)	125
0.3	725M30494J	.73 (18.5)	.38 (9.7)	.65 (16.5)	82	0.12	725M12496J	.73 (18.5)	.36 (9.1)	.63 (16.0)	129
						0.15	725M15496J	.73 (18.5)	.40 (10.2)	.68 (17.3)	133
0.33	725M33494R	1.03 (26.2)	.30 (7.6)	.57 (14.5)	43						
0.39	725M39494R	1.03 (26.2)	.33 (8.4)	.60 (15.2)	45	0.18	725M18496R	1.03 (26.2)	.33 (8.4)	.60 (15.2)	68
0.43	725M43494R	1.03 (26.2)	.34 (8.6)	.62 (15.7)	46	0.22	725M22496R	1.03 (26.2)	.34 (8.6)	.67 (17.0)	70
0.47	725M47494R	1.03 (26.2)	.36 (9.1)	.63 (16.0)	46	0.25	725M25496R	1.03 (26.2)	.36 (9.1)	.70 (17.8)	72
0.5	725M50494R	1.03 (26.2)	.37 (9.4)	.64 (16.3)	47	0.27	725M27496R	1.03 (26.2)	.38 (9.7)	.71 (18.0)	72
0.56	725M56494R	1.03 (26.2)	.39 (9.9)	.67 (17.0)	48	0.3	725M30496R	1.03 (26.2)	.40 (10.2)	.74 (18.8)	73
0.62	725M62494R	1.03 (26.2)	.41 (10.4)	.69 (17.5)	48	0.33	725M33496R	1.03 (26.2)	.42 (10.7)	.76 (19.3)	74
0.68	725M68494R	1.03 (26.2)	.41 (10.4)	.75(19.1)	48	0.39	725M39496R	1.03 (26.2)	.46 (11.7)	.80 (20.3)	75
0.75	725M75494R	1.03 (26.2)	.43 (10.9)	.77 (19.6)	49	0.43	725M43496R	1.03 (26.2)	.48 (12.2)	.82 (20.8)	75
0.82	725M82494R	1.03 (26.2)	.45 (11.4)	.79 (20.1)	49	0.47	725M47496R	1.03 (26.2)	.51 (13.0)	.85 (21.6)	76
0.9	725M90494R	1.03 (26.2)	.47 (11.9)	.81 (20.6)	50	0.5	725M50496R	1.03 (26.2)	.52 (13.2)	.87 (22.1)	76
1.0	725M105941	1.23 (31.2)	.44 (11.2)	.78 (19.8)	38	0.56	725M56496L	1.23 (31.2)	.48 (12.2)	.82 (20.8)	58
1.2	725M12594L	1.23 (31.2)	.48 (12.2)	.82 (20.8)	39	0.62	725M62496L	1.23 (31.2)	.51 (13.0)	.85 (21.6)	58
1.5	725M15594L	1.23 (31.2)	.54 (13.7)	.89 (22.6)	39	0.68	725M68496L	1.23 (31.2)	.54 (13.7)	.88 (22.4)	59
						0.75	725M75496L	1.23 (31.2)	.57 (14.5)	.91 (23.1)	59

* 60 Hz., RMS

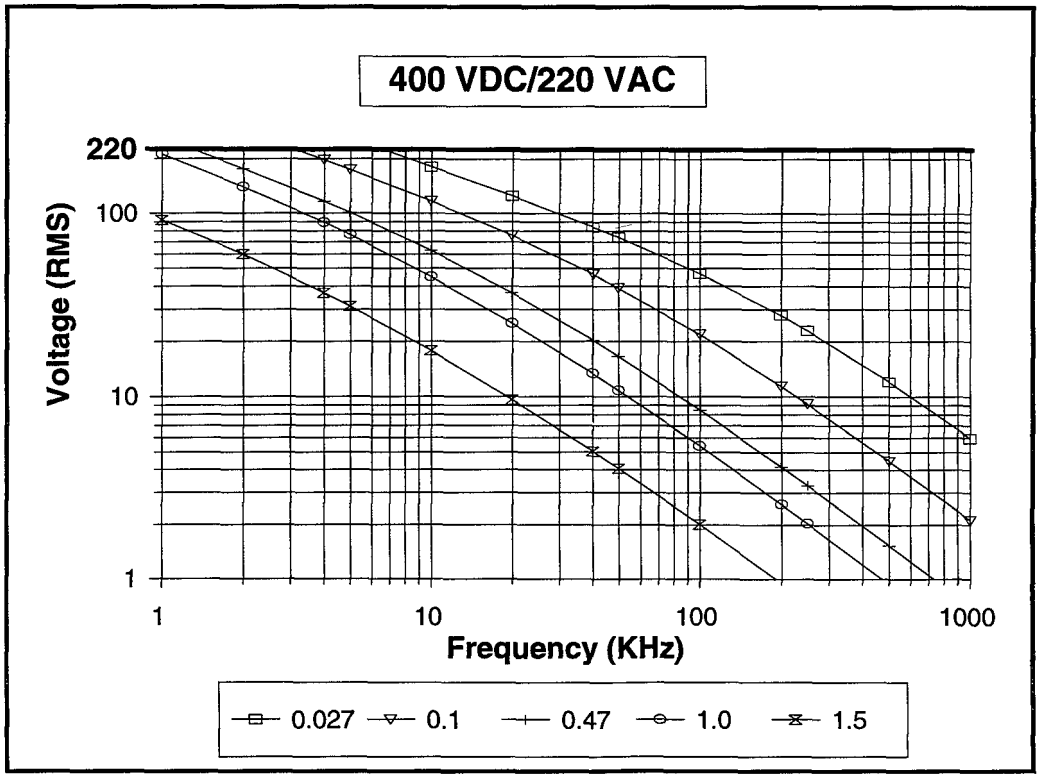
[1] To complete part number for specific tolerance, terminal style and lead length please refer to Ordering/Part Number Information page

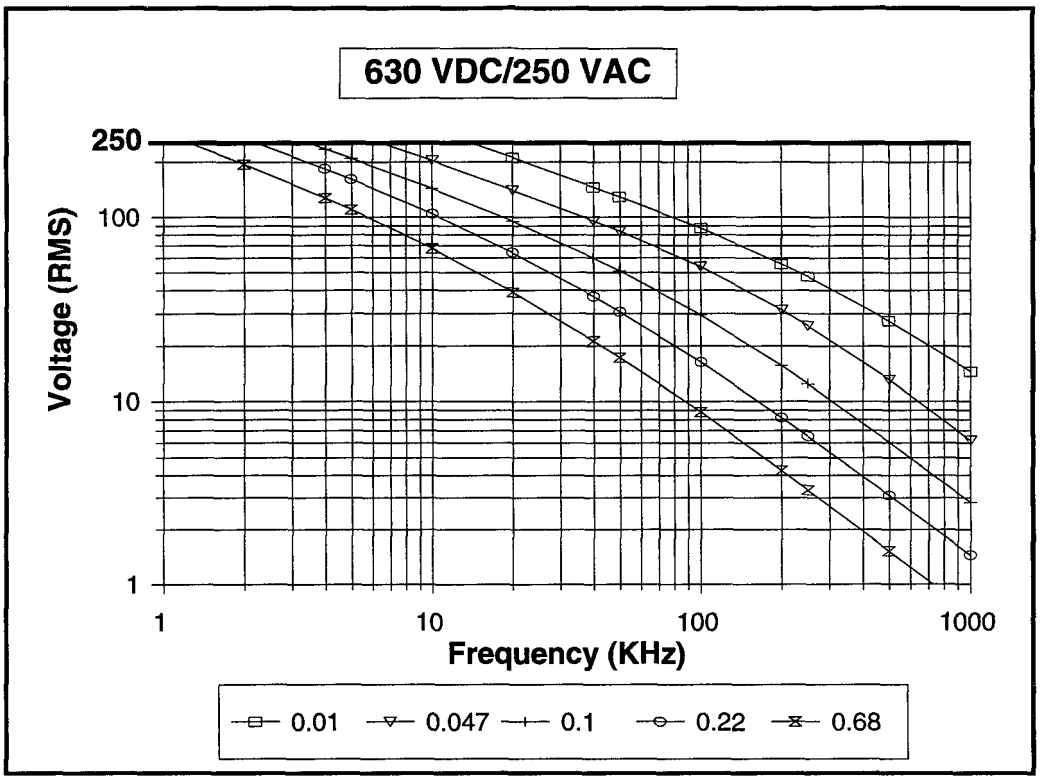
RMS Voltage vs. Frequency @ +85°C, in still air





RMS Voltage vs. Frequency @ +85°C, in still air





General Specifications

The Type 725M Orange Drop® is designed and manufactured for operation in a wide range of demanding environments and applications. Type 725M capacitors are wound from the most reliable metallized polypropylene film available and are protected by a rugged conformal coating of orange epoxy. They may be operated up to +105°C with proper derating.

The 725M series is an ideal choice for a variety of commercial and industrial electronic applications, from power supplies and amplifiers, to inverters and lighting ballasts. The 725M series is constructed of the highest quality polypropylene film with a vacuum deposited metal electrode. Metallized film offers specific clearing/self-healing characteristics that remove a fault or short in the dielectric film by vaporizing the metal electrode surrounding the defect and isolating the area.

Operating Temperature Range:
The standard operating temperature range for polypropylene film is -55°C to +85°C. The 725M may be operated at full voltage within this temperature range.

The 725M may be operated up to +105°C provided the DC working voltage is reduced to 50% of the +85°C rating (full rating).

For more specific details regarding operation above +85°C please contact our application engineering department.

The maximum operating temperature for the 725M series is +105°C.

Dielectric Withstanding Voltage:
Units shall withstand a DC potential of 150% of rated voltage applied between terminals for not more than 2 minutes.

AC Voltage Applications:
The A-C component of the 725M's voltage rating has been specified to assure that corona will not be encountered when the capacitor is operated within the noted specifications. We encourage you to contact us if you have any concerns about operating voltage, temperature limits, etc.

Lead Bend Test:
After 3 consecutive 180° bends. No damage.

DC Voltage Life Test:
500 hours at +85°C at 125% of rated voltage. After test; capacitance shall not have changed by more than ±5% of initial value, insulation resistance shall not have decreased by more than 50% of initial requirement and dissipation factor shall not have increased to more than 0.1%. In addition, there should be no open or short circuits, and no sign of visible damage.

AC Voltage Life Test:
Minimum of 500 hours at +85°C at 60 Hz. AC test voltage applied at 110% of AC rating. After test, capacitance shall not have changed by more than 3%, insulation resistance shall not have decreased by more than 50% of initial requirement, and dissipation factor shall not have changed by more than 0.03%. Measurements made at 1 KHz.

Additional Notes:
While it is not possible to list every detail of testing that we perform or every combination of capacitance value, tolerance, etc. that is available, we strongly encourage you to please contact us with your specific requirements. Thank you.

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Type 778P/779P, Orange Drop®, Polypropylene Film/Foil Capacitors

400 VAC

Type 778P/779P Orange Drop® 400 Volts A-C Polypropylene Film/Foil Capacitors



Features

- Specifically designed for A-C voltage applications where corona free operation is required for high reliability.
- Extremely low dissipation factor and ESR.
- Ideal for high frequency, high pulse current applications; dV/dt rating up to 77,400 volts/µsec.
- Excellent stability, virtually linear temperature coefficient.
- Compact size with various lead spacings.

Specifications

Capacitance Range:
470 pF to .033 µF

Capacitance Tolerance:
±1% to ±10%

Voltage Ratings:
400 Volts A-C/630 Volts D-C

Operating Temperature Range:
-55°C to +85°C
(+105°C with proper voltage derating)

Lead Wire:
Tinned copper-clad steel, .032" (.8) diameter, #20 AWG

Insulation Resistance:
400,000 MΩ minimum at +25°C
20,000 MΩ minimum at +85°C
2,000 MΩ minimum at +105°C

Temperature Coefficient (typical, over temperature range of -55°C to +85°C):
-140 ppm/°C, Type 778P
-180 ppm/°C, Type 779P

Pulse Rise Time, dV/dt:
See standard ratings table.

Dissipation Factor & ESR:
See standard ratings table.

Corona Start Voltage (typical):
500 Volts RMS

Encapsulation:
Conformal coating of flame retardant orange epoxy (meets UL94V-0 specs.)

Dielectric:
Polypropylene film; utilizing a floating common of metallized polypropylene, which provides self-healing characteristics.

Construction:
Non-inductively wound with extended foil, internal series-section design.

Applications:
Electronic Lighting Ballasts, Switching Power Supplies, Resonant Converters.

Dimensions in inches, metric (mm) in parenthesis.

Type 778P/779P, Orange Drop®, Polypropylene Film/Foil Capacitors

High Performance

Ordering/Part Number Information

715P 222 5 6 J D 3 (XXXX)

- **(XXXX)** — A suffix may be added by the factory to denote special construction.
- **3** — **Lead Length** 1 = 0.187 (4.7) ±0.030 (0.8); 2 = 0.250 (6.4) ±0.030 (0.8); 3 = 1.250 (32.0) Minimum (Other lead lengths available)
- **D** — **Terminal** A = Straight Lead (1.25 Min. lead length); B,F = Hairpin Crimp; G,H = Hockey Stick Crimp
- **J** — **Case Code** See Standard Sizes/Ratings Table
- **6** — **D-C Voltage Rating** Expressed in Volts
- **5** — **Capacitance Tolerance 9 = ±10%; 5 = ±5%; 3 = ±3%; 2 = ±2%; 1 = ±1%**
- **222** — **Capacitance** Expressed in Picofarads. The first two digits are the significant figures, the third is the number of zeros following. (i.e. 222 = 2200 pF = .0022 µF)
- **715P** — **CDE Type Number** Identifies the basic capacitor design. 778P Round profile, 779P Pressed profile

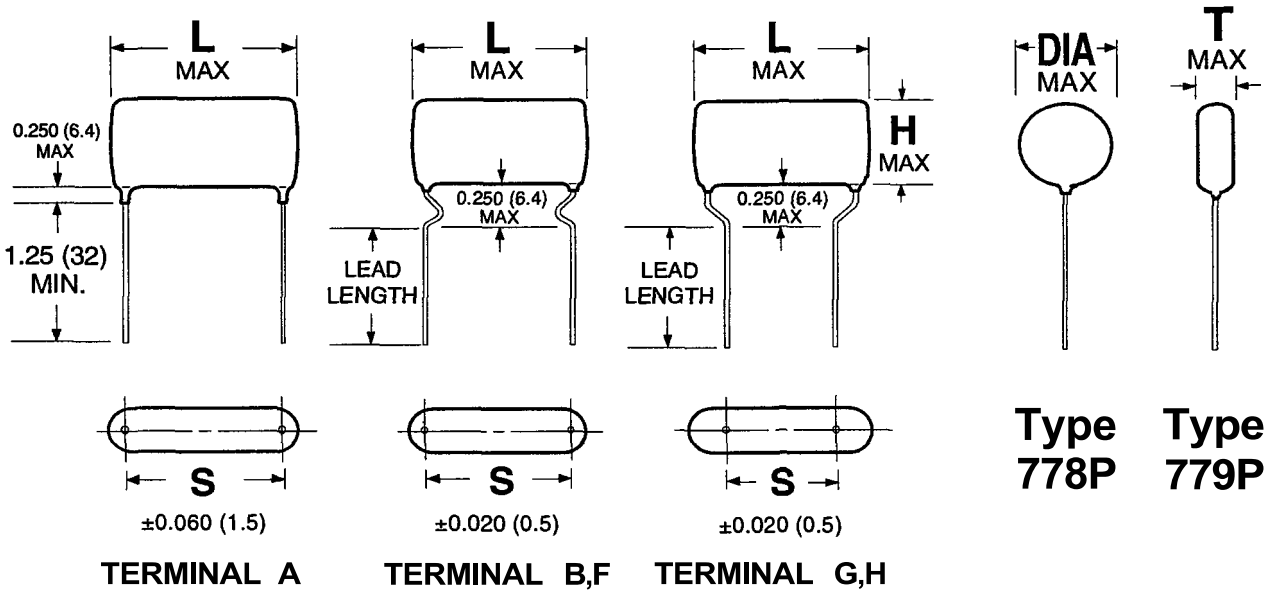
Standard Marking Format

Sample Marking on unit		Description	Tolerance codes per EIA standards	
	CDE	CDE Electronics identification	F	±1%
CDE778P800VAC	**778P**	Type number	G	±2%
222J 9810	**400VAC**	AC Voltage rating, Volts	H	±3%
	222J	Capacitance and tolerance code	J	±5%
	9810	Weekly date code (i.e. 10th wk of 1998)	K	±10%

Type 778P/779P, Orange Drop®, Polypropylene Film/Foil Capacitors

400 VAC

Standard Lead Styles



Standard Lead Spacings

S				
Term. A	Term. B	Term. F	Term. G	Term. H
0.590 (15.0)	0.590 (15.0)	0.394 (10.0)	0.295 (7.5)	0.197 (5.0)

Note: For additional capacitance values, further detailed technical data, application information, or any questions, please contact us!

Dimensions in inches, metric (mm) in parenthesis.

Type 778P/779P, Orange Drop®, Polypropylene Film/Foil Capacitors

400 VAC

Type 778P, 400 VAC/630 VDC Standard Sizes/Ratings

Value (µF)	Part Number*	L MAX	DIA MAX	H MAX	Seated Height	Max dV/dt (Volts/µsec)	Peak I Amps	Max % D.F. 20KHz	Max % D.F. 100KHz	Max ESR (mΩ) 20KHz	Max ESR (mΩ) 100KHz
.00047	778P4715400J	.75 (19.1)	.28 (7.1)	.31 (7.9)	.56 (14.2)	77400	54.6	.029	.039	4910	1321
.00056	778P5615400J	.75 (19.1)	.29 (74)	.32 (8.1)	.57 (14.5)	70900	59.6	.029	.040	4121	1137
.00068	778P6815400J	.75 (19.1)	.30 (7.6)	.33 (8.4)	.58 (14.7)	64400	65.7	.029	.040	3394	936
.00075	778P7515400J	.75 (19.1)	.30 (7.6)	.34 (8.6)	.59 (15.0)	61300	69.0	.029	.040	3077	849
.00082	778P8215400J	.75 (19.1)	.27 (6.9)	.30 (7.6)	.55 (14.0)	58600	72.1	.030	.042	2911	815
.001	778P1025400J	.75 (19.1)	.28 (7.1)	.31 (7.9)	.56 (14.2)	53100	79.6	.030	.042	2387	668
.0012	778P1225400J	.75 (19.1)	.29 (74)	.32 (8.1)	.57 (14.5)	48500	87.2	.030	.042	1989	557
.0015	778P1525400J	.75 (19.1)	.25 (6.4)	.29 (74)	.54 (13.7)	43300	97.5	.031	.047	1645	499
.0018	778P1825400J	.75 (19.1)	.26 (6.6)	.30 (7.6)	.55 (14.0)	39600	106.8	.031	.047	1371	416
.0022	778P2225400J	.75 (19.1)	.27 (6.9)	.30 (7.6)	.55 (14.0)	35800	118.1	.031	.047	1121	340
.0025	778P2525400J	.75 (19.1)	.28 (7.1)	.31 (7.9)	.56 (14.2)	33600	125.9	.031	.047	987	299
.0027	778P2725400J	.75 (19.1)	.28 (7.1)	.32 (8.1)	.57 (14.5)	32300	130.8	.031	.048	914	283
.0033	778P3325400J	.75 (19.1)	.29 (74)	.33 (8.4)	.58 (14.7)	29200	144.6	.031	.048	748	231
.0039	778P3925400J	.75 (19.1)	.30 (7.6)	.34 (8.6)	.59 (15.0)	26900	157.3	.031	.048	633	196
.0047	778P4725400J	.75 (19.1)	.32 (8.1)	.35 (8.9)	.60 (15.2)	24500	172.6	.031	.048	525	163
.0051	778P5125400J	.75 (19.1)	.32 (8.1)	.36 (9.1)	.61 (15.5)	23500	179.8	.031	.048	484	150
.0056	778P5625400J	.75 (19.1)	.33 (8.4)	.37 (9.4)	.62 (15.7)	22400	188.4	.031	.048	441	136
.0062	778P6225400J	.75 (19.1)	.34 (8.6)	.38 (9.7)	.63 (16.0)	21300	198.3	.031	.048	398	123
.0068	778P6825400J	.75 (19.1)	.35 (8.9)	.39 (9.9)	.64 (16.3)	20400	207.6	.031	.049	363	115
.0075	778P7525400J	.75 (19.1)	.36 (9.1)	.40 (10.2)	.65 (16.5)	19400	218.1	.031	.049	329	104
.0082	778P8225400J	.75 (19.1)	.37 (9.4)	.41 (10.4)	.66 (16.8)	18500	228.0	.031	.049	301	95
.01	778P1035400J	.75 (19.1)	.39 (9.9)	.43 (10.9)	.68 (17.3)	16800	251.8	.031	.049	247	78
.012	778P1235400J	.75 (19.1)	.41 (10.4)	.45 (11.4)	.70 (17.8)	15300	275.8	.031	.050	206	66
.015	778P1535400J	.75 (19.1)	.45 (11.4)	.49 (12.4)	.74 (18.8)	13700	308.4	.031	.051	164	54
.018	778P1835400J	.75 (19.1)	.47 (11.9)	.52 (13.2)	.77 (19.6)	12500	337.8	.032	.051	141	45
.022	778P2235400J	.75 (19.1)	.51 (13.0)	.55 (14.0)	.80 (20.3)	11300	373.5	.032	.052	116	38

Type 779P, 400 VAC/630 VDC Standard Sizes/Ratings[1]

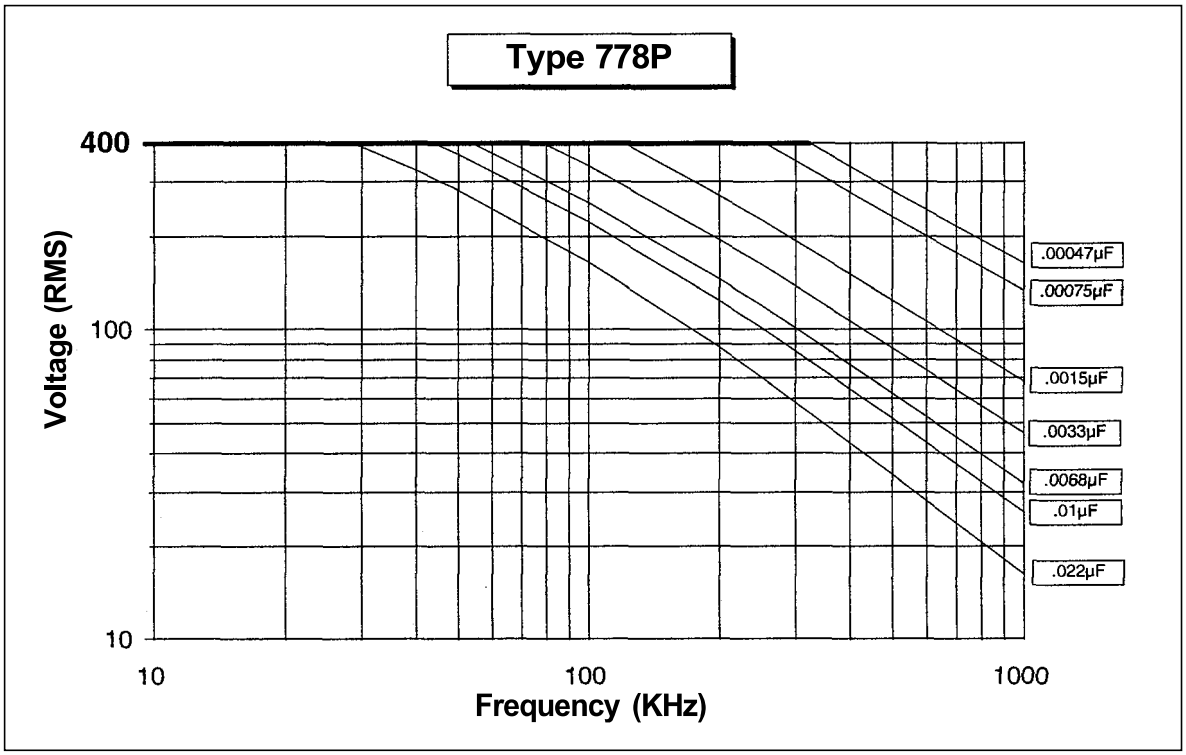
Value (µF)	Part Number*	L MAX	T MAX	H MAX	Seated Height	Max dV/dt (Volts/µsec)	Peak I Amps	Max % D.F. 20KHz	Max % D.F. 100KHz	Max ESR (mΩ) 20KHz	Max ESR (mΩ) 100KHz
.00068	779P6815400J	.75 (19.1)	.23 (5.9)	.37 (9.4)	.62 (15.7)	64400	65.7	.030	.040	3511	936
.00075	779P7515400J	.75 (19.1)	.24 (6.1)	.37 (9.4)	.62 (15.7)	61300	69.0	.030	.040	3183	849
.00082	779P8215400J	.75 (19.1)	.24 (6.1)	.38 (9.7)	.63 (16.0)	58600	72.1	.030	.040	2911	776
.001	779P1025400J	.75 (19.1)	.24 (6.1)	.40 (10.2)	.65 (16.5)	53100	79.6	.030	.040	2387	637
.0012	779P1225400J	.75 (19.1)	.26 (6.6)	42 (13.2)	.67 (17.0)	48500	87.2	.030	.040	1989	531
.0015	779P1525400J	.75 (19.1)	.23 (5.9)	.37 (9.4)	.62 (15.7)	43300	97.5	.030	.043	1592	456
.0018	779P1825400J	.75 (19.1)	.25 (6.4)	.38 (9.7)	.63 (16.0)	39600	106.8	.030	.044	1326	389
.0022	779P2225400J	.75 (19.1)	.26 (6.6)	.40 (10.2)	.65 (16.5)	35800	118.1	.030	.044	1085	318
.0025	779P2525400J	.75 (19.1)	.25 (6.4)	41 (10.1)	.66 (16.8)	33600	125.9	.030	.044	955	280
.0027	779P2725400J	.75 (19.1)	.21 (5.4)	.35 (8.9)	.60 (15.2)	32300	130.8	.031	.046	914	271
.0033	779P3325400J	.75 (19.1)	.22 (5.6)	.36 (9.1)	.61 (15.5)	29200	144.6	.031	.047	748	227
.0039	779P3925400J	.75 (19.1)	.23 (6.9)	.37 (9.4)	.62 (15.7)	26900	157.3	.031	.047	633	192
.0047	779P4725400J	75 (19.1)	.24 (6.1)	.40 (10.2)	.65 (16.5)	24500	172.6	.031	.048	525	163
.0051	779P5125400J	.75 (19.1)	.24 (6.1)	41 (10.4)	.66 (16.8)	23500	179.8	.031	.048	484	150
.0056	779P5625400J	.75 (19.1)	.25 (6.4)	.41 (10.4)	.66 (16.8)	22400	188.4	.031	.049	441	139
.0062	779P6225400J	.75 (19.1)	.26 (6.6)	42 (10.7)	.67 (17.0)	21300	198.3	.031	.049	398	126
.0068	779P6825400J	.75 (19.1)	.27 (6.9)	.43 (10.9)	.68 (17.3)	20400	207.6	.031	.050	363	117
.0075	779P7525400J	.75 (19.1)	.28 (7.1)	44 (11.2)	.69 (17.5)	19400	218.1	.031	.050	329	106
.0082	779P8225400J	.75 (19.1)	.28 (7.1)	47 (11.9)	.72 (18.3)	18500	228.0	.032	.051	311	99
.01	779P1035400J	.75 (19.1)	.30 (7.6)	.49 (12.4)	.74 (18.8)	16800	251.8	.032	.053	255	84
.012	779P1235400J	.75 (19.1)	.32 (8.1)	.51 (13.0)	.76 (19.3)	15300	275.8	.032	.054	212	72
015	779P1535400J	.75 (19.1)	.33 (8.4)	.57 (14.5)	.82 (20.8)	13700	308.4	.032	.057	170	60
.018	770P1835400J	.75 (19.1)	.36 (9.1)	.60 (15.2)	.85 (21.6)	12500	337.8	.033	.059	146	52
.022	779P2235400J	.75 (19.1)	.39 (9.9)	.64 (16.3)	.89 (22.6)	11300	373.5	.033	.063	119	46
.027	779P2735400J	.75 (19.1)	43 (10.9)	.68 (17.3)	.93 (23.6)	10200	413.8	.034	.067	100	39
.033	779P3335400J	.75 (19.1)	.47 (11.9)	.72 (18.3)	.97 (24.6)	9200	457.4	.035	.072	84	35

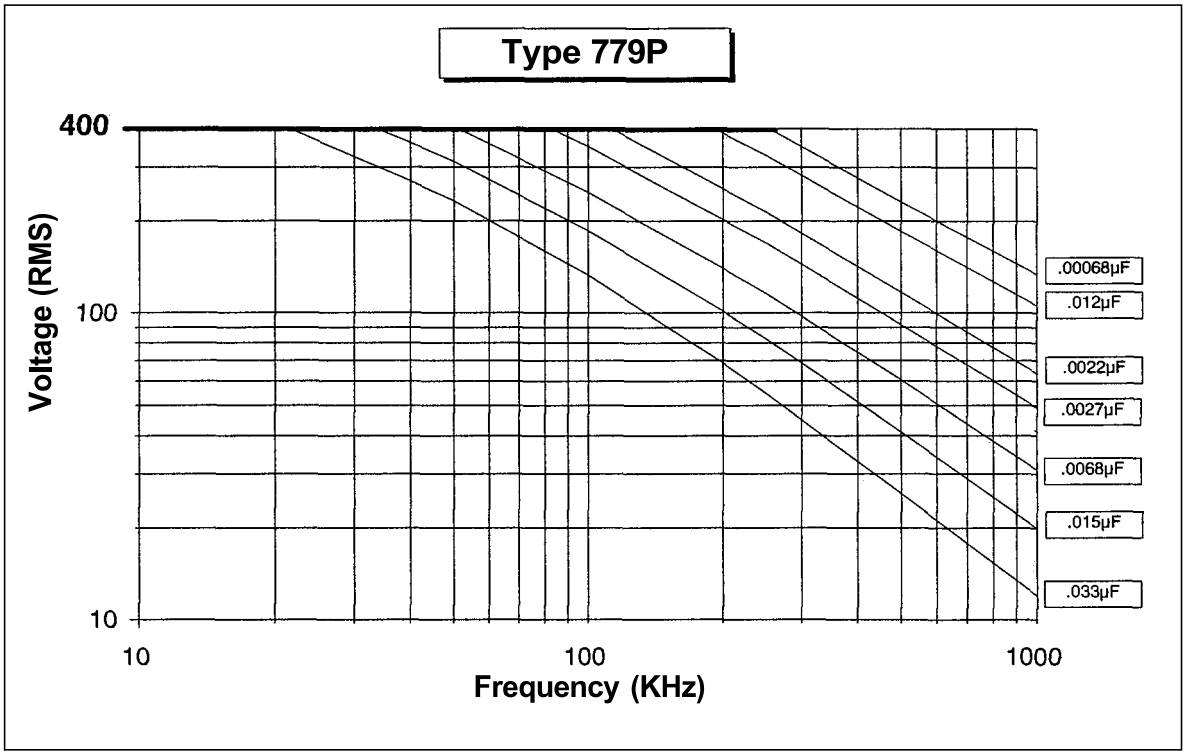
* For complete part number please refer to Ordering/Part Number Information page.

[1] Shaded part numbers, when ordered as ±5% tolerance with the B3 terminal style and lead length, are Standard Stock items available through the Sprague/Vishay Distribution Network. For complete part number please add the B3 suffix to the above part numbers in accordance with the Ordering Information (i.e. 779P4725400JB3). Other part numbers are available on special order.

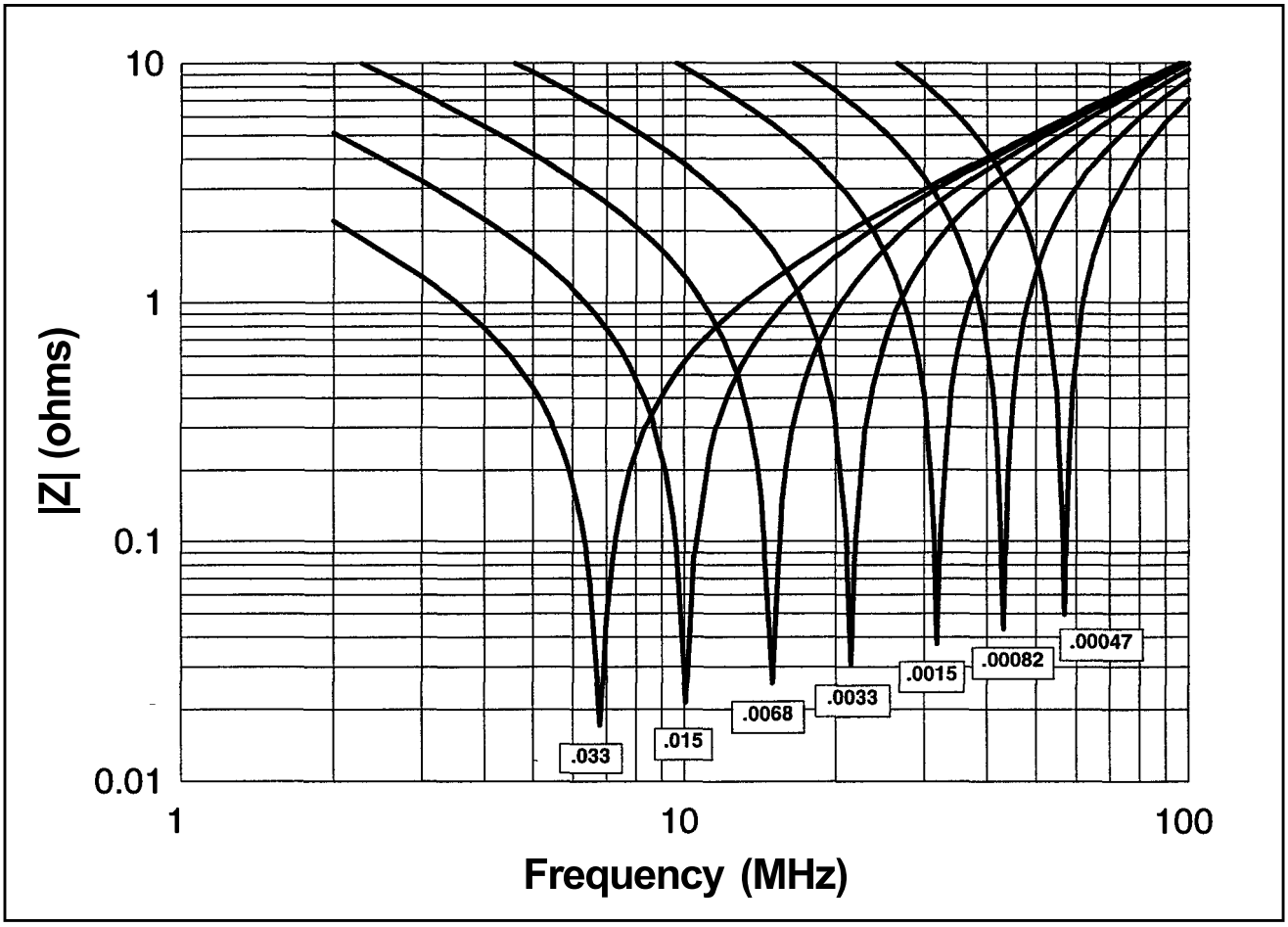
Dimensions in inches, metric (mm) in parenthesis.

RMS Voltage vs. Frequency @ +85°C





Typical Impedance vs. Frequency



Please note: Capacitance values above are in µF The resonant frequency and impedance shown above apply to units with a 0.250" lead length and are typical values only. Please contact us for additional data.

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Type 953B, Metallized Polypropylene Film Capacitors

AC Rated, Radial Leaded Box, UL 810 Fail Safe, Rated 10,000 AFC



Type 953B radial leaded metallized polypropyene capacitors are designed for UPS systems and other AC output filtering applications. With an integrated fused metallization pattern, this product features UL 810 recognition for fail-safe operation at temperatures up to 85 °C.

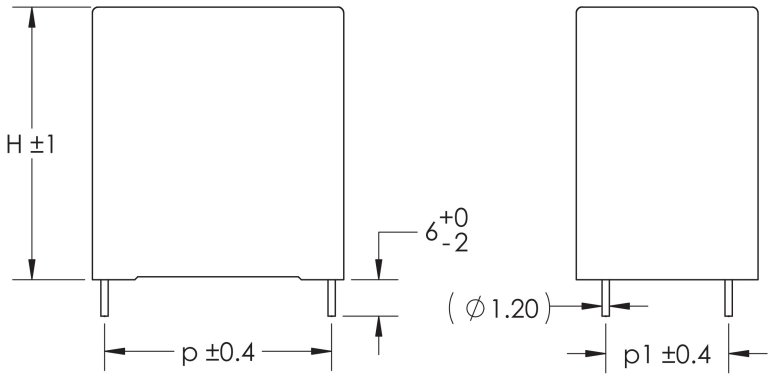
Highlights

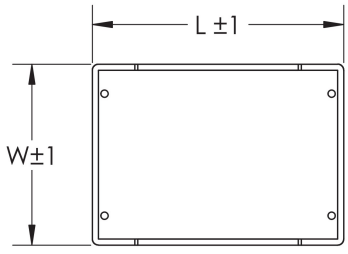
– Fuse protection
– UL 810 recognized
– Low dissipation factor
– Self healing

Specifications

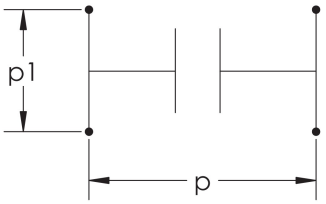
Capacitance Range	2.5 µF to 50 µF
Capacitance Tolerance	±10 % (±5% optional)
Rated Voltage	160 Vac, 250 Vac, 275 Vac
Operating Temperature Range	–40 °C to 85 °C
IEC Climatic Category	40/85/56 (test conditions 40 °C, 93% RH, rated voltage, 1000 hours)
Sevice Life Objective	10,000 h at rated voltage and 85 °C
Protection	UL 810 file number E71645
RoHS Compliant	

Dimensions





Construction Details	
Case Material	Plastic UL 94V-0
Resin Material	Dry Resin UL 94V-0
Terminal Material	Tin Plated Copper



Type 953B, Metallized Polypropylene Film Capacitors

AC Rated, Radial Leaded Box, UL 810 Fail Safe, Rated 10,000 AFC

Part Numbering System

953B	X	W	2P5	K	SF	-F
Series	Voltage Code I = 160 Vdc Q = 250 Vdc X = 275 Vdc	Cap Decimal P = 0. W = No Decimal Point	Cap Rating in µF 2P5 = 2.5 µF 8 = 8 µF 25 = 25 µF	Tolerance K = ±10% J = ±5%	Metallization Type SF = Segmented Fused	RoHs Compliant

Case Code	W	H	L	p	p1	d
A	20	40	41.5	37.5	10.2	1.2
B	28	37	41.5	37.5	10.2	1.2
C	24	44	41.5	37.5	10.2	1.2
D	30	45	41.5	37.5	20.3	1.2
E	30	45	57.5	52.5	20.3	1.2
F	35	50	57.5	52.5	20.3	1.2

Ratings

Part Number	Cap 1 kHz (µF)	Typ. ESR 10 kHz (mΩ)	Typ. ESL (nH)	Ipeak (A)	dV/dt (V/µs)	Rth (°C/W)	Irms 10 kHz 85°C (A)	Case Code
160 VAC								
953BIW10KSF-F	10	9	30	285	29	16	8.0	A
953BIW16KSF-F	16	7	30	475	30	14	9.3	B
953BIW17P5KSF-F	17.5	7	30	570	33	13	9.6	C
953BIW25KSF-F	25	6	30	760	30	12	10.4	D
953BIW38KSF-F	38	7	38	760	20	9	11.3	E
953BIW50KSF-F	50	6	38	1045	21	8	12.2	F
250 VAC								
953BQW4P5KSF-F	4.5	12	30	190	42	16	7.1	A
953BQW7KSF-F	7	9	30	285	41	14	8.3	B
953BQW7P5KSF-F	7.5	9	30	380	51	13	8.7	C
953BQW10KSF-F	10	8	30	475	48	12	9.0	D
953BQW16P5KSF-F	16.5	8	38	475	29	9	10.3	E
953BQW22KSF-F	22	7	38	665	30	8	11.3	F
275 VAC								
953BXW2P5KSF-F	2.5	14	30	190	76	16	6.4	A
953BXW3P5KSF-F	3.5	11	30	190	54	14	7.4	B
953BXW4KSF-F	4	11	30	285	71	13	7.9	C
953BXW6KSF-F	6	8	30	380	63	12	9.0	D
953BXW9KSF-F	9	10	38	380	42	9	9.5	E
953BXW12KSF-F	12	8	38	475	40	8	10.5	F

Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.

Type DME Polyester Film Capacitors

Metallized Radial Leads

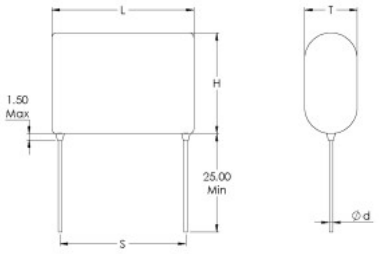
DC Applications
Miniature Size



Type DME radial-leaded, mini-dipped capacitors deliver virtually the same performance of other capacitors physically twice as big. Improvements in film technology permit the use of thinner dielectric. **Type DME** self heals shorts caused by overvoltage transients. For small size and low cost, **Type DME** is tops.

Specifications

Voltage Range: 100-1000 Vdc
Capacitance Range: .01-10 µF
Capacitance Tolerance: ±10% (K) standard
±5% (J) optional
Operating Temperature Range: -55 °C to 125 °C*
*Full-rated voltage at 85 °C–Derate linearly to 50%-rated voltage at 125 °C
Dielectric Strength: 150% (1 minute)
Dissipation Factor: 1% Max. (25 °C, 1kHz)
Insulation Resistance: 3,000 MΩ x µF
9,000 MΩ Min.
Life Test: 1000 Hours at 85°C at 125% Rated Voltage



NOTE: Refer to Application Guide for test conditions.
Contact us for other capacitance values, sizes and performance specifications.

Ratings

RoHS Compliant

Cap.	Catalog	T Max.		H Max.		L Max.		S ±.04 (±1.0)		d		dV/dt
(µF)	Part Number	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	V/µs
					100 Vdc							
0.56	DME1P56K-F	0.217	(5.5)	0.429	(10.9)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	16
0.68	DME1P68K-F	0.236	(6.0)	0.469	(11.9)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	16
0.82	DME1P82K-F	0.256	(6.5)	0.531	(13.5)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	16
1.00	DME1W1K-F	0.276	(7.0)	0.551	(14.0)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	16
1.20	DME1W1P2K-F	0.217	(5.5)	0.504	(12.8)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	10
1.50	DME1W1P5K-F	0.256	(6.5)	0.528	(13.4)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	10
1.80	DME1W1P8K-F	0.256	(6.5)	0.571	(14.5)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	10
2.20	DME1W2P2K-F	0.295	(7.5)	0.610	(15.5)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	10
2.70	DME1W2P7K-F	0.315	(8.0)	0.630	(16.0)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	10
3.30	DME1W3P3K-F	0.354	(9.0)	0.650	(16.5)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	10
3.90	DME1W3P9K-F	0.276	(7.0)	0.646	(16.4)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	6
4.70	DME1W4P7K-F	0.315	(8.0)	0.669	(17.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	6
5.60	DME1W5P6K-F	0.354	(9.0)	0.689	(17.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	6
6.80	DME1W6P8K-F	0.374	(9.5)	0.728	(18.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	6
8.20	DME1W8P2K-F	0.394	(10.0)	0.787	(20.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	6
10.00	DME1W10K-F	0.453	(11.5)	0.827	(21.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	6

Type DME Polyester Film Capacitors

RoHS Compliant

Cap. (µF)	Catalog Part Number	T Max. Inches	T Max. (mm)	H Max. Inches	H Max. (mm)	L Max. Inches	L Max. (mm)	S ±.04 (±1.0) Inches	S ±.04 (±1.0) (mm)	d Inches	d (mm)	dV/dt V/µs
					250 Vdc							
0.010	DME2S1K-F	0.177	(4.5)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.012	DME2S12K-F	0.177	(4.5)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.015	DME2S15K-F	0.177	(4.5)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.018	DME2S18K-F	0.177	(4.5)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.022	DME2S22K-F	0.177	(4.5)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.027	DME2S27K-F	0.177	(4.5)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.033	DME2S33K-F	0.177	(4.5)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.039	DME2S39K-F	0.177	(4.5)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.047	DME2S47K-F	0.177	(4.5)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.056	DME2S56K-F	0.189	(4.8)	0.311	(7.9)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.068	DME2S68K-F	0.189	(4.8)	0.311	(7.9)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.082	DME2S82K-F	0.197	(5.0)	0.315	(8.0)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.100	DME2P1K-F	0.228	(5.8)	0.346	(8.8)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.120	DME2P12K-F	0.236	(6.0)	0.354	(9.0)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.150	DME2P15K-F	0.236	(6.0)	0.425	(10.8)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	31
0.180	DME2P18K-F	0.197	(5.0)	0.413	(10.5)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	20
0.220	DME2P22K-F	0.236	(6.0)	0.413	(10.5)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	20
0.270	DME2P27K-F	0.236	(6.0)	0.453	(11.5)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	20
0.330	DME2P33K-F	0.276	(7.0)	0.472	(12.0)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	20
0.390	DME2P39K-F	0.193	(4.9)	0.472	(12.0)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	12
0.470	DME2P47K-F	0.236	(6.0)	0.492	(12.5)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	12
0.560	DME2P56K-F	0.236	(6.0)	0.512	(13.0)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	12
0.680	DME2P68K-F	0.256	(6.5)	0.531	(13.5)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	12
0.820	DME2P82K-F	0.276	(7.0)	0.590	(15.0)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	12
1.000	DME2W1K-F	0.315	(8.0)	0.610	(15.5)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	12
1.200	DME2W1P2K-F	0.315	(8.0)	0.626	(15.9)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	12
1.500	DME2W1P5K-F	0.374	(9.5)	0.689	(17.5)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	12
1.800	DME2W1P8K-F	0.295	(7.5)	0.610	(15.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	7
2.200	DME2W2P2K-F	0.354	(9.0)	0.669	(17.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	7
2.700	DME2W2P7K-F	0.394	(10.0)	0.689	(17.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	7
3.300	DME2W3P3K-F	0.413	(10.5)	0.748	(19.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	7
3.900	DME2W3P9K-F	0.443	(11.2)	0.807	(20.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	7
4.700	DME2W4P7K-F	0.492	(12.5)	0.886	(22.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	7
5.600	DME2W5P6K-F	0.492	(12.5)	0.846	(21.5)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	6
6.800	DME2W6P8K-F	0.531	(13.5)	0.886	(22.5)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	6
8.200	DME2W8P2K-F	0.590	(15.0)	0.945	(24.0)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	6
10.000	DME2W10K-F	0.630	(16.0)	1.024	(26.0)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	6
					400 Vdc							
0.010	DME4S1K-F	0.169	(4.3)	0.291	(7.4)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	46
0.012	DME4S12K-F	0.173	(4.4)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	46
0.015	DME4S15K-F	0.173	(4.4)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	46
0.018	DME4S18K-F	0.173	(4.4)	0.295	(7.5)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	46
0.022	DME4S22K-F	0.189	(4.8)	0.311	(7.9)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	46
0.027	DME4S27K-F	0.217	(5.5)	0.315	(8.0)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	46
0.033	DME4S33K-F	0.236	(6.0)	0.354	(9.0)	0.406	(10.3)	0.295	(7.5)	0.024	(0.6)	46
0.039	DME4S39K-F	0.193	(4.9)	0.315	(8.0)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	30
0.047	DME4S47K-F	0.217	(5.5)	0.335	(8.5)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	30
0.056	DME4S56K-F	0.217	(5.5)	0.394	(10.0)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	30

Type DME Polyester Film Capacitors

RoHS Compliant

Cap. (µF)	Catalog Part Number	T Max. Inches	T Max. (mm)	H Max. Inches	H Max. (mm)	L Max. Inches	L Max. (mm)	S ±.04 (±1.0) Inches	S ±.04 (±1.0) (mm)	d Inches	d (mm)	dV/dt V/µs
					400 Vdc							
0.068	DME4S68K-F	0.236	(6.0)	0.413	(10.5)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	30
0.082	DME4S82K-F	0.248	(6.3)	0.433	(11.0)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	30
0.100	DME4P1K-F	0.256	(6.5)	0.472	(12.0)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	30
0.120	DME4P12K-F	0.217	(5.5)	0.394	(10.0)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	17
0.150	DME4P15K-F	0.217	(5.5)	0.488	(12.4)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	17
0.180	DME4P18K-F	0.217	(5.5)	0.492	(12.5)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	17
0.220	DME4P22K-F	0.256	(6.5)	0.512	(13.0)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	17
0.270	DME4P27K-F	0.256	(6.5)	0.563	(14.3)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	17
0.330	DME4P33K-F	0.295	(7.5)	0.587	(14.9)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	17
0.390	DME4P39K-F	0.295	(7.5)	0.606	(15.4)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	17
0.470	DME4P47K-F	0.327	(8.3)	0.669	(17.0)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	17
0.560	DME4P56K-F	0.276	(7.0)	0.630	(16.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	11
0.680	DME4P68K-F	0.295	(7.5)	0.650	(16.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	11
0.820	DME4P82K-F	0.315	(8.0)	0.689	(17.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	11
1.000	DME4W1K-F	0.335	(8.5)	0.728	(18.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	11
1.200	DME4W1P2K-F	0.374	(9.5)	0.744	(18.9)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	11
1.500	DME4W1P5K-F	0.374	(9.5)	0.748	(19.0)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	9
1.800	DME4W1P8K-F	0.433	(11.0)	0.807	(20.5)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	9
2.200	DME4W2P2K-F	0.453	(11.5)	0.866	(22.0)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	9
					630 Vdc							
0.010	DME6S1K-F	0.197	(5.0)	0.315	(8.0)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	66
0.012	DME6S12K-F	0.197	(5.0)	0.315	(8.0)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	66
0.015	DME6S15K-F	0.217	(5.5)	0.335	(8.5)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	66
0.018	DME6S18K-F	0.217	(5.5)	0.394	(10.0)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	66
0.022	DME6S22K-F	0.217	(5.5)	0.413	(10.5)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	66
0.027	DME6S27K-F	0.217	(5.5)	0.429	(10.9)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	66
0.033	DME6S33K-F	0.256	(6.5)	0.469	(11.9)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	66
0.039	DME6S39K-F	0.236	(6.0)	0.528	(13.4)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	66
0.047	DME6S47K-F	0.276	(7.0)	0.531	(13.5)	0.492	(12.5)	0.394	(10.0)	0.024	(0.6)	66
0.056	DME6S56K-F	0.236	(6.0)	0.413	(10.5)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	33
0.068	DME6S68K-F	0.236	(6.0)	0.453	(11.5)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	33
0.082	DME6S82K-F	0.276	(7.0)	0.472	(12.0)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	33
0.100	DME6P1K-F	0.256	(6.5)	0.551	(14.0)	0.728	(18.5)	0.591	(15.0)	0.024	(0.6)	33
0.120	DME6P12K-F	0.256	(6.5)	0.571	(14.5)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	33
0.150	DME6P15K-F	0.315	(8.0)	0.630	(16.0)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	33
0.180	DME6P18K-F	0.315	(8.0)	0.630	(16.0)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	33
0.220	DME6P22K-F	0.374	(9.5)	0.669	(17.0)	0.728	(18.5)	0.591	(15.0)	0.032	(0.8)	33
0.270	DME6P27K-F	0.276	(7.0)	0.650	(16.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	19
0.330	DME6P33K-F	0.315	(8.0)	0.689	(17.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	19
0.390	DME6P39K-F	0.335	(8.5)	0.705	(17.9)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	19
0.470	DME6P47K-F	0.394	(10.0)	0.728	(18.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	19
0.560	DME6P56K-F	0.413	(10.5)	0.787	(20.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	19
0.680	DME6P68K-F	0.472	(12.0)	0.827	(21.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	19
0.820	DME6P82K-F	0.453	(11.5)	0.807	(20.5)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	15
1.000	DME6W1K-F	0.512	(13.0)	0.866	(22.0)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	15
1.200	DME6W1P2K-F	0.531	(13.5)	0.906	(23.0)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	15
1.500	DME6W1P5K-F	0.630	(16.0)	0.985	(25.0)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	15
1.800	DME6W1P8K-F	0.669	(17.0)	1.063	(27.0)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	15

Type DME Polyester Film Capacitors

Cap.	Catalog	T Max.		H Max.		L Max.		S ±.04 (±1.0)		d		dV/dt
(µF)	Part Number	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	V/µs
2.200	DME6W2P2K-F	0.787	(20.0)	1.142	(29.0)	1.220	(31.0)	1.083	(27.5)	0.032	(0.8)	15
					1000 Vdc							
0.010	DME10S1K-F	0.236	(6.0)	0.433	(11.0)	0.610	(15.5)	0.492	(12.5)	0.024	(0.6)	93
0.012	DME10S12K-F	0.236	(6.0)	0.472	(12.0)	0.610	(15.5)	0.492	(12.5)	0.024	(0.6)	93
0.015	DME10S15K-F	0.276	(7.0)	0.492	(12.5)	0.610	(15.5)	0.492	(12.5)	0.024	(0.6)	93
0.018	DME10S18K-F	0.295	(7.5)	0.512	(13.0)	0.610	(15.5)	0.492	(12.5)	0.032	(0.8)	93
0.022	DME10S22K-F	0.295	(7.5)	0.610	(15.5)	0.610	(15.5)	0.492	(12.5)	0.032	(0.8)	93
0.027	DME10S27K-F	0.236	(6.0)	0.512	(13.0)	0.827	(21.0)	0.689	(17.5)	0.032	(0.8)	104
0.033	DME10S33K-F	0.256	(6.5)	0.551	(14.0)	0.827	(21.0)	0.689	(17.5)	0.032	(0.8)	104
0.039	DME10S39K-F	0.276	(7.0)	0.571	(14.5)	0.827	(21.0)	0.689	(17.5)	0.032	(0.8)	104
0.047	DME10S47K-F	0.295	(7.5)	0.610	(15.5)	0.827	(21.0)	0.689	(17.5)	0.032	(0.8)	104
0.056	DME10S56K-F	0.295	(7.5)	0.669	(17.0)	0.827	(21.0)	0.689	(17.5)	0.032	(0.8)	104
0.068	DME10S68K-F	0.335	(8.5)	0.709	(18.0)	0.827	(21.0)	0.689	(17.5)	0.032	(0.8)	104
0.082	DME10S82K-F	0.354	(9.0)	0.728	(18.5)	0.827	(21.0)	0.689	(17.5)	0.032	(0.8)	104
0.100	DME10P1K-F	0.394	(10.0)	0.787	(20.0)	0.827	(21.0)	0.689	(17.5)	0.032	(0.8)	104
0.120	DME10P12K-F	0.354	(9.0)	0.728	(18.5)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	70
0.150	DME10P15K-F	0.394	(10.0)	0.787	(20.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	70
0.180	DME10P18K-F	0.413	(10.5)	0.866	(22.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	70
0.220	DME10P22K-F	0.472	(12.0)	0.906	(23.0)	1.024	(26.0)	0.886	(22.5)	0.032	(0.8)	70

RoHS Compliant

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Type DMM Polyester Film Capacitors

Metallized



DC Applications
Self Healing

Type DMM radial-leaded, metallized polyester capacitors have non-inductive windings and multi-layered epoxy resin enhancing performace characteristics and humidity resistance. Self healing characteristics prevent permanent shorting due to high-voltage transients. When long life and performance stability are critical **Type DMM** is the ideal solution.

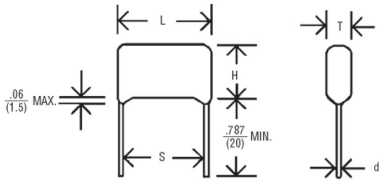
Specifications

Voltage Range: 100-630 Vdc
Capacitance Range: .01-10 µF
Capacitance Tolerance: ±10% (K) standard
±5% (J) optional
Operating Temperature Range: -55 °C to 125 °C*
*Full-rated voltage at 85 °C–Derate linearly to 50%-rated voltage at 125 °C

Dielectric Strength: 150% (1 minute)
Dissipation Factor: 1% Max. (25 °C, 1 kHz)
Insulation Resistance: 5,000 MΩ x µF
10,000 MΩ Min.
Life Test: 1,000 Hours at 85 °C at
125% Rated Voltage

Pulse Capability					
Rated Volts	Body Length				
	0.55	0.71	0.94	1.024-1.220	1.38
	dV/dt—volts per microsecond, maximum				
100	20	12	8	6	
250	28	17	12	8	7
400	46	28	15	14	12
630	72	43	28	21	17

NOTE: Other capa
sizes and performar
are available. Conta



Ratings

RoHS Compliant

Cap. (µF)	Catalog Part Number	T Max. Inches (mm)	H Max. Inches (mm)	L Max. Inches (mm)	S ±.06 (±1.5) Inches (mm)	d Inches (mm)
			100 Vdc			
0.15	DMM1P15K–F	0.236 (6.0)	0.394 (10.0)	0.551 (14.0)	0.394 (10.0)	0.024 (0.6)
0.22	DMM1P22K–F	0.236 (6.0)	0.414 (10.5)	0.551 (14.0)	0.394 (10.0)	0.024 (0.6)
0.33	DMM1P33K–F	0.236 (6.0)	0.414 (10.5)	0.709 (18.0)	0.591 (15.0)	0.024 (0.6)
0.47	DMM1P47K–F	0.236 (6.0)	0.473 (12.0)	0.709 (18.0)	0.591 (15.0)	0.024 (0.6)
0.68	DMM1P68K–F	0.276 (7.0)	0.551 (14.0)	0.709 (18.0)	0.591 (15.0)	0.024 (0.6)
1.00	DMM1W1K–F	0.354 (9.0)	0.591 (15.0)	0.709 (18.0)	0.591 (15.0)	0.032 (0.8)
1.50	DMM1W1P5K–F	0.354 (9.0)	0.670 (17.0)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)
2.20	DMM1W2P2K–F	0.433 (11.0)	0.788 (20.0)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)
3.30	DMM1W3P3K–F	0.453 (11.5)	0.788 (20.0)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)
4.70	DMM1W4P7K–F	0.512 (13.0)	0.906 (23.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
6.80	DMM1W6P8K–F	0.630 (16.0)	1.024 (26.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
10.00	DMM1W10K–F	0.709 (18.0)	1.221 (31.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
			250 Vdc			
0.068	DMM2S68K–F	0.236 (6.0)	0.394 (10.0)	0.551 (14.0)	0.390 (10.0)	0.024 (0.6)
0.10	DMM2P1K–F	0.276 (7.0)	0.394 (10.0)	0.551 (14.0)	0.390 (10.0)	0.024 (0.6)
0.15	DMM2P15K–F	0.276 (7.0)	0.433 (11.0)	0.709 (18.0)	0.590 (15.0)	0.024 (0.6)
0.22	DMM2P22K–F	0.276 (7.0)	0.473 (12.0)	0.709 (18.0)	0.590 (15.0)	0.024 (0.6)
0.33	DMM2P33K–F	0.276 (7.0)	0.512 (13.0)	0.709 (18.0)	0.590 (15.0)	0.024 (0.6)
0.47	DMM2P47K–F	0.315 (8.0)	0.591 (15.0)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)
0.68	DMM2P68K–F	0.354 (9.0)	0.610 (15.5)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)

Cap. (µF)	Catalog Part Number	T Max. Inches (mm)	H Max. Inches (mm)	L Max. Inches (mm)	S ±.06 (±1.5) Inches (mm)	d Inches (mm)
			250 Vdc			
1.00	DMM2W1K–F	0.394 (10.0)	0.670 (17.0)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)
1.50	DMM2W1P5K–F	0.394 (10.0)	0.768 (19.5)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
2.20	DMM2W2P2K–F	0.512 (13.0)	0.866 (22.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
3.30	DMM2W3P3K–F	0.630 (16.0)	1.024 (26.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
4.70	DMM2W4P7K–F	0.630 (16.0)	1.024 (26.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
			400 Vdc			
0.033	DMM4S33K–F	0.236 (6.0)	0.414 (10.5)	0.551 (14.0)	0.394 (10.0)	0.024 (0.6)
0.047	DMM4S47K–F	0.315 (8.0)	0.433 (11.0)	0.551 (14.0)	0.394 (10.0)	0.024 (0.6)
0.068	DMM4S68K–F	0.236 (6.0)	0.512 (13.0)	0.709 (18.0)	0.591 (15.0)	0.024 (0.6)
0.10	DMM4P1K–F	0.256 (6.5)	0.512 (13.0)	0.709 (18.0)	0.591 (15.0)	0.024 (0.6)
0.15	DMM4P15K–F	0.276 (7.0)	0.551 (14.0)	0.709 (18.0)	0.591 (15.0)	0.032 (0.8)
0.22	DMM4P22K–F	0.354 (9.0)	0.630 (16.0)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)
0.33	DMM4P33K–F	0.354 (9.0)	0.630 (16.0)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)
0.47	DMM4P47K–F	0.394 (10.0)	0.709 (18.0)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)
0.68	DMM4P68K–F	0.414 (10.5)	0.709 (18.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
1.00	DMM4W1K–F	0.473 (12.0)	0.866 (22.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
			630 Vdc			
0.01	DMM6S1K–F	0.236 (6.0)	0.394 (10.0)	0.551 (14.0)	0.394 (10.0)	0.024 (0.6)
0.015	DMM6S15K–F	0.256 (6.5)	0.453 (11.5)	0.551 (14.0)	0.394 (10.0)	0.024 (0.6)
0.022	DMM6S22K–F	0.276 (7.0)	0.492 (12.5)	0.551 (14.0)	0.394 (10.0)	0.024 (0.6)
0.033	DMM6S33K–F	0.315 (8.0)	0.532 (13.5)	0.709 (18.0)	0.591 (15.0)	0.024 (0.6)
0.047	DMM6S47K–F	0.295 (7.5)	0.492 (12.5)	0.709 (18.0)	0.591 (15.0)	0.024 (0.6)
0.068	DMM6S68K–F	0.335 (8.5)	0.571 (14.5)	0.709 (18.0)	0.591 (15.0)	0.032 (0.8)
0.10	DMM6P1K–F	0.374 (9.5)	0.630 (16.0)	0.709 (18.0)	0.591 (15.0)	0.032 (0.8)
0.15	DMM6P15K–F	0.394 (10.0)	0.670 (17.0)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)
0.22	DMM6P22K–F	0.433 (11.0)	0.788 (20.0)	1.024 (26.0)	0.886 (22.5)	0.032 (0.8)
0.33	DMM6P33K–F	0.512 (13.0)	0.866 (22.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
0.47	DMM6P47K–F	0.512 (13.0)	0.866 (22.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
0.68	DMM6P68K–F	0.591 (15.0)	1.024 (26.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)
1.00	DMM6W1K–F	0.689 (17.5)	1.182 (30.0)	1.221 (31.0)	1.083 (27.5)	0.032 (0.8)

Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.

Type DMT, Polyester Film Capacitors

Film/Foil
Radial Leads

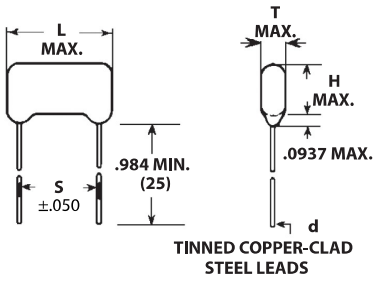


General Purpose, High Peak Currents, High Insulation Resistance

Type DMT radial-leaded, polyester film/foil noninductively wound film capacitors feature compact size and moisture-resistive epoxy coating. High insulation resistance and low dissipation factor, **Type DMT** is an ideal choice for most applications, especially with high peak currents.

Specifications

Voltage Range: 100-600 Vdc
Capacitance Range: .001-.68 µF
Capacitance Tolerance: ±10% (K) standard
±5% (J) optional
Operating Temperature Range: -55 °C to 125 °C*
*Full-rated voltage at 85 °C–Derate linearly to 50%-rated voltage at 125 °C
Dielectric Strength: 250% (1 minute)
Dissipation Factor: 1% Max. (25 °C, 1 kHz)
Insulation Resistance: 30,000 MΩ x µF
100,000 MΩ Min.
Life Test: 500 Hours at 85 °C at 125% Rated Voltage



NOTE: Other capacitance values, sizes and performance specifications are available. Contact us.

Ratings — RoHS Compliant

Cap.	Catalog	T		H		L		S		d		dV/dt
(µF)	Part Number	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	V/µs
					100 Vdc							
0.0010	DMT1D1K-F	0.197	(5.0)	0.354	(9.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	4550
0.0015	DMT1D15K-F	0.200	(5.1)	0.354	(9.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	4550
0.0022	DMT1D22K-F	0.210	(5.3)	0.354	(9.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	4550
0.0033	DMT1D33K-F	0.210	(5.3)	0.354	(9.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	4550
0.0047	DMT1D47K-F	0.210	(5.3)	0.354	(9.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	4550
0.0068	DMT1D68K-F	0.210	(5.3)	0.354	(9.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	4550
0.0100	DMT1S1K-F	0.220	(5.6)	0.354	(9.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	4550
0.0150	DMT1S15K-F	0.220	(5.6)	0.370	(9.4)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	4550
0.0220	DMT1S22K-F	0.256	(6.5)	0.390	(9.9)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	4550
0.0330	DMT1S33K-F	0.250	(6.3)	0.350	(8.9)	0.560	(14.2)	0.400	(10.2)	0.032	(0.8)	3300
0.0470	DMT1S47K-F	0.260	(6.6)	0.433	(11.0)	0.560	(14.2)	0.420	(10.7)	0.032	(0.8)	3300
0.0680	DMT1S68K-F	0.275	(7.0)	0.460	(11.7)	0.560	(14.2)	0.420	(10.7)	0.032	(0.8)	3300
0.1000	DMT1P1K-F	0.290	(7.4)	0.445	(11.3)	0.682	(17.3)	0.545	(13.8)	0.032	(0.8)	2100
0.1500	DMT1P15K-F	0.350	(8.9)	0.490	(12.4)	0.682	(17.3)	0.545	(13.8)	0.032	(0.8)	2100
0.2200	DMT1P22K-F	0.360	(9.1)	0.520	(13.2)	0.820	(20.8)	0.670	(17.0)	0.032	(0.8)	1600
0.3300	DMT1P33K-F	0.390	(9.9)	0.560	(14.2)	0.942	(23.9)	0.795	(20.2)	0.032	(0.8)	1600
0.4700	DMT1P47K-F	0.420	(10.7)	0.600	(15.2)	1.080	(27.4)	0.920	(23.4)	0.032	(0.8)	1050

RoHS Compliant

Cap.	Catalog	T		H		L		S		d		dV/dt
(µF)	Part Number	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	V/µs
0.5000	DMT1P5K-F	0.530	(13.5)	0.690	(17.5)	1.102	(28.0)	0.920	(23.4)	0.032	(0.8)	1050
0.6800	DMT1P68K-F	0.480	(12.2)	0.690	(17.5)	1.140	(28.9)	0.985	(25.0)	0.032	(0.8)	1050
1.0000	DMT1W1K-F	0.520	(13.2)	0.730	(18.5)	1.330	(33.8)	1.170	(29.7)	0.032	(0.8)	800
					200/250 Vdc							
0.0010	DMT2D1K-F	0.217	(5.5)	0.374	(9.5)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	6000
0.0015	DMT2D15K-F	0.217	(5.5)	0.374	(9.5)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	6000
0.0022	DMT2D22K-F	0.217	(5.5)	0.374	(9.5)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	6000
0.0033	DMT2D33K-F	0.217	(5.5)	0.374	(9.5)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	6000
0.0047	DMT2D47K-F	0.236	(6.0)	0.394	(10.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	6000
0.0068	DMT2D68K-F	0.236	(6.0)	0.394	(10.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	6000
0.0100	DMT2S1K-F	0.236	(6.0)	0.394	(10.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	6000
0.0150	DMT2S15K-F	0.236	(6.0)	0.395	(10.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	6000
0.0220	DMT2S22K-F	0.275	(7.0)	0.433	(11.0)	0.512	(13.0)	0.394	(10.0)	0.024	(0.6)	6000
0.0330	DMT2S33K-F	0.295	(7.5)	0.453	(11.0)	0.694	(17.6)	0.545	(13.8)	0.024	(0.6)	3000
0.0470	DMT2S47K-F	0.295	(7.5)	0.472	(12.0)	0.694	(17.6)	0.545	(13.8)	0.024	(0.6)	3000
0.0680	DMT2S68K-F	0.335	(8.5)	0.512	(13.0)	0.694	(17.6)	0.545	(13.8)	0.032	(0.8)	3000
0.1000	DMT2P1K-F	0.354	(9.0)	0.512	(13.0)	0.820	(20.8)	0.670	(17.0)	0.032	(0.8)	2100
0.1500	DMT2P15K-F	0.394	(10.0)	0.571	(14.5)	0.820	(20.8)	0.670	(17.0)	0.032	(0.8)	2100
0.2200	DMT2P22K-F	0.413	(10.5)	0.630	(16.0)	0.945	(24.0)	0.795	(20.2)	0.032	(0.8)	2100
0.3300	DMT2P33K-F	0.492	(12.5)	0.689	(17.5)	0.945	(24.0)	0.795	(20.2)	0.032	(0.8)	2100
0.4700	DMT2P47K-F	0.531	(13.5)	0.728	(18.5)	1.110	(28.2)	0.920	(23.4)	0.032	(0.8)	1360
0.6800	DMT2P68K-F	0.630	(16.0)	0.827	(21.0)	1.132	(28.7)	0.984	(25.0)	0.032	(0.8)	1360
					400 Vdc							
0.0010	DMT4D1K-F	0.197	(5.0)	0.354	(9.0)	0.569	(14.4)	0.400	(10.2)	0.024	(0.6)	14400
0.0015	DMT4D15K-F	0.221	(5.6)	0.356	(9.0)	0.569	(14.4)	0.400	(10.2)	0.024	(0.6)	14400
0.0022	DMT4D22K-F	0.221	(5.6)	0.356	(9.0)	0.569	(14.4)	0.400	(10.2)	0.024	(0.6)	14400
0.0033	DMT4D33K-F	0.221	(5.6)	0.374	(9.5)	0.569	(14.4)	0.400	(10.2)	0.024	(0.6)	14400
0.0047	DMT4D47K-F	0.241	(6.1)	0.394	(10.0)	0.569	(14.4)	0.400	(10.2)	0.024	(.6)	14400
0.0068	DMT4D68K-F	0.286	(7.3)	0.411	(10.4)	0.569	(14.4)	0.400	(10.2)	0.024	(0.6)	14400
0.0100	DMT4S1K-F	0.331	(8.4)	0.456	(11.6)	0.569	(14.4)	0.400	(10.2)	0.032	(0.8)	14400
0.0150	DMT4S15K-F	0.368	(9.3)	0.534	(13.6)	0.569	(14.4)	0.400	(10.2)	0.032	(0.8)	14400
0.0220	DMT4S22K-F	0.328	(8.3)	0.479	(12.2)	0.694	(17.6)	0.545	(13.8)	0.032	(0.8)	7200
0.0330	DMT4S33K-F	0.388	(9.9)	0.539	(13.7)	0.694	(17.6)	0.545	(13.8)	0.032	(0.8)	7200
0.0470	DMT4S47K-F	0.338	(8.6)	0.534	(13.6)	0.882	(22.4)	0.733	(18.6)	0.032	(0.8)	4100
0.0680	DMT4S68K-F	0.397	(10.1)	0.593	(15.1)	0.882	(22.4)	0.733	(18.6)	0.032	(0.8)	4100
0.1000	DMT4P1K-F	0.472	(12.0)	0.668	(17.0)	0.882	(22.4)	0.733	(18.6)	0.032	(0.8)	4100
0.1500	DMT4P15K-F	0.408	(10.4)	0.810	(20.6)	1.069	(27.1)	0.920	(23.4)	0.032	(0.8)	2900
0.2200	DMT4P22K-F	0.418	(10.6)	0.811	(20.6)	1.319	(33.5)	1.170	(29.7)	0.032	(0.8)	2100
0.3300	DMT4P33K-F	0.415	(10.5)	0.844	(21.4)	1.569	(39.8)	1.420	(36.1)	0.032	(0.8)	2100
0.4700	DMT4P47K-F	0.541	(13.7)	0.934	(23.7)	1.569	(39.8)	1.420	(36.1)	0.032	(0.8)	2100
					600/630 Vdc							
0.0010	DMT6D1K-F	0.218	(5.5)	0.326	(8.3)	0.694	(17.6)	0.545	(13.8)	0.024	(0.6)	15000
0.0015	DMT6D15K-F	0.221	(5.6)	0.329	(8.4)	0.694	(17.6)	0.545	(13.8)	0.024	(0.6)	15000
0.0022	DMT6D22K-F	0.251	(6.4)	0.359	(9.1)	0.694	(17.6)	0.545	(13.8)	0.024	(0.6)	15000
0.0033	DMT6D33K-F	0.251	(6.4)	0.376	(9.5)	0.694	(17.6)	0.545	(13.8)	0.032	(0.8)	15000
0.0047	DMT6D47K-F	0.284	(7.2)	0.409	(10.4)	0.694	(17.6)	0.545	(13.8)	0.032	(0.8)	15000

Type DMT, Polyester Film Capacitors

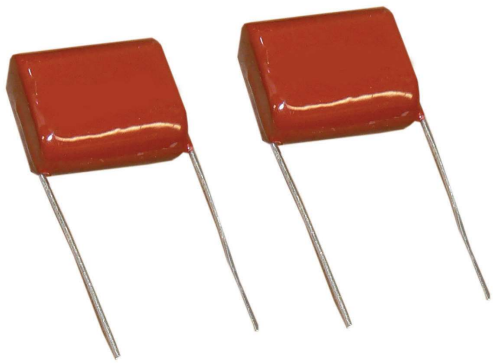
RoHS Compliant

Cap.	Catalog	T		H		L		S		d		dV/dt
(µF)	Part Number	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	V/µs
					600/630 Vdc							
0.0068	DMT6D68K-F	0.313	(7.9)	0.464	(11.8)	0.694	(17.6)	0.545	(13.8)	0.032	(0.8)	15000
0.0100	DMT6S1K-F	0.364	(9.2)	0.515	(13.1)	0.694	(17.6)	0.545	(13.8)	0.032	(0.8)	15000
0.0150	DMT6S15K-F	0.342	(8.7)	0.508	(12.9)	0.820	(20.8)	0.670	(17.0)	0.032	(0.8)	7400
0.0220	DMT6S22K-F	0.402	(10.2)	0.568	(14.4)	0.820	(20.8)	0.670	(17.0)	0.032	(0.8)	7400
0.0330	DMT6S33K-F	0.443	(11.2)	0.609	(15.5)	0.882	(22.4)	0.733	(18.6)	0.032	(0.8)	7400
0.0470	DMT6S47K-F	0.519	(13.2)	0.685	(17.4)	0.882	(22.4)	0.733	(18.6)	0.032	(0.8)	7400
0.0680	DMT6S68K-F	0.453	(11.5)	0.649	(16.5)	1.194	(30.3)	1.045	(26.5)	0.032	(0.8)	4000
0.1000	DMT6P1K-F	0.541	(13.7)	0.737	(18.7)	1.194	(30.3)	1.045	(26.5)	0.032	(0.8)	4000
0.1500	DMT6P15K-F	0.656	(16.7)	0.926	(23.5)	1.194	(30.3)	1.045	(26.5)	0.032	(0.8)	4000
0.2200	DMT6P22K-F	0.630	(16.0)	1.024	(26.0)	1.444	(36.7)	1.295	(32.9)	0.032	(0.8)	3000
0.3300	DMT6P33K-F	0.650	(16.5)	1.010	(25.6)	1.819	(46.2)	1.670	(42.4)	0.032	(0.8)	3000
0.4700	DMT6P47K-F	0.739	(18.8)	1.132	(28.7)	1.819	(46.2)	1.670	(42.4)	0.032	(0.8)	3000

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Type DPFF High AC Current Polypropylene Film Capacitors

High Voltage Single and Series Section Film/Foil Polypropylene Capacitors



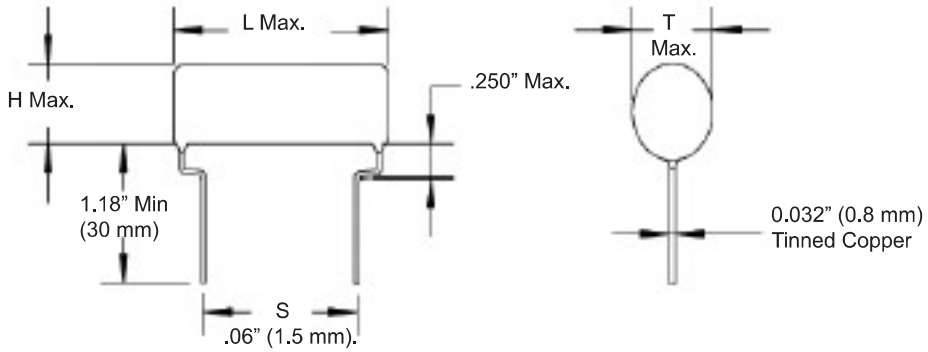
Type DPFF radial leaded polypropylene film/foil capacitors feature single and series section construction. Part numbers with the "S" suffix have extended aluminum foil with a floating metallized film. Excellent temperature stability to 105 ºC and low loss characteristics, make Type DPFF ideal for high AC current and pulse applications.

Highlights

- High dv/dt
- High AC current
- Good for pulse applications
- Low DF

RoHS Compliant

Outline Drawing



NOTE: Other capacitance values, sizes and performance specifications are available. Please contact CDE.

Specifications

Capacitance Range: 0.001 to 0.47 µF
Voltage Range: 200 to 1600 Vdc (155 to 500 Vac 60 Hz)
Capacitance Tolerance: ±5% standard, ±10% optional
Operating Temperature Range: –55 ºC to +105 ºC (derate linearly to 50% rated voltage at +105 ºC
Dielectric Strength: 250% (≤800 Vdc) 200% (1200 and 1600 Vdc) for 1 minute
Dissipation Factor: 0.10% Max. (+25 ºC, 1 KHz)
Insulation Resistance: 50,000 MΩ·µF, 100,000 MΩ Min.
Life Test: 500 hr @ 85 ºC @ 125% rated voltage
Pulse Capability:

Rated Volts	Body Length			
	.700-.750	.900-.950	1.250-1.300	1.650-1.700
	dV/dt — volts per microsecond, maximum			
200	4600	2400	1400	720
400	6000	3200	1800	840
600	8000	6600	2800	1200
800			6000	3200
1200			6800	3200
1600			11600	6000

Type DPFF High AC Current Polypropylene Film Capacitors

Ratings

Cap (µF)	Catalog Part Number	T Max. Inches (mm)	H Max. Inches (mm)	L Max. Inches (mm)	S ±0.06 (±1.5) Inches (mm)
200/250 Vdc (155 Vac 60 Hz)					
.0120	DPFF2S12J–F	0.37 (9.4)	0.37 (9.4)	0.75 (19.1)	0.374 (9.5)
.0150	DPFF2S15J–F	0.37 (9.4)	0.37 (9.4)	0.75 (19.1)	0.374 (9.5)
.0150	DPFF2S15JS–F	0.28 (7.1)	0.34 (8.6)	0.70 (17.8)	0.374 (9.5)
.0180	DPFF2S18J–F	0.37 (9.4)	0.37 (9.4)	0.75 (19.1)	0.374 (9.5)
.0220	DPFF2S22J–F	0.37 (9.4)	0.37 (9.4)	0.75 (19.1)	0.374 (9.5)
.0220	DPFF2S22JS–F	0.31 (7.9)	0.37 (9.4)	0.70 (17.8)	0.374 (9.5)
.0270	DPFF2S27J–F	0.42 (10.7)	0.42 (10.7)	0.75 (19.1)	0.374 (9.5)
.0330	DPFF2S33J–F	0.42 (10.7)	0.42 (10.7)	0.75 (19.1)	0.374 (9.5)
.0330	DPFF2S33JS–F	0.36 (9.1)	0.42 (10.7)	0.70 (17.8)	0.374 (9.5)
.0390	DPFF2S39J–F	0.40 (10.2)	0.40 (10.2)	0.95 (24.1)	0.374 (9.5)
.0470	DPFF2S47J–F	0.40 (10.2)	0.40 (10.2)	0.95 (24.1)	0.374 (9.5)
.0470	DPFF2S47JS–F	0.34 (8.6)	0.40 (10.2)	0.90 (22.9)	0.374 (9.5)
.0560	DPFF2S56J–F	0.45 (11.4)	0.45 (11.4)	0.95 (24.1)	0.374 (9.5)
.0680	DPFF2S68J–F	0.45 (11.4)	0.45 (11.4)	0.95 (24.1)	0.374 (9.5)
.0680	DPFF2S68JS-F	0.39 (9.9)	0.45 (11.4)	0.90 (22.9)	0.374 (9.5)
.0820	DPFF2S82J–F	0.45 (11.4)	0.45 (11.4)	1.30 (33.0)	0.72 (18.3)
.1000	DPFF2P1J–F	0.45 (11.4)	0.45 (11.4)	1.25 (31.8)	0.72 (18.3)
.1000	DPFF2P1JS–F	0.38 (9.7)	0.44 (11.2)	1.25 (31.8)	0.72 (18.3)
.1200	DPFF2P12J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.1500	DPFF2P15J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.1500	DPFF2P15JS–F	0.44 (11.2)	0.50 (12.7)	1.25 (31.8)	0.72 (18.3)
.1800	DPFF2P18J–F	0.62 (15.7)	0.62 (15.7)	1.30 (33.0)	0.72 (18.3)
.2200	DPFF2P22J–F	0.62 (15.7)	0.62 (15.7)	1.30 (33.0)	0.72 (18.3)
.2200	DPFF2P22JS–F	0.51 (13.0)	0.57 (14.5)	1.25 (31.8)	0.72 (18.3)
.2700	DPFF2P27J–F	0.65 (16.5)	0.65 (14.5)	1.70 (43.2)	1.095 (27.8)
.3300	DPFF2P33J–F	0.65 (16.5)	0.65 (14.5)	1.65 (41.9)	1.095 (27.8)
.3300	DPFF2P33JS-F	0.53 (13.5)	0.59 (15.0)	1.65 (41.9)	1.095 (27.8)
.3900	DPFF2P39J–F	0.75 (19.1)	0.75 (19.1)	1.70 (43.2)	1.095 (27.8)
.4700	DPFF2P47J–F	0.75 (19.1)	0.75 (19.1)	1.70 (43.2)	1.095 (27.8)
.4700	DPFF2P47JS–F	0.6 (15.2)	0.66 (168)	1.65 (41.9)	1.095 (27.8)
400 Vdc (200 Vac 60 Hz)					
.0039	DPFF4D39J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0047	DPFF4D47J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0056	DPFF4D56J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0068	DPFF4D68J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0082	DPFF4D82J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0100	DPFF4S1J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0120	DPFF4S12J–F	0.45 (11.4)	0.45 (11.4)	0.75 (19.1)	0.374 (9.5)
.0150	DPFF4S15J–F	0.45 (11.4)	0.45 (11.4)	0.75 (19.1)	0.374 (9.5)
.0150	DPFF4S15JS–F	0.34 (8.6)	0.40 (10.2)	0.70 (17.8)	0.374 (9.5)
.0180	DPFF4S18J–F	0.45 (11.4)	0.45 (11.4)	0.95 (24.1)	0.374 (9.5)
.0220	DPFF4S22J–F	0.45 (11.4)	0.45 (11.4)	0.95 (24.1)	0.374 (9.5)
.0270	DPFF4S27J–F	0.50 (12.7)	0.50 (12.7)	0.95 (24.1)	0.374 (9.5)
.0330	DPFF4S33J–F	0.50 (12.7)	0.50 (12.7)	0.95 (24.1)	0.374 (9.5)
.0330	DPFF4S33JS–F	0.38 (9.7)	0.44 (11.2)	0.90 (22.9)	0.374 (9.5)
.0390	DPFF4S39J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)

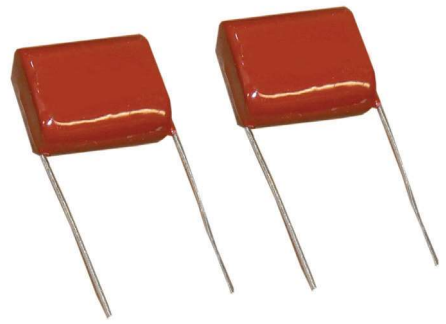
Cap (µF)	Catalog Part Number	T Max. Inches (mm)	H Max. Inches (mm)	L Max. Inches (mm)	S ±0.06 (±1.5) Inches (mm)
400 Vdc (200 Vac 60 Hz)					
.0470	DPFF4S47J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0560	DPFF4S56J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.0680	DPFF4S68J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.0820	DPFF4S82J–F	0.60 (15.2)	0.60 (15.2)	1.30 (33.0)	0.72 (18.3)
.1000	DPFF4P1J–F	0.60 (15.2)	0.60 (15.2)	1.30 (33.0)	0.72 (18.3)
.1200	DPFF4P12J–F	0.65 (16.5)	0.65 (16.5)	1.30 (33.0)	0.72 (18.3)
.1500	DPFF4P15J–F	0.65 (16.5)	0.65 (16.5)	1.30 (33.0)	0.72 (18.3)
.1500	DPFF4P15JS–F	0.56 (14.2)	0.62 (15.7)	1.25 (31.8)	0.72 (18.3)
.1800	DPFF4P18J–F	0.70 (17.8)	0.70 (17.8)	1.70 (43.2)	1.095 (27.8)
.2200	DPFF4P22J–F	0.70 (17.8)	0.70 (17.8)	1.70 (43.2)	1.095 (27.8)
.2200	DPFF4P22JS-F	0.58 14.7)	0.64 (16.3)	1.65 (41.9)	1.095 (27.8)
.2700	DPFF4P27J–F	0.80 (20.3)	0.80 (20.3)	1.70 (43.2)	1.095 (27.8)
.3300	DPFF4P33J–F	0.80 (20.3)	0.80 (20.3)	1.70 (43.2)	1.095 (27.8)
.3300	DPFF4P33JS–F	0.70 (17.8)	0.76 (19.3)	1.65 (41.9)	1.095 (27.8)
.3900	DPFF4P39J–F	0.90 (22.9)	0.90 (22.9)	1.70 (43.2)	1.095 (27.8)
.4700	DPFF4P47J–F	0.90 (22.9)	0.90 (22.9)	1.70 (43.2)	1.095 (27.8)
.4700	DPFF4P47JS–F	0.82 (20.8)	0.88 (22.4)	1.65 (41.9)	1.095 (27.8)
600/630 Vdc (200 Vac 60 Hz)					
.0010	DPFF6D1J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0012	DPFF6D12J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0015	DPFF6D15J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0015	DPFF6D15JS–F	0.32 (8.1)	0.36 (9.1)	0.70 (17.8)	0.374 (9.5)
.0018	DPFF6D18J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0022	DPFF6D22J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0027	DPFF6D27J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0033	DPFF6D33J–F	0.40 (10.2)	0.40 (10.2)	0.75 (19.1)	0.374 (9.5)
.0033	DPFF6D33JS–F	0.32 (8.1)	0.36 (9.1)	0.70 (17.8)	0.374 (9.5)
.0039	DPFF6D39J–F	0.45 (11.4)	0.45 (11.4)	0.75 (19.1)	0.374 (9.5)
.0047	DPFF6D47J–F	0.45 (11.4)	0.45 (11.4)	0.75 (19.1)	0.374 (9.5)
.0047	DPFF6D47JS–F	0.34 (8.6)	0.38 (9.7)	0.70 (17.8)	0.374 (9.5)
.0056	DPFF6D56J–F	0.45 (11.4)	0.45 (11.4)	0.75 (19.1)	0.374 (9.5)
.0068	DPFF6D68J–F	0.45 (11.4)	0.45 (11.4)	0.75 (19.1)	0.374 (9.5)
.0068	DPFF6D68JS–F	0.38 (9.7)	0.42 (10.7)	0.70 (17.8)	0.374 (9.5)
.0082	DPFF6D82J–F	0.45 (11.4)	0.45 (11.4)	0.95 (24.1)	0.374 (9.5)
.0100	DPFF6S1J–F	0.45 (11.4)	0.45 (11.4)	0.95 (24.1)	0.374 (9.5)
.0100	DPFF6S1JS–F	0.36 (8.1)	0.40 (10.2)	0.90 (22.9)	0.374 (9.5)
.0120	DPFF6S12J–F	0.50 (12.7)	0.50 (12.7)	0.95 (24.1)	0.374 (9.5)
.0150	DPFF6S15J–F	0.50 (12.7)	0.50 (12.7)	0.95 (24.1)	0.374 (9.5)
.0150	DPFF6S15JS–F	0.42 (10.7)	0.46 (11.7)	0.90 (22.9)	0.374 (9.5)
.0180	DPFF6S18J–F	0.55 (14.0)	0.55 (14.0)	0.95 (24.1)	0.374 (9.5)
.0220	DPFF6S22J–F	0.55 (14.0)	0.55 (14.0)	0.95 (24.1)	0.374 (9.5)
.0220	DPFF6S22JS–F	0.48 (12.2)	0.52 (13.2)	0.90 (22.9)	0.374 (9.5)
.0270	DPFF6S27J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.0270	DPFF6S27JS–F	0.43 (10.9)	0.47 (11.9)	1.25 (31.8)	0.72 (18.3)
.0330	DPFF6S33J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.0390	DPFF6S39J–F	0.60 (15.2)	0.60 (15.2)	1.30 (33.0)	0.72 (18.3)

Cap (µF)	Catalog Part Number	T Max. Inches (mm)	H Max. Inches (mm)	L Max. Inches (mm)	S ±0.06 (±1.5) Inches (mm)
		600/630 Vdc (200 Vac 60 Hz)			
.0470	DPFF6S47J–F	0.60 (15.2)	0.60 (15.2)	1.30 (33.0)	0.72 (18.3)
.0560	DPFF6S56J–F	0.65 (16.5)	0.65 (16.5)	1.30 (33.0)	0.72 (18.3)
.0680	DPFF6S68J–F	0.65 (16.5)	0.65 (16.5)	1.30 (33.0)	0.72 (18.3)
.0680	DPFF6S68JS–F	0.60 (15.2)	0.64 (16.3)	1.25 (31.8)	0.72 (18.3)
.0820	DPFF6S82J–F	0.75 (16.0)	0.75 (16.0)	1.30 (33.0)	0.72 (18.3)
.1000	DPFF6P1J–F	0.75 (16.0)	0.75 (16.0)	1.30 (33.0)	0.72 (18.3)
.1000	DPFF6P1JS–F	0.71 (18.0)	0.75 (16.0)	1.25 (31.8)	0.72 (18.3)
.1200	DPFF6P12J–F	0.75 (19.0)	0.75 (19.0)	1.70 (43.2)	1.095 (27.8)
.1500	DPFF6P15J–F	0.75 (19.0)	0.75 (19.0)	1.70 (43.2)	1.095 (27.8)
.1500	DPFF6P15JS–F	0.71 (18.0)	0.75 (19.0)	1.65 (41.9)	1.095 (27.8)
.1800	DPFF6P18J–F	0.85 (21.6)	0.85 (21.6)	1.70 (43.2)	1.095 (27.8)
.2200	DPFF6P22J–F	0.85 (21.6)	0.85 (21.6)	1.70 (43.2)	1.095 (27.8)
.2200	DPFF6P22JS–F	0.83 (21.1)	0.85 (21.6)	1.65 (41.9)	1.095 (27.8)
		800 Vdc (450 Vac 60 Hz)			
.0056	DPFF8D56J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0056	DPFF8D56JS–F	0.28 (7.1)	0.34 (8.6)	1.25 (31.8)	0.72 (18.3)
.0068	DPFF8D68J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0082	DPFF8D82J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0100	DPFF8S1J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0100	DPFF8S1JS–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0120	DPFF8S12J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.0120	DPFF8S12JS–F	0.35 (8.9)	0.41 (10.4)	1.25 (31.8)	0.72 (18.3)
.0150	DPFF8S15J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.0150	DPFF8S15JS–F	0.38 (9.7)	0.44 (11.2)	1.25 (31.8)	0.72 (18.3)
.0180	DPFF8S18J–F	0.60 (15.2)	0.60 (15.2)	1.30 (33.0)	0.72 (18.3)
.0220	DPFF8S22J–F	0.60 (15.2)	0.60 (15.2)	1.30 (33.0)	0.72 (18.3)
.0220	DPFF8S22JS–F	0.44 (11.2)	0.50 (12.7)	1.25 (31.8)	0.72 (18.3)
.0270	DPFF8S27J–F	0.70 (17.8)	0.70 (17.8)	1.30 (33.0)	0.72 (18.3)
.0330	DPFF8S33J–F	0.70 (17.8)	0.70 (17.8)	1.30 (33.0)	0.72 (18.3)
.0330	DPFF8S33JS–F	0.51 (13.0)	0.57 ((14.5)	1.25 (31.8)	0.72 (18.3)
.0390	DPFF8S39J–F	0.70 (17.8)	0.70 (17.8)	1.70 (43.2)	1.095 (27.8)
.0470	DPFF8S47J–F	0.70 (17.8)	0.70 (17.8)	1.70 (43.2)	1.095 (27.8)
.0560	DPFF8S56J–F	0.80 (20.3)	0.80 (20.3)	1.70 (43.2)	1.095 (27.8)
.0680	DPFF8S68J–F	0.80 (20.3)	0.80 (20.3)	1.70 (43.2)	1.095 (27.8)
.0680	DPFF8S68JS–F	0.58 (14.7)	0.64 (16.3)	1.65 (41.9)	1.095 (27.8)
.0820	DPFF8S82J–F	0.90 (22.9)	0.90 (22.9)	1.70 (43.2)	1.095 (27.8)
.1000	DPFF8P1J–F	0.90 (22.9)	0.90 (22.9)	1.70 (43.2)	1.095 (27.8)
.1000	DPFF8P1JS–F	0.67 (17.0)	0.73 (18.5)	1.65 (41.9)	1.095 (27.8)
		1200 Vdc (475 Vac 60 Hz)			
.0027	DPFF12D27J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0033	DPFF12D33J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0039	DPFF12D39J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0047	DPFF12D47J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0056	DPFF12D56J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.0068	DPFF12D68J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.0082	DPFF12D82J–F	0.60 (15.2)	0.60 (15.2)	1.30 (33.0)	0.72 (18.3)

Cap (µF)	Catalog Part Number	T Max. Inches (mm)	H Max. Inches (mm)	L Max. Inches (mm)	S ±0.06 (±1.5) Inches (mm)
		1200 Vdc (475 Vac 60 Hz)			
.0100	DPFF12S1J–F	0.60 (15.2)	0.60 (15.2)	1.30 (33.0)	0.72 (18.3)
.0120	DPFF12S12J–F	0.65 (16.5)	0.65 (16.5)	1.30 (33.0)	0.72 (18.3)
.0150	DPFF12S15J–F	0.65 (16.5)	0.65 (16.5)	1.30 (33.0)	0.72 (18.3)
.0150	DPFF12S15JS–F	0.55 (14.0)	0.61 (15.5)	1.25 (31.8)	0.72 (18.3)
.0180	DPFF12S18J–F	0.65 (16.5)	0.65 (16.5)	1.30 (33.0)	1.095 (27.8)
.0220	DPFF12S22J–F	0.65 (16.5)	0.65 (16.5)	1.30 (33.0)	1.095 (27.8)
.0270	DPFF12S27J–F	0.75 (16.0)	0.75 (16.0)	1.70 (43.2)	1.095 (27.8)
.0330	DPFF12S33J–F	0.75 (16.0)	0.75 (16.0)	1.70 (43.2)	1.095 (27.8)
.0390	DPFF12S39J–F	0.85 (21.6)	0.85 (21.6)	1.70 (43.2)	1.095 (27.8)
.0390	DPFF12S39JS–F	0.68 (17.3)	0.74 (18.8)	1.65 (41.9)	1.095 (27.8)
.0470	DPFF12S47J–F	0.85 (21.6)	0.85 (21.6)	1.70 (43.2)	1.095 (27.8)
		1600 Vdc (500 Vac 60 Hz)			
.0010	DPFF16D1JS–F	0.29 (7.4)	0.33 (8.4)	1.25 (31.8)	0.72 (18.3)
.0012	DPFF16D12JS–F	0.30 (7.6)	0.34 (8.6)	1.25 (31.8)	0.72 (18.3)
.0015	DPFF16D15JS–F	0.32 (8.1)	0.36 (9.1)	1.25 (31.8)	0.72 (18.3)
.0018	DPFF16D18J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0022	DPFF16D22J–F	0.50 (12.7)	0.50 (12.7)	1.30 (33.0)	0.72 (18.3)
.0022	DPFF16D22JS–F	0.35 (8.9)	0.39 (9.9)	1.25 (31.8)	0.72 (18.3)
.0027	DPFF16D27J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.0033	DPFF16D33J–F	0.55 (14.0)	0.55 (14.0)	1.30 (33.0)	0.72 (18.3)
.0033	DPFF16D33JS–F	0.40 (10.2)	0.44 (11.2)	1.25 (31.8)	0.72 (18.3)
.0039	DPFF16D39J–F	0.60 (15.2)	0.60 (15.2)	1.30 (33.0)	0.72 (18.3)
.0047	DPFF16D47J–F	0.60 (15.2)	0.60 (15.2)	1.30 (33.0)	0.72 (18.3)
.0047	DPFF16D47JS–F	0.46 (11.7)	0.50 (12.7)	1.25 (31.8)	0.72 (18.3)
.0056	DPFF16D56J–F	0.65 (16.5)	0.65 (16.5)	1.30 (33.0)	0.72 (18.3)
.0068	DPFF16D68J–F	0.65 (16.5)	0.65 (16.5)	1.30 (33.0)	0.72 (18.3)
.0068	DPFF16D68JS–F	0.52 (13.2)	0.56 (14.2)	1.25 (31.8)	0.72 (18.3)
.0082	DPFF16D82J–F	0.70 (17.8)	0.70 (17.8)	1.30 (33.0)	0.72 (18.3)
.0100	DPFF16S1J–F	0.70 (17.8)	0.70 (17.8)	1.30 (33.0)	0.72 (18.3)
.0100	DPFF16S1JS–F	0.61 (15.5)	0.65 (16.5)	1.25 (31.8)	0.72 (18.3)
.0120	DPFF16S12J–F	0.75 (19.1)	0.75 (19.1)	1.70 (43.2)	1.095 (27.8)
.0150	DPFF16S15J–F	0.75 (19.1)	0.75 (19.1)	1.70 (43.2)	1.095 (27.8)
.0150	DPFF16S15JS–F	0.59 (15.0)	0.63 (16.0)	1.65 (41.9)	1.095 (27.8)
.0180	DPFF16S18J–F	0.85 (21.6)	0.85 (21.6)	1.70 (43.2)	1.095 (27.8)
.0220	DPFF16S22J–F	0.85 (21.6)	0.85 (21.6)	1.70 (43.2)	1.095 (27.8)
.0270	DPFF16S27J–F	0.95 (24.1)	0.95 (24.1)	1.70 (43.2)	1.095 (27.8)
0.033	DPFF16S33J–F	0.95 (24.1)	0.95 (24.1)	1.70 (43.2)	1.095 (27.8)
0.033	DPFF16S33JS–F	0.81 (20.6)	0.85 (21.6)	1.65 (41.9)	1.095 (27.8)

Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.

Type DPP Polypropylene Radial Leaded Film Capacitors



High Frequency **Film/Foil**
Precise Values **Radial Leaded**

Type DPP radial leaded polypropylene film/foil capacitors are non-inductively wound. Very low dissipation factor and high insulation resistance contribute to excellent performance and long-term stability characteristics. Low ESR, DF and its inherent stability make **Type DPP** an ideal choice for tight tolerance, pulse and high-frequency applications.

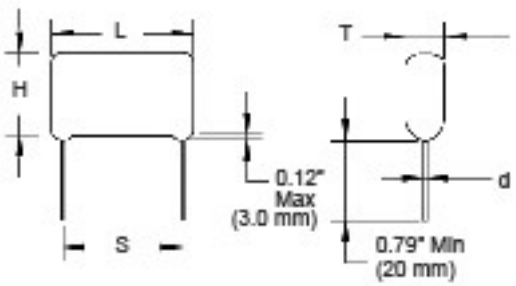
Specifications

Capacitance Range: 0.001 to 0.47 µF
Voltage Range: 100 to 630 Vdc
(70 to 250 Vac, 60 Hz)
Capacitance Tolerance: ±10% standard,
±5% optional
Operating Temperature Range: –55 ºC to +105 ºC*
*Full rated voltage at 85 ºC, derated linearly to 50% rated voltage at +105 ºC

Dielectric Strength: 200% (1 minute)
Dissipation Factor: 0.10% Max. (+25 ºC, 1 kHz)
Insulation Resistance: 50,000 MΩ·µF,
100,000 MΩ Min.
Life Test: 1000 hr at 85 ºC at 125% rated voltage

RoHS Compliant

Pulse Capability			
Rated Volts	Body Length		
	0.630	.790 - .940	≥1.02
	dV/dt — volts per microsecond, max.		
100	4200	4000	1900
250	6900	4100	2400
400	19000	10000	3200
630	60000	20000	6700



NOTE: Other capacitance values, sizes and performance specifications are available. Please contact CDE.

Ratings

Cap (µF)	Catalog Part Number	T Max. Inches (mm)	H Max. Inches (mm)	L Max. Inches (mm)	S ±0.06 (±1.5) Inches (mm)	d ±0.05 (1.27) Inches (mm)
100 Vdc (70 Vac 60 Hz)						
.033	DPP1S33K-F	0.315 (8.0)	0.532 (13.5)	0.768 (19.5)	0.591 (15.0)	.024 (.6)
.047	DPP1S47K-F	0.335 (8.5)	0.610 (15.5)	0.768 (19.5)	0.591 (15.0)	.024 (.6)
.068	DPP1S68K-F	0.374 (9.5)	0.650 (16.5)	0.788 (20.0)	0.591 (15.0)	.024 (.6)
.10	DPP1P1K-F	0.394 (10.4)	0.670 (17.0)	1.024 (26.0)	0.788 (20.0)	.024 (.6)
.15	DPP1P15K-F	0.433 (11.0)	0.748 (19.0)	1.024 (26.0)	0.788 (20.0)	.032 (.8)
.22	DPP1P22K-F	0.512 (13.0)	0.748 (19.0)	1.024 (26.0)	0.788 (20.0)	.032 (.8)
.33	DPP1P33K-F	0.551 (14.0)	0.827 (21.0)	1.260 (32.0)	1.083 (27.5)	.032 (.8)
.47	DPP1P47K-F	0.630 (16.0)	0.945 (24.0)	1.260 (32.0)	1.083 (27.5)	.032 (.8)
250 Vdc (140 Vac 60 Hz)						
.010	DPP2S1K-F	0.276 (7.0)	0.473 (12.0)	0.591 (15.0)	0.394 (10.0)	0.024 (.6)
.015	DPP2S15K-F	0.295 (7.5)	0.473 (12.0)	0.591 (15.0)	0.394 (10.0)	0.024 (.6)
.022	DPP2S22K-F	0.315 (8.0)	0.512 (13.0)	0.591 (15.0)	0.394 (10.0)	0.024 (.6)

Type DPP Polypropylene Radial Leaded Film Capacitors

Cap (µF)	Catalog Part Number	T Max. Inches (mm)	H Max. Inches (mm)	L Max. Inches (mm)	S ±0.06 (±1.5) Inches (mm)	d ±0.05 (1.27) Inches (mm)
			250 Vdc (140 Vac 60 Hz)			
.033	DPP2S33K-F	0.335 (8.5)	0.551 (14.0)	0.788 (20.0)	0.591 (15.0)	0.024 (.6)
.047	DPP2S47K-F	0.354 (9.0)	0.630 (16.0)	0.788 (20.0)	0.591 (15.0)	0.024 (.6)
.068	DPP2S68K-F	0.433 (11.0)	0.630 (16.0)	0.788 (20.0)	0.591 (15.0)	0.024 (.6)
.10	DPP2P1K-F	0.394 (10.0)	0.709 (18.0)	1.024 (26.0)	0.788 (20.0)	0.032 (.8)
.15	DPP2P15K-F	0.473 (12.0)	0.866 (22.0)	1.024 (26.0)	0.788 (20.0)	0.032 (.8)
.22	DPP2P22K-F	0.551 (14.0)	0.945 (24.0)	1.024 (26.0)	0.788 (20.0)	0.032 (.8)
.33	DPP2P33K-F	0.591 (15.0)	0.985 (25.0)	1.260 (32.0)	1.083 (27.5)	0.032 (.8)
.47	DPP2P47K-F	0.680 (16.0)	1.063 (27.0)	1.260 (32.0)	1.083 (27.5)	0.032 (.8)
			400 Vdc (250 Vac 60 Hz)			
.010	DPP4S1K-F	0.335 (8.5)	0.551 (14.0)	0.591 (15.0)	0.394 (10.0)	0.024 (.6)
.015	DPP4S15K-F	0.354 (9.0)	0.591 (15.0)	0.591 (15.0)	0.394 (10.0)	0.024 (.6)
.022	DPP4S22K-F	0.394 (10.0)	0.670 (17.0)	0.768 (19.5)	0.591 (15.0)	0.024 (.6)
.033	DPP4S33K-F	0.394 (10.0)	0.670 (17.0)	0.768 (19.5)	0.591 (15.0)	0.024 (.6)
.047	DPP4S47K-F	0.354 (9.0)	0.630 (16.0)	1.024 (26.0)	0.788 (20.0)	0.032 (.8)
.068	DPP4S68K-F	0.433 (11.0)	0.709 (18.0)	1.024 (26.0)	0.788 (20.0)	0.032 (.8)
.10	DPP4P1K-F	0.473 (12.0)	0.788 (20.0)	1.260 (32.0)	1.083 (27.5)	0.032 (.8)
.15	DPP4P15K-F	0.473 (12.0)	0.906 (23.0)	1.260 (32.0)	1.083 (27.5)	0.032 (.8)
			630 Vdc (250 Vac 60 Hz)			
.0010	DPP6 D1K-F	0.256 (6.5)	0.492 (12.5)	0.591 (15.0)	0.394 (10.0)	.024 (.6)
.0015	DPP6 D15K-F	0.276 (7.0)	0.492 (12.5)	0.591 (15.0)	0.394 (10.0)	.024 (.6)
.0022	DPP6 D22K-F	0.276 (7.0)	0.492 (12.5)	0.591 (15.0)	0.394 (10.0)	.024 (.6)
.0033	DPP6 D33K-F	0.295 (7.5)	0.473 (12.0)	0.768 (19.5)	0.591 (15.0)	.024 (.6)
.0047	DPP6 D47K-F	0.315 (8.0)	0.492 (12.5)	0.768 (19.5)	0.591 (15.0)	.024 (.6)
.0068	DPP6 D68K-F	0.354 (9.0)	0.551 (14.0)	0.768 (19.5)	0.591 (15.0)	.024 (.6)
.010	DPP6S1K-F	0.354 (9.0)	0.551 (14.0)	1.024 (26.0)	0.788 (20.0)	.024 (.6)
.015	DPP6S15K-F	0.394 (10.0)	0.630 (16.0)	1.024 (26.0)	0.788 (20.0)	.024 (.6)
.022	DPP6S22K-F	0.433 (11.0)	0.670 (17.0)	1.024 (26.0)	0.788 (20.0)	.024 (.6)
.033	DPP6S33K-F	0.433 (11.0)	0.670 (17.0)	1.260 (32.0)	1.083 (27.5)	.032 (.8)
.047	DPP6S47K-F	0.492 (12.5)	0.748 (19.0)	1.260 (32.0)	1.083 (27.5)	.032 (.8)
.068	DPP6S68K-F	0.551 (14.0)	0.866 (22.0)	1.260 (32.0)	1.083 (27.5)	.032 (.8)
.100	DPP6P1K-F	0.512 (13.0)	0.866 (22.0)	1.260 (32.0)	1.083 (27.5)	.032 (.8)

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Type DPPM Polypropylene Film Capacitors

Foil/Metallized Hybrid, Radial Leaded



Great for Compact Snubber Applications

Type DPPM radial-leaded, film/foil polypropylene capacitors utilize series wound extended foil with floating metallized common film construction. **Type DPPM** offers excellent high frequency and high current capabilities and self-healing characteristics. With low inductance and high dV/dt characteristics, **Type DPPM** is ideal for snubber applications.

Specifications

Capacitance Range: .001-.047 µF

Voltage Range: 1000-2000 Vdc (450-500 Vac, 60 Hz)

Capacitance Tolerance: ±10% (K) standard
±5% (J), ±20% (M) optional

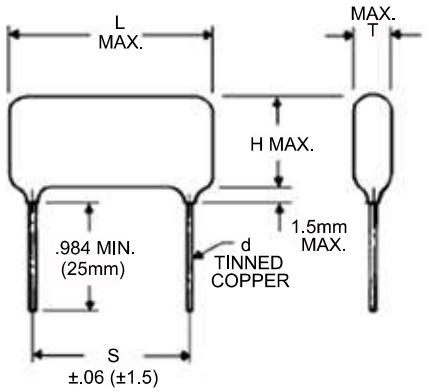
Operating Temperature Range: -40 °C to 105 °C*
*Full-rated voltage at 85 °C–Derate linearly to 50%-rated voltage at 105 °C

Dielectric Strength: 175% (1 minute)

Dissipation Factor: 0.1% Max. (25 °C, 1kHz)

Insulation Resistance: 400,000 MΩ Min.

Life Test: 500 hours at 85 °C at 125% rated voltage



NOTE: Other capacitance values, sizes and performance pecifications are available. Contact us.

Ratings

RoHS Compliant

Cap. µF	Catalog Part Number	T Inches (mm)	H Inches (mm)	L Inches (mm)	S Inches (mm)	d Inches (mm)	dV/dt V/µs
1000 Vdc (450 Vac)							
.0010	DPPM10D1K-F	0.256 (6.5)	0.452 (11.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0012	DPPM10D12K-F	0.256 (6.5)	0.452 (11.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0015	DPPM10D15K-F	0.256 (6.5)	0.452 (11.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0018	DPPM10D18K-F	0.256 (6.5)	0.452 (11.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0022	DPPM10D22K-F	0.256 (6.5)	0.452 (11.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0027	DPPM10D27K-F	0.275 (7.0)	0.472 (12.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0033	DPPM10D33K-F	0.275 (7.0)	0.492 (12.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0039	DPPM10D39K-F	0.275 (7.0)	0.511 (13.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0047	DPPM10D47K-F	0.295 (7.5)	0.531 (13.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0056	DPPM10D56K-F	0.314 (8.0)	0.551 (14.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0068	DPPM10D68K-F	0.334 (8.5)	0.570 (14.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.0082	DPPM10D82K-F	0.334 (8.5)	0.629 (16.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.010	DPPM10S1K-F	0.374 (9.5)	0.649 (16.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.012	DPPM10S12K-F	0.393 (10.0)	0.688 (17.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	1900
.015	DPPM10S15K-F	0.374 (9.5)	0.669 (17.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1300
.018	DPPM10S18K-F	0.393 (10.0)	0.688 (17.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1300
.022	DPPM10S22K-F	0.433 (11.0)	0.728 (18.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1300
.027	DPPM10S27K-F	0.472 (12.0)	0.767 (19.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1300
.033	DPPM10S33K-F	0.511 (13.0)	0.807 (20.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1300
.039	DPPM10S39K-F	0.551 (14.0)	0.846 (21.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1300
.047	DPPM10S47K-F	0.590 (15.0)	0.885 (22.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1300

Ratings

RoHS Compliant

Cap. mF	Catalog Part Number	T Inches (mm)	H Inches (mm)	L Inches (mm)	S Inches (mm)	d Inches (mm)	dV/dt V/µs
1200 Vdc (475 Vac)							
.0010	DPPM12D1K-F	0.256 (6.5)	0.452 (11.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	2100
.0012	DPPM12D12K-F	0.256 (6.5)	0.452 (11.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	2100
.0015	DPPM12D15K-F	0.256 (6.5)	0.452 (11.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	2100
.0018	DPPM12D18K-F	0.275 (7.0)	0.472 (12.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	2100
.0022	DPPM12D22K-F	0.275 (7.0)	0.492 (12.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	2100
.0027	DPPM12D27K-F	0.275 (7.0)	0.492 (12.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	2100
.0033	DPPM12D33K-F	0.295 (7.5)	0.511 (13.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	2100
.0039	DPPM12D39K-F	0.295 (7.5)	0.531 (13.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	2100
.0047	DPPM12D47K-F	0.314 (8.0)	0.551 (14.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	2100
.0056	DPPM12D56K-F	0.334 (8.5)	0.570 (14.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	2100
.0068	DPPM12D68K-F	0.314 (8.0)	0.590 (15.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1500
.0082	DPPM12D82K-F	0.334 (8.5)	0.610 (15.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1500
.010	DPPM12S1K-F	0.354 (9.0)	0.629 (16.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1500
.012	DPPM12S12K-F	0.374 (9.5)	0.669 (17.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1500
.015	DPPM12S15K-F	0.413 (10.5)	0.708 (18.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1500
.018	DPPM12S18K-F	0.433 (11.0)	0.748 (19.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1500
.022	DPPM12S22K-F	0.472 (12.0)	0.787 (20.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1500
.027	DPPM12S27K-F	0.511 (13.0)	0.826 (21.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1500
.033	DPPM12S33K-F	0.551 (14.0)	0.866 (22.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	1500
1600 Vdc (500 Vac)							
.0010	DPPM16D1K-F	0.256 (6.5)	0.452 (11.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3700
.0012	DPPM16D12K-F	0.256 (6.5)	0.452 (11.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3700
.0015	DPPM16D15K-F	0.275 (7.0)	0.492 (12.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3700
.0018	DPPM16D18K-F	0.295 (7.5)	0.531 (13.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3700
.0022	DPPM16D22K-F	0.314 (8.0)	0.590 (15.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3700
.0027	DPPM16D27K-F	0.334 (8.5)	0.610 (15.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3700
.0033	DPPM16D33K-F	0.374 (9.5)	0.649 (16.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3700
.0039	DPPM16D39K-F	0.393 (10.0)	0.688 (17.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3700
.0047	DPPM16D47K-F	0.413 (10.5)	0.748 (19.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3700
.0056	DPPM16D56K-F	0.393 (10.0)	0.708 (18.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2800
.0068	DPPM16D68K-F	0.413 (10.5)	0.748 (19.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2800
.0082	DPPM16D82K-F	0.433 (11.0)	0.787 (20.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2800
.010	DPPM16S1K-F	0.472 (12.0)	0.866 (22.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2800
.012	DPPM16S12K-F	0.531 (13.5)	0.905 (23.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2800
.015	DPPM16S15K-F	0.590 (15.0)	0.964 (24.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2800
.018	DPPM16S18K-F	0.649 (16.5)	1.023 (26.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2800
.022	DPPM16S22K-F	0.708 (18.0)	1.082 (27.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2800
2000 Vdc (500 Vac)							
.0010	DPPM20D1K-F	0.275 (7.0)	0.492 (12.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3900
.0012	DPPM20D12K-F	0.295 (7.5)	0.511 (13.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3900
.0015	DPPM20D15K-F	0.314 (8.0)	0.551 (14.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3900
.0018	DPPM20D18K-F	0.334 (8.5)	0.610 (15.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3900
.0022	DPPM20D22K-F	0.354 (9.0)	0.629 (16.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3900
.0027	DPPM20D27K-F	0.374 (9.5)	0.649 (16.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3900
.0033	DPPM20D33K-F	0.413 (10.5)	0.688 (17.5)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3900
.0039	DPPM20D39K-F	0.433 (11.0)	0.748 (19.0)	0.984 (25.0)	0.826 (21.0)	0.032 (0.8)	3900
.0047	DPPM20D47K-F	0.393 (10.0)	0.748 (19.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2900
.0056	DPPM20D56K-F	0.433 (11.0)	0.767 (19.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2900
.0068	DPPM20D68K-F	0.472 (12.0)	0.807 (20.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2900
.0082	DPPM20D82K-F	0.511 (13.0)	0.846 (21.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2900
.010	DPPM20S1K-F	0.551 (14.0)	0.866 (22.0)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2900
.012	DPPM20S12K-F	0.570 (14.5)	0.925 (23.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2900
.015	DPPM20S15K-F	0.629 (16.0)	0.964 (24.5)	1.220 (31.0)	1.043 (26.5)	0.032 (0.8)	2900

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MMR

Metallized Polyester Film Capacitors

Radial Leaded, Epoxy Dipped

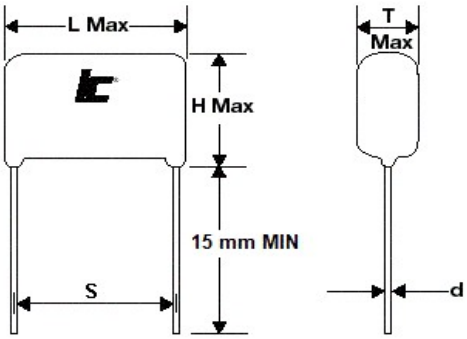


FEATURES	Small Size - High Voltage - General Purpose

APPLICATIONS	General Purpose – Bypass – Coupling – Blocking

Operating Temperature Range	**-40°C to +105°C**					
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional					
Peak, AC voltage (50/60 Hz)	**WVDC**	**100**	**250**	**400**	**630**	
	VAC	63	160	200	220	
	For T>+85°C , The voltage must be decreased by 1.25% per °C					
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**Dissipation Factor**				
	1	1.0%				
	10	1.5%				
Insulation Resistance @25°C (<70% RH) for 1 minute at 100VDC applied	**Capacitance**	**Insulation Resistance**				
	≤0.33µF	9000 MΩ				
	>0.33µF	3000 MΩxµF				
Load Life	**2000 Hours, +85C with 125% of rated voltage**					
	Capacitance Change	≤5% of initially measured value				
	Dissipation Factor	≤0.005 at 1kHz and 25°C				
	Insulation Resistance	≥50% of maximum specified value				
Damp Heat test	**1000 Hours, 93%RH (+/-2%), +40°C and no voltage applied**					
	Capacitance Change	≤5% of initially measured value				
	Dissipation Factor	≤0.005 at 1kHz and 25°C				
	Insulation Resistance	≥50% of maximum specified value				
Self Inductance	<1 nano-Henry per mm of body length and lead length					
Capacitance Drift Factor	<1.0% after 2 years at 40°C					
Capacitance Temperature Coefficient	+400 ppm/°C, ±200ppm/°C					
Dielectric Strength	**Terminal to Terminal**					
	160% of VDC applied for 2 Seconds and 25°C					
Dielectric	Polyester					
Construction	Metallized film					
Coating	Flame Retardant epoxy resin (UL94V0)					
Leads	Lead free tinned copper leads					

Special Order Options



L MAX	10.5	12	18.5	26	31
S±1.0	7.5	10	15	22.5	27.5
G MAX	1.5	1.5	1.5	1.5	1.5
d ±0.05	0.6	0.6	0.8	0.8	0.8

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MMR

Small Size Epoxy Dipped Metallized Polyester Radial Lead

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
100	0.15	154MMR100K	35	10.3x7.5x4.5	7.5	0.6
100	0.22	224MMR100K	35	10.3x8x5	7.5	0.6
100	0.33	334MMR100K	35	10.3x10.7x6	7.5	0.6
100	0.68	684MMR100K	0	12x13x6	10	0.6
100	1	105MMR100K	30	12x14x6.7	10	0.6
100	1.5	155MMR100K	20	18.5x13.4x6	15	0.8
100	2.2	225MMR100K	20	18.5x15x7	15	0.8
100	3.3	335MMR100K	20	18.5x16.5x8.5	15	0.8
100	4.7	475MMR100K	10	26x17x7.5	22.5	0.8
100	5.6	565MMR100K	10	26x18.5x8.3	22.5	0.8
100	6.8	685MMR100K	10	26x18.5x9	22.5	0.8
100	8.2	825MMR100K	10	26x21x10	22.5	0.8
100	10	106MMR100K	10	26x21x11.5	22.5	0.8
250	0.01	103MMR250K	80	10.3x7.5x4.3	7.5	0.6
250	0.015	153MMR250K	80	10.3x7.5x4.4	7.5	0.6
250	0.022	223MMR250K	80	10.3x7.5x4.4	7.5	0.6
250	0.033	333MMR250K	80	10.3x7.5x4.5	7.5	0.6
250	0.047	473MMR250K	80	10.3x7.5x4.5	7.5	0.6
250	0.068	683MMR250K	80	10.3x7.5x4.5	7.5	0.6
250	0.1	104MMR250K	80	10.3x8.4x5.8	7.5	0.6
250	0.15	154MMR250K	80	10.3x10.8x6	7.5	0.6
250	0.22	224MMR250K	110	12x10.5x5.5	10	0.6
250	0.33	334MMR250K	110	12x12x6.5	10	0.6
250	0.47	474MMR250K	45	18.5x12.5x5.3	15	0.8
250	0.68	684MMR250K	45	18.5x13.5x6	15	0.8
250	1	105MMR250K	45	18.5x15x7.4	15	0.8
250	1.5	155MMR250K	45	18.5x16.8x9	15	0.8
250	2.2	225MMR250K	20	26x16.3x8.5	22.5	0.8
250	3.3	335MMR250K	20	26x18x10.3	22.5	0.8
250	4.7	475MMR250K	20	26x21.5x12	22.5	0.8
250	5.6	565MMR250K	15	31x22x11.8	27.5	0.8
250	6.8	685MMR250K	15	31x22.4x13	27.5	0.8

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
250	8.2	825MMR250K	15	31x24.5x14.3	27.5	0.8
250	10	106MMR250K	15	31x25.8x15.9	27.5	0.8
400	0.01	103MMR400K	190	10.3x7.4x4.3	7.5	0.6
400	0.015	153MMR400K	190	10.3x7.5x4.4	7.5	0.6
400	0.022	223MMR400K	190	10.3x7.9x4.8	7.5	0.6
400	0.033	333MMR400K	190	10.3x9x6	7.5	0.6
400	0.047	473MMR400K	160	12x8.3x5	10	0.6
400	0.068	683MMR400K	160	12x10.5x5.4	10	0.6
400	0.1	104MMR400K	160	12x12x6.3	10	0.6
400	0.15	154MMR400K	65	18.5x12.4x5	15	0.8
400	0.22	224MMR400K	65	18.5x13x5.9	15	0.8
400	0.33	334MMR400K	65	18.5x14.9x7	15	0.8
400	0.47	474MMR400K	65	18.5x17x7.8	15	0.8
400	0.68	684MMR400K	30	26x16.5x7	22.5	0.8
400	1	105MMR400K	30	26x18x8.5	22.5	0.8
400	1.5	155MMR400K	25	31x19x9.5	27.5	0.8
400	2.2	225MMR400K	25	31x22x11	27.5	0.8
630	0.01	103MMR630K	200	12x7.5x4.5	10	0.6
630	0.015	153MMR630K	200	12x8.2x5	10	0.6
630	0.022	223MMR630K	200	12x10.5x5.3	10	0.6
630	0.033	333MMR630K	200	12x11.9x6	10	0.6
630	0.047	473MMR630K	200	12x13.5x6.5	10	0.6
630	0.068	683MMR630K	90	18.5x11x5.8	15	0.8
630	0.1	104MMR630K	90	18.5x14x6.3	15	0.8
630	0.15	154MMR630K	90	18.5x15.4x7.5	15	0.8
630	0.22	224MMR630K	90	18.5x16.5x9	15	0.8
630	0.33	334MMR630K	35	26x17x7.8	22.5	0.8
630	0.47	474MMR630K	35	26x18.5x9.3	22.5	0.8
630	0.68	684MMR630K	35	26x21x11.5	22.5	0.8
630	1	105MMR630K	30	31x21.9x12.5	27.5	0.8
630	1.5	155MMR630K	30	31x24.7x15.3	27.5	0.8
630	2.2	225MMR630K	30	31x29x19.5	27.5	0.8

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MPR

Metallized Polypropylene Film Capacitors

+105°C Epoxy Dipped, Radial Lead

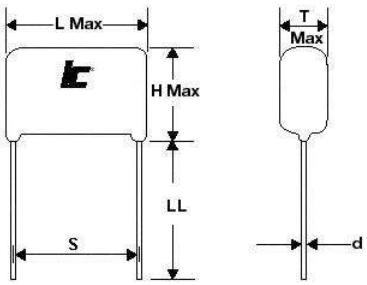


FEATURES — Small size – Low ESR – Good Pulse Capabilities – Stable with Frequency and Temperature

APPLICATIONS — General Purpose – Switching Power Supplies – Blocking – Coupling – AC Applications (Not across the Line)

Operating Temperature Range	**-55°C to +105°C**						
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional						
Peak, AC voltage (50/60 Hz)	**WVDC**	**100**	**250**	**400**	**630**	**1000**	
	VAC	63	200	220	250	300	
	For T>+85°C , The voltage must be decreased by 1.5% per °C						
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤0.1uF**	**0.1uF<C≤1uF**	**1uF<C≤3uF**	**3uF<C≤5uF**	**C>5uF**	
	1	0.1%	0.1%	0.1%	0.1%	0.1%	
	100	0.4%	0.7%	1.2%	1.8%	2.8%	
Insulation Resistance @25°C (<70% RH)for 1 minute at 100VDC applied	**Capacitance**	**Insulation Resistance**					
	≤0.33µF	30000 MΩ					
	>0.33µF	10000 MΩxµF					
Load Life	**2000 Hours, +85C with 125% of rated voltage**						
	Capacitance Change	≤3% of initially measured value					
	Dissipation Factor	≤0.001 at 1kHz and 25°C					
	Insulation Resistance	≥50% of maximum specified value					
Damp Heat test	**56 days at40°C with 90 to 95%RH, +40°C and no voltage applied**						
	Capacitance Change	≤3% of initially measured value					
	Dissipation Factor	≤0.001 at 1kHz and 25°C					
	Insulation Resistance	≥50% of maximum specified value					
Self Inductance	<1 nano-Henry per mm of body length and lead length						
Capacitance Drift Factor	<0.5% after 2 years at 40°C						
Capacitance Temperature Coefficient	-200 ppm/°C, ±100ppm/°C						
Dielectric Strength	**Terminal to Terminal**						
	160% of rated VDC or VAC applied for 2 Seconds and 25°C						
Dielectric	Polypropylene						
Construction	Metallized film						
Coating	Flame Retardant epoxy resin (UL94V0)						
Leads	Lead free tinned copper leads						

Special Order Options



L MAX	12	18.5	26	31
S±1.0	10	15	22.5	27.5
G MAX	1.5	1.5	1.5	1.5
d±0.05	0.6	0.8	0.8	0.8

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MPR

Metallized Polypropylene
Epoxy Dipped Radial Lead

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
100	0.47	474MPR100K	100	18.5x14x8	15	0.8
250	0.015	153MPR250K	220	13x9x5	10	0.6
250	0.022	223MPR250K	220	13x9x5	10	0.6
250	0.033	333MPR250K	220	13x9x5.5	10	0.6
250	0.047	473MPR250K	220	13x9.5x5.5	10	0.6
250	0.068	683MPR250K	220	13x10.5x6	10	0.6
250	0.1	104MPR250K	220	13x11x7	10	0.6
250	0.15	154MPR250K	200	18x11x7	15	0.8
250	0.22	224MPR250K	200	18x12.5x7.5	15	0.8
250	0.33	334MPR250K	200	18x13x8.5	15	0.8
250	0.47	474MPR250K	110	26x14x8.5	22.5	0.8
250	0.68	684MPR250K	115	26x15x9.5	22.5	0.8
250	1	105MPR250K	110	26x16x12	22.5	0.8
250	1.5	155MPR250K	100	31x18x13	27.5	0.8
250	2.2	225MPR250K	100	31x21x15	27.5	0.8
400	0.01	103MPR400K	350	13x9x5	10	0.6
400	0.015	153MPR400K	350	13x9.5x5	10	0.6
400	0.022	223MPR400K	350	13x10.5x5.5	10	0.6
400	0.033	333MPR400K	350	13x11x6.5	10	0.6
400	0.047	473MPR400K	350	13x11x7.5	10	0.6

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
400	0.068	683MPR400K	300	18x12x6.5	15	0.8
400	0.1	104MPR400K	300	18x12.5x7.5	15	0.8
400	0.15	154MPR400K	185	26x13x7.5	22.5	0.8
400	0.22	224MPR400K	165	26x14x8.5	22.5	0.8
400	0.33	334MPR400K	165	26x15x10	22.5	0.8
400	0.47	474MPR400K	150	31x16.5x10.5	27.5	0.8
400	1	105MPR400K	150	31x22x15	27.5	0.8
630	0.01	103MPR630K	420	13x10x6	10	0.6
630	0.015	153MPR630K	420	13x11x7	10	0.6
630	0.022	223MPR630K	420	13x12.5x8.5	10	0.6
630	0.033	333MPR630K	400	18x11.5x7.5	15	0.8
630	0.047	473MPR630K	400	18x13.5x8.5	15	0.8
630	0.068	683MPR630K	400	18x15.5x9.5	15	0.8
630	0.1	104MPR630K	230	26x15x10	22.5	0.8
630	0.15	154MPR630K	230	26x17x11	22.5	0.8
630	0.22	224MPR630K	180	31x17.5x10.5	27.5	0.8
630	0.33	334MPR630K	180	31x21.5x13	27.5	0.8
630	0.47	474MPR630K	180	31x24.5x15.5	27.5	0.8
1000	0.22	224MPR102K	135	31x18x9	27.5	0.8
1000	0.47	474MPR102K	135	31x22x13	27.5	0.8

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MSR

Metallized Polyester Film Capacitors

Radial Leaded, Epoxy Dipped



FEATURES

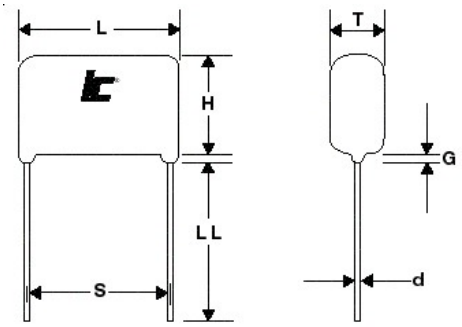
Small Size – Self Healing – Low Cost

APPLICATIONS

General Purpose – Bypass – Coupling – Blocking

Operating Temperature Range	**-55°C to +125°C**						
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional						
Peak, AC voltage (50/60 Hz)	**WVDC**	**100**	**250**	**400**	**630**	**1000**	
	VAC	63	160	200	220	250	
	For T>+85°C , The voltage must be decreased by 1.25% per °C						
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**Dissipation Factor**					
	1	1.0%					
	10	1.5%					
Insulation Resistance Charge Time: 60 ±5sec. at 20°C IEC 60384, 4.2.4	**Capacitance**	**WVDC**	**Insulation Resistance**	**Test Conditions**			
	C ≤0.33µF	Vr >100	7,500 MΩ min.	Charge Voltage			
		Vr ≤100	3,750 MΩ min.	Vr <100VDC: 50VDC			
	C >0.33µF	Vr >100	2,500 MΩ*µF min	Vr <500VDC: 100VDC			
		Vr ≤100	1,250 MΩ*µFmin	Vr ≥500VDC: 500VDC			
Load Life	**2000 Hours, +85C with 125% of rated voltage**						
	Capacitance Change	≤5% of initially measured value					
	Dissipation Factor	≤0.005 at 1kHz and 25°C					
	Insulation Resistance	≥50% of maximum specified value					
Damp Heat test	**1000 Hours, 93%RH(+/-2%), +40°C and no voltage applied**						
	Capacitance Change	≤5% of initially measured value					
	Dissipation Factor	≤0.005 at 1kHz and 25°C					
	Insulation Resistance	≥50% of maximum specified value					
Self Inductance	<1 nano-Henry per mm of body length and lead length						
Capacitance Drift Factor	<1.0% after 2 years at 40°C <75%RH						
Capacitance Temperature Coefficient	+400 ppm/°C, ±200ppm/°C						
Dielectric Strength	**Terminal to Terminal**						
	160% of VDC applied for 5 Seconds and 25°C						
Dielectric	Polyester						
Construction	Metallized film						
Coating	Flame Retardant epoxy resin (UL94V0)						
Leads	Lead free tinned						

Special Order Options



L MAX	10.5	12	18.5	26	31
S±1.0	7.5	10	15	22.5	27.5
G MAX	1.5	1.5	1.5	1.5	1.5
d ±0.05	0.6	0.6	0.8	0.8	0.8

LL= 15mm Min.

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MSR

Metallized Polyester Epoxy Dipped Radial Lead

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
100	0.047	473MSR100K	35	10.5x9.5x6	7.5	0.6
100	0.068	683MSR100K	35	10.5x9.5x6	7.5	0.6
100	0.1	104MSR100K	30	12.5x8.5x5.5	10	0.6
100	0.15	154MSR100K	30	13x9x5.5	10	0.6
100	0.22	224MSR100K	30	13x10x6.5	10	0.6
100	0.33	334MSR100K	20	17.5x10x5.5	15	0.8
100	0.47	474MSR100K	20	18x11x7	15	0.8
100	0.68	684MSR100K	20	18.5x12.5x7.5	15	0.8
100	1	105MSR100K	20	18.5x13.5x8.5	15	0.8
100	1.5	155MSR100K	10	22.5x14.5x8	20	0.8
100	2.2	225MSR100K	10	22.5x16.5x10	20	0.8
100	3.3	335MSR100K	10	22.5x20x12	20	0.8
100	4.7	475MSR100K	5	30x20.5x11	27.5	0.8
100	6.8	685MSR100K	5	32x23.5x14.5	27.5	0.8
100	10	106MSR100K	5	32x28.5x17.5	27.5	0.8
250	0.015	153MSR250K	110	10.5x9.5x5.5	7.5	0.6
250	0.022	223MSR250K	110	10.5x9.5x5.5	7.5	0.6
250	0.033	333MSR250K	110	10.5x9.5x6	7.5	0.6
250	0.047	473MSR250K	110	12.5x9x5	10	0.6
250	0.068	683MSR250K	110	12.5x10x5	10	0.6
250	0.1	104MSR250K	110	13x10x6.5	10	0.6
250	0.15	154MSR250K	110	13x13x7	10	0.6
250	0.22	224MSR250K	45	18x11.5x6	15	0.8
250	0.33	334MSR250K	45	18.5x12x7	15	0.8
250	0.47	474MSR250K	20	22.5x12.5x7.5	20	0.8
250	0.68	684MSR250K	20	22.5x13.5x8.5	20	0.8
250	1	105MSR250K	20	22.5x15x10	20	0.8
250	1.5	155MSR250K	15	30x17.5x9.5	27.5	0.8
250	2.2	225MSR250K	15	30.5x22x12	27.5	0.8
400	0.01	103MSR400K	160	10.5x9x5.5	7.5	0.6
400	0.015	153MSR400K	160	10.5x9.5x5.5	7.5	0.6
400	0.022	223MSR400K	160	13x9.5x6	10	0.6

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
400	0.033	333MSR400K	160	13x10.5x6.5	10	0.6
400	0.047	473MSR400K	160	13x11x7	10	0.6
400	0.068	683MSR400K	65	17.5x10x5.5	15	0.8
400	0.1	104MSR400K	65	18.5x12x7	15	0.8
400	0.15	154MSR400K	65	18.5x13.5x8	15	0.8
400	0.22	224MSR400K	30	22.5x14.5x8	20	0.8
400	0.33	334MSR400K	30	22.5x15x9	20	0.8
400	0.47	474MSR400K	30	23.5x19x10.5	20	0.8
400	0.68	684MSR400K	25	32x19x12	27.5	0.8
400	1	105MSR400K	25	30.5x21x12.5	27.5	0.8
630	0.01	103MSR630K	200	13x10x6	10	0.6
630	0.015	153MSR630K	200	13x10.5x6.5	10	0.6
630	0.022	223MSR630K	200	13x12.5x7.5	10	0.6
630	0.033	333MSR630K	90	18.5x12x6.5	15	0.8
630	0.047	473MSR630K	90	18x12.5x7.5	15	0.6
630	0.068	683MSR630K	90	18.5x14x8.5	15	0.8
630	0.1	104MSR630K	90	18.5x15.5x10	15	0.8
630	0.15	154MSR630K	35	22.5x16.5x9.5	20	0.8
630	0.22	224MSR630K	35	22.5x19x11.5	20	0.8
630	0.33	334MSR630K	30	32x19x12	27.5	0.8
630	0.47	474MSR630K	30	32x22x13.5	27.5	0.8
630	0.68	684MSR630K	30	33x24.5x14	27.5	0.8
1000	0.01	103MSR102K	80	14x11.5x7	10	0.6
1000	0.015	153MSR102K	80	14x11.5x8	10	0.6
1000	0.022	223MSR102K	40	19x12.5x8.5	15	0.8
1000	0.033	333MSR102K	40	19.5x14x9.5	15	0.8
1000	0.047	473MSR102K	33	27x14x9	22.5	0.8
1000	0.068	683MSR102K	33	27x15x10	22.5	0.8
1000	0.1	104MSR102K	33	27x16.5x11.5	22.5	0.8
1000	0.22	224MSR102K	20	32.5x22.5x14.5	27.5	0.8
1000	0.33	334MSR102K	20	32.5x25.5x16	27.5	0.8
1000	0.47	474MSR102K	20	32.5x26.5x18.5	27.5	0.8

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MTB

Metallized Polyester Film Capacitors

For General Purpose Applications

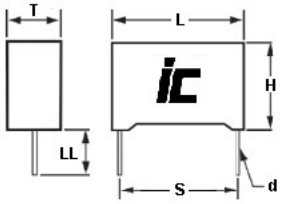


FEATURES — Self Healing – Small Size – Low ESR

APPLICATIONS — General Purpose – Coupling – Bypass – Blocking

Operating Temperature Range	**-55°C to +105°C**								
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional								
Peak, AC voltage (50/60 Hz)	**WVDC**	**63**	**100**	**160**	**250**	**400**	**630**	**1000**	
	VAC	40	63	90	160	200	220	400	
	For T>+85°C, The voltage must be decreased by 1.25% per °C								
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤1uF**	**C>1uF**						
	1	0.8%	1.0%						
	10	1.5%	-						
Insulation Resistance @25°C (<70% RH) for 1 minute at 100VDC applied	**WVDC**	**Capacitance**	**Insulation Resistance**						
	≤100	**≤0.33µF**	3750 MΩ						
	≤100	**>0.33µF**	1250 MΩxµF						
	>100	**≤0.33µF**	30000 MΩxµF						
	>100	**>0.33µF**	10000 MΩxµF						
Load Life	**2000 Hours, +85°C with 125% of rated voltage**								
	Capacitance Change	≤5% of initially measured value							
	Dissipation Factor	≤0.005 at 1kHz and 25°C for C≤1uF ≤0.003 at 1kHz and 25°C for C>1uF							
	Insulation Resistance	≥50% of maximum specified value							
Damp Heat test	**1000 Hours, 93%RH (+/-2%), +40°C and no voltage applied**								
	Capacitance Change	≤5% of initially measured value							
	Dissipation Factor	≤0.005 at 1kHz and 25°C							
	Insulation Resistance	≥50% of maximum specified value							
Reliability (1 FIT= 1 failure per billion components hours)	**5 Fit at 50% of rated voltage and +40°C**								
	Capacitance Change	≤2% of initially measured value							
	Dissipation Factor	≤0.005 at 10kHz and 25°C for C≤1uF ≤0.003 at 1kHz and 25°C for C>1uF							
	Insulation Resistance	≥50% of maximum specified value							
Self Inductance	<1 nano-Henry per mm of body length and lead length								
Capacitance Drift Factor	<1.0% after 2 years at 40°C								
Capacitance Temperature Coefficient	+400 ppm/°C, ±200ppm/°C								
Dielectric Strength	**Terminal to Terminal**								
	160% of VDC applied for 2 Seconds and 25°C								
Dielectric	Polyester								
Construction	Metallized film								
Coating	Flame Retardant plastic box (UL94V-1) and epoxy resin (UL94V0)								
Leads	Lead free tinned copper leads								

Special Order Options



L MAX	18	26.5	32	42.5
S±1.0	15	22.5	27.5	37.5
LL	5±1.0	5±1.0	5±1.0	30±5.0
d ±0.05	0.6	0.6	0.8	1.0

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MTB

Metallized Polyester Radial Lead Box

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
63	0.68	684MTB063KE	3	18x11x5	15	0.8
63	1	105MTB063KE	3	18x11x5	15	0.8
63	1.5	155MTB063KE	3	18x11x5	15	0.8
63	2.2	225MTB063KE	3	18x12x6	15	0.8
63	3.3	335MTB063KE	3	18x13.5x7.5	15	0.8
63	3.3	335MTB063KG	2	26.5x15x6	22.5	0.8
63	4.7	475MTB063KE	3	18x14.5x8.5	15	0.8
63	4.7	475MTB063KG	2	26.5x16x7	22.5	0.8
63	6.8	685MTB063KE	3	18x16x10	15	0.8
63	6.8	685MTB063KG	2	26.5x16x7	22.5	0.8
63	10	106MTB063KG	2	26.5x17x8.5	22.5	0.8
63	10	106MTB063KH	1	32x17x9	27.5	0.8
63	15	156MTB063KG	2	26.5x22x13	22.5	0.8
63	15	156MTB063KH	1	32x20x11	27.5	0.8
63	22	226MTB063KH	1	32x22x13	27.5	0.8
63	33	336MTB063KH	1	32x24.5x15	27.5	0.8
63	47	476MTB063KH	1	32x33x18	27.5	0.8
63	47	476MTB063KJ	0.8	42.5x28x17	37.5	0.8
63	68	686MTB063KH	1	32x37x22	27.5	0.8
63	68	686MTB063KJ	0.8	42.5x30x22	37.5	1
63	100	107MTB063KJ	0.8	42.5x37x28	37.5	1
63	150	157MTB063KJ	0.8	42.5x45x30	37.5	1.2
100	0.33	334MTB100KE	5	18x11x5	15	0.8
100	0.47	474MTB100KE	5	18x11x5	15	0.8
100	0.68	684MTB100KE	5	18x11x5	15	0.8
100	1	105MTB100KE	5	18x11x5	15	0.8
100	1.5	155MTB100KE	5	18x13.5x7.5	15	0.8
100	1.5	155MTB100KG	2.5	26.5x15x6	22.5	0.8
100	2.2	225MTB100KE	5	18x14.5x8.5	15	0.8
100	2.2	225MTB100KG	3	26.5x15x6	22.5	0.8
100	3.3	335MTB100KE	5	18x16x10	15	0.8
100	3.3	335MTB100KG	3	26.5x16x7	22.5	0.8
100	4.7	475MTB100KG	3	26.5x17x8.5	22.5	0.8
100	4.7	475MTB100KH	2	32x17x9	27.5	0.8
100	6.8	685MTB100KG	3	26.5x18.5x10	22.5	0.8
100	6.8	685MTB100KH	2	32x17x9	27.5	0.8
100	10	106MTB100KG	3	26.5x22x13	22.5	0.8
100	10	106MTB100KH	2	32x20x11	27.5	0.8
100	15	156MTB100KH	2	32x22x13	27.5	0.8
100	22	226MTB100KH	2	32x28x14	27.5	0.8
100	33	336MTB100KH	2	32x33x18	27.5	0.8
100	33	336MTB100KJ	1.2	42.5x28x17	37.5	0.8
100	47	476MTB100KH	2	32x37x22	27.5	0.8
100	47	476MTB100KJ	1.2	42.5x30x22	37.5	1
100	68	686MTB100KJ	1.2	42.5x37x28	37.5	1
100	82	826MTB100KJ	1.2	42.5x45x30	37.5	1.2
160	0.33	334MTB160KE	9	18x11x5	15	0.8
160	1	105MTB160KE	9	18x13.5x7.5	15	0.8
160	1.5	155MTB160KE	9	18x14.5x8.5	15	0.8
160	1.5	155MTB160KG	6	26.5x15x6	22.5	0.8
160	2.2	225MTB160KE	9	18x16x10	15	0.8
160	2.2	225MTB160KG	6	26.5x16x7	22.5	0.8
160	3.3	335MTB160KG	6	26.5x17x8.5	15	0.8
160	3.3	335MTB160KH	3	32x17x9	27.5	0.8
160	4.7	475MTB160KG	6	26.5x20x11	22.5	0.8
160	4.7	475MTB160KH	3	32x17x9	27.5	0.8
160	6.8	685MTB160KG	6	26.5x22x13	22.5	0.8
160	6.8	685MTB160KH	3	32x20x11	27.5	0.8

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
160	10	106MTB160KH	3	32x22x13	27.5	0.8
160	15	156MTB160KH	3	32x28x14	27.5	0.8
160	22	226MTB160KH	3	32x37x22	27.5	0.8
160	22	226MTB160KJ	2.2	42.5x28x17	37.5	0.8
160	33	336MTB160KJ	2.2	42.5x30x22	37.5	1
160	47	476MTB160KJ	2.2	42.5x37x28	37.5	1
160	68	686MTB160KJ	1.2	42.5x45x30	37.5	1.2
160	82	826MTB160KJ	2.2	42.5x45x30	37.5	1.2
250	0.1	104MTB250KE	12	18x11x5	15	0.8
250	0.15	154MTB250KE	12	18x11x5	15	0.8
250	0.22	224MTB250KE	12	18x11x5	15	0.8
250	0.33	334MTB250KE	12	18x11x5	15	0.8
250	0.47	474MTB250KE	12	18x12x6	15	0.8
250	0.47	474MTB250KG	8	26.5x15x6	22.5	0.8
250	0.68	684MTB250KE	12	18x13.5x7.5	15	0.8
250	0.68	684MTB250KG	8	26.5x15x6	22.5	0.8
250	1	105MTB250KE	12	18x14.5x8.5	15	0.8
250	1	105MTB250KG	8	26.5x15x6	22.5	0.8
250	1.5	155MTB250KE	12	18x16x10	15	0.8
250	1.5	155MTB250KG	8	26.5x16x7	22.5	0.8
250	1.5	155MTB250KH	5	32x17x9	27.5	0.8
250	2.2	225MTB250KG	8	26.5x18.5x10	22.5	0.8
250	2.2	225MTB250KH	5	32x17x9	27.5	0.8
250	3.3	335MTB250KG	8	26.5x20x11	22.5	0.8
250	3.3	335MTB250KH	5	32x20x11	27.5	0.8
250	4.7	475MTB250KH	5	32x22x13	27.5	0.8
250	6.8	685MTB250KH	5	32x28x14	27.5	0.8
250	10	106MTB250KH	5	32x33x18	27.5	0.8
250	10	106MTB250KJ	4	42.5x28x17	37.5	0.8
250	15	156MTB250KH	5	32x37x22	27.5	0.8
250	15	156MTB250KJ	4	42.5x28x17	37.5	0.8
250	22	226MTB250KJ	4	42.5x30x22	37.5	1
250	33	336MTB250KJ	4	42.5x37x28	37.5	1
250	47	476MTB250KJ	4	42.5x47x30	37.5	1.2
400	0.047	473MTB400KE	20	18x11x5	15	0.8
400	0.068	683MTB400KE	20	18x11x5	15	0.8
400	0.1	104MTB400KE	20	18x11x5	15	0.8
400	0.15	154MTB400KE	20	18x11x5	15	0.8
400	0.22	224MTB400KE	20	18x12x6	15	0.8
400	0.22	224MTB400KG	13	26.5x15x6	22.5	0.8
400	0.33	334MTB400KE	20	18x13.5x7.5	15	0.8
400	0.33	334MTB400KG	13	26.5x15x6	22.5	0.8
400	0.47	474MTB400KE	20	18x14.5x8.5	15	0.8
400	0.47	474MTB400KG	13	26.5x15x6	22.5	0.8
400	0.68	684MTB400KG	13	26.5x16x7	22.5	0.8
400	0.68	684MTB400KH	8.5	32x17x9	27.5	0.8
400	1	105MTB400KG	13	26.5x18.5x10	22.5	0.8
400	1	105MTB400KH	8.5	32x17x9	27.5	0.8
400	1.5	155MTB400KG	13	26.5x20x11	22.5	0.8
400	1.5	155MTB400KH	8.5	32x20x11	27.5	0.8
400	2.2	225MTB400KH	8.5	32x22x13	27.5	0.8
400	3.3	335MTB400KH	8.5	32x28x14	27.5	0.8
400	4.7	475MTB400KH	8.5	32x33x18	27.5	0.8
400	6.8	685MTB400KH	8.5	32x37x22	27.5	0.8
400	6.8	685MTB400KJ	6.5	42.5x28x17	37.5	0.8
400	10	106MTB400KJ	6.5	42.5x30x22	37.5	1
400	15	156MTB400KJ	6.5	42.5x37x28	37.5	1
400	22	226MTB400KJ	6.5	42.5x45x30	37.5	1.2

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MTB

Metallized Polyester Radial Lead Box

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
630	0.033	333MTB630KE	25	18x11x5	15	0.8
630	0.047	473MTB630KE	25	18x11x5	15	0.8
630	0.068	683MTB630KE	25	18x12x6	15	0.8
630	0.1	104MTB630KE	25	18x13.5x7.5	15	0.8
630	0.1	104MTB630KG	14	26.5x15x6	22.5	0.8
630	0.15	154MTB630KE	25	18x14.5x8.5	15	0.8
630	0.15	154MTB630KG	14	26.5x15x6	22.5	0.8
630	0.22	224MTB630KG	14	26.5x16x7	22.5	0.8
630	0.33	334MTB630KG	14	26.5x18.5x10	22.5	0.8
630	0.33	334MTB630KH	10	32x17x9	27.5	0.8
630	0.47	474MTB630KH	10	32x20x11	27.5	0.8
630	0.68	684MTB630KH	10	32x22x13	27.5	0.8
630	1	105MTB630KH	10	32x28x14	27.5	0.8
630	1.5	155MTB630KH	10	32x33x18	27.5	0.8
630	2.2	225MTB630KH	10	32x37x22	27.5	0.8
630	2.2	225MTB630KJ	8	42.5x28x17	37.5	0.8
630	3.3	335MTB630KJ	8	42.5x30x22	37.5	1
630	4.7	475MTB630KJ	8	42.5x37x28	37.5	1
630	6.8	685MTB630KJ	8	42.5x45x30	37.5	1.2

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
1000	0.022	223MTB102KE	40	18x11x5	15	0.8
1000	0.033	333MTB102KE	40	18x12x6	15	0.8
1000	0.047	473MTB102KE	40	18x13.5x7.5	15	0.8
1000	0.068	683MTB102KE	40	18x14.5x8.5	15	0.8
1000	0.068	683MTB102KG	33	26.5x15x6	22.5	0.8
1000	0.1	104MTB102KE	40	18x16x10	15	0.8
1000	0.1	104MTB102KG	33	26.5x16x7	22.5	0.8
1000	0.15	154MTB102KG	33	26.5x17x8.5	22.5	0.8
1000	0.22	224MTB102KG	33	26.5x20x11	22.5	0.8
1000	0.22	224MTB102KH	20	32x17x9	27.5	0.8
1000	0.33	334MTB102KH	20	32x20x11	27.5	0.8
1000	0.47	474MTB102KH	20	32x24.5x15	27.5	0.8
1000	0.68	684MTB102KH	20	32x33x18	27.5	0.8
1000	1	105MTB102KH	20	32x33x18	27.5	0.8
1000	1	105MTB102KJ	15	42.5x28x17	37.5	0.8
1000	1.5	155MTB102KJ	15	42.5x30x22	37.5	1
1000	2.2	225MTB102KJ	15	42.5x37x28	37.5	1
1000	3.3	335MTB102KJ	15	42.5x45x30	37.5	1.2

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PHB

Metallized Polypropylene Film Capacitors

for Switching Circuits 2, 4 or 6 Leaded



FEATURES High Current - High Voltage – Good Pulse Current Rating

APPLICATIONS Resonant Circuits – Switching Power Supplies – Motor Speed Controls – Induction Heaters

Operating Temperature Range	**-40°C to +100°C**							
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional							
Non-Recurrent SVDC	**WVDC**	**250**	**330**	**400**	**600**	**700**	**850**	
	SVDC	400	500	600	800	1000	1200	
AC voltage (50/60 Hz)	**WVDC**	**250**	**330**	**400**	**600**	**700**	**850**	
	VAC	160	220	275	350	400	500	
	For T>+85°C , The voltage (DC/AC)must be decreased by (1.5/2.5)% per °C							
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤5uF**		**5<C≤25uF**		**C>25uF**		
	1	0.05%		0.08%		0.1%		
Insulation Resistance @25°C (<70% RH)for 1 minute at 100VDC applied	**Insulation Resistance**							
	30000 MΩxuF (not to exceed 30GΩ)							
Self Inductance	<1 nano-Henry per mm of lead spacing							
Capacitance Drift Factor	<0.5% after 2 years at 40°C							
Life Expectancy	100000 Hours @WVDC 30000 Hours @ VAC							
	Capacitance Change	≤3% of initially measured value						
Failure quota	300/ Billion component hours							
Damp Heat test	**56 days at40°C with 90 to 95%RH, +40°C and no voltage applied**							
	Capacitance Change	≤2% of initially measured value						
	Dissipation Factor	≤0.001 at 1kHz and 25°C						
	Insulation Resistance	≥50% of maximum specified value						
Self Inductance	<1 nano-Henry per mm of lead spacing							
Capacitance Drift Factor	<0.5% after 2 years at 40°C							
Capacitance Temperature Coefficient	-200 ppm/°C, ±100ppm/°C							
Dielectric Strength	**Terminal to Terminal**					**Terminal to case**		
	160% of rated VDCApplied for 10 seconds or 150% VAC applied for 2 Seconds and 25°C					3kVAC @ 50/60 Hz applied between terminals and case for 60 seconds at 25°C		
Dielectric	Polypropylene							
Construction	Metallized film							
Coating	Flame Retardant plastic box with epoxy resin (UL94V-0)							
Leads	Lead free tinned copper leads							

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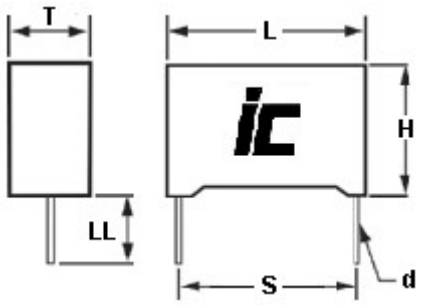
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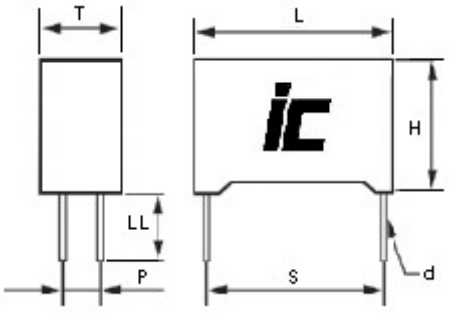
Metallized Polypropylene Film Capacitors

for Switching Circuits 2, 4 or 6 Leaded

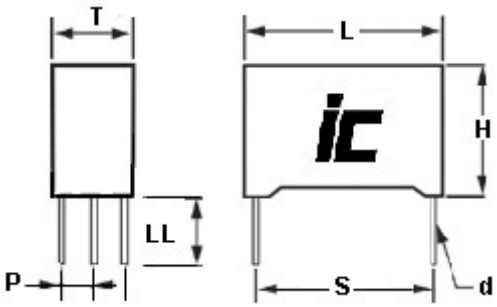




L	26.5	32	32	32	42.5	57.5
H	ALL	≤20	20<H≤24.5	>24.5	ALL	ALL
T	ALL	ALL	≤18	ALL	ALL	ALL
S	22.5	27.5	27.5	27.5	37.5	52.5
d	0.8	0.8	1.0	1.2	1.2	1.2



L	32	42.5	57.5
S	27.5	37.5	52.5
d	1.2	1.2	1.2



L	42.5	57.5
S	37.5	52.5
d	1.2	1.2

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PHB

Metallized Polypropylene, High Frequency radial lead box

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
250	1	105PHB250K2G	50	4.5	7.6	26.5x16x7	22.5	0.8		2
250	1.5	155PHB250K2G	50	6.5	6.1	26.5x17x8.5	22.5	0.8		2
250	1.5	155PHB250K2H	40	6.5	7.1	32x20x11	27.5	0.8		2
250	2	205PHB250K2G	50	7.5	5.3	26.5x20x11	22.5	0.8		2
250	2	205PHB250K2H	40	7	6.1	32x20x11	27.5	0.8		2
250	2.2	225PHB250K2G	50	7.5	5.1	26.5x20x11	22.5	0.8		2
250	2.2	225PHB250K2H	40	7	5.8	32x20x11	27.5	0.8		2
250	2.5	255PHB250K2H	40	8	5.4	32x20x11	27.5	0.8		2
250	3	305PHB250K2H	40	9	4.8	32x22x13	27.5	1		2
250	3.3	335PHB250K2H	40	9.5	4.3	32x22x13	27.5	1		2
250	4	405PHB250K2H	40	10.5	3.8	32x22x13	27.5	1		2
250	4.7	475PHB250K2H	40	12	3.5	32x28x14	27.5	1.2		2
250	4.7	475PHB250K4H	40	15	2.8	32x28x14	27.5	1.2	5.1	4
250	5	505PHB250K4H	40	15	2.7	32x28x14	27.4	1.2	5.1	4
250	5	505PHB250K2H	40	12	3.4	32x28x14	27.5	1.2		2
250	6.8	685PHB250K2H	40	14	3.1	32x33x18	27.5	1.2		2
250	6.8	685PHB250K4H	40	18	2.4	32x33x18	27.5	1.2	5.1	4
250	10	106PHB250K4H	40	20.5	1.9	32x33x18	27.5	1.2	10.2	4
250	10	106PHB250K2H	40	20.5	2.6	32x33x18	27.5	1.2		2
250	10	106PHB250K2J	25	14	3.6	42.5x28x17	37.5	1.2		2
250	15	156PHB250K2J	25	14	3.1	42.5x30x22	37.5	1.2		2
250	20	206PHB250K4J	25	24	2.1	42.5x37x28	37.5	1.2	10.2	4
250	20	206PHB250K2J	25	14	2.8	42.5x37x28	37.5	1.2		2
250	22	226PHB250K2J	25	14	2.8	42.5x37x28	37.5	1.2		2
250	22	226PHB250K4J	25	25	2.1	42.5x37x28	37.5	1.2	10.2	4
250	25	256PHB250K4J	25	26.5	1.9	42.5x37x28	37.5	1.2	20.3	4
250	25	256PHB250K2J	25	14	2.6	42.5x37x28	37.5	1.2		2
250	30	306PHB250K2J	25	14	2.6	42.5x45x30	37.5	1.2		2
250	30	306PHB250K4J	25	26.5	1.9	42.5x45x30	37.5	1.2	20.3	4
250	33	336PHB250K2J	25	14	2.4	42.5x45x30	37.5	1.2		2
250	33	336PHB250K4J	25	27	1.7	42.5x45x30	37.5	1.2	20.3	4
250	40	406PHB250K4R	15	26	2.6	57.5x45x30	52.5	1.2	20.3	4
250	40	406PHB250K2R	15	14	3.3	57.5x45x30	52.5	1.2		2
250	50	506PHB250K2R	15	14	3	57.5x50x35	52.5	1.2		2
250	50	506PHB250K4R	15	26.5	2.3	57.5x50x35	52.5	1.2	20.3	4
250	60	606PHB250K4R	15	27	2	57.5x50x35	52.5	1.2	20.3	4
250	60	606PHB250K2R	15	14	2.7	57.5x50x35	52.5	1.2		2
330	0.68	684PHB330K2G	60	5	8.9	26.5x16x7	22.5	0.8		2
330	1	105PHB330K2G	60	6.5	7	26.5x18.5x10	22.5	0.8		2
330	1.5	155PHB330K2H	45	7.5	6.1	32x20x11	27.5	0.8		2
330	2	205PHB330K2H	45	8.5	5.3	32x22x13	27.5	1		2
330	2.2	225PHB330K2H	45	9	5.1	32x22x13	27.5	1		2
330	2.5	255PHB330K2H	45	9.5	4.9	32x22x13	27.5	1		2
330	3	305PHB330K2H	45	10.5	4.3	32x24.5x15	27.5	1		2
330	3.3	335PHB330K2H	45	10.5	4.1	32x24.5x15	27.5	1		2
330	4.7	475PHB330K2H	45	14	3.4	32x33x18	27.5	1.2		2
330	4.7	475PHB330K4H	45	17	2.7	32x33x18	27.5	1.2	5.1	4
330	5	505PHB330K4H	45	17.5	2.6	32x33x18	27.5	1.2	5.1	4
330	5	505PHB330K2H	45	14	3.3	32x33x18	27.5	1.2		2
330	6.8	685PHB330K2H	45	14	2.8	32x37x22	27.5	1.2		2
330	6.8	685PHB330K4H	45	22	2.1	32x37x22	27.5	1.2	10.2	4
330	6.8	685PHB330K2J	30	14	3.7	42.5x28x17	37.5	1.2		2
330	15	156PHB330K2J	30	14	2.7	42.5x37x28	37.5	1.2		2
330	15	156PHB330K4J	30	26	2	42.5x37x28	37.5	1.2	10.2	4
330	20	206PHB330K2J	30	14	2.5	42.5x45x30	37.5	1.2		2
330	20	206PHB330K4J	30	27	1.8	42.5x45x30	37.5	1.2	20.3	4
330	25	256PHB330K4R	17	23	2.9	57.5x45x30	52.5	1.2	20.3	4
330	25	256PHB330K2R	17	14	3.6	57.5x45x30	52.5	1.2		2

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PHB

Metallized Polypropylene, High Frequency radial lead box

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
330	30	306PHB330K2R	17	14	3.4	57.5x45x30	52.5	1.2		2
330	30	306PHB330K4R	17	24.5	2.7	57.5x45x30	52.5	1.2	20.3	4
330	33	336PHB330K4R	17	26	2.6	57.5x50x35	52.5	1.2	20.3	4
330	33	336PHB330K2R	17	14	3.3	57.5x50x35	52.5	1.2		2
330	35	356PHB330K4R	17	22	2.6	57.5x50x35	52.5	1.2	20.3	4
330	35	356PHB330K2R	17	12	3.2	57.5x50x35	52.5	1.2		2
330	40	406PHB330K4R	17	27	2.4	57.5x50x35	52.5	1.2	20.3	4
330	40	406PHB330K2R	17	14	3.1	57.5x50x35	52.5	1.2		2
400	0.47	474PHB400K2G	75	4.5	8.6	26.5x16x7	22.5	0.8		2
400	0.68	684PHB400K2G	75	6.5	7.1	26.5x18.5x10	22.5	0.8		2
400	0.68	684PHB400K2H	55	6.5	8.8	32x20x11	27.5	0.8		2
400	1	105PHB400K2G	75	7.5	5.8	26.5x20x11	22.5	0.8		2
400	1	105PHB400K2H	55	7	6.7	32x20x11	27.5	0.8		2
400	1.5	155PHB400K2H	55	9	5.3	32x22x13	27.5	1		2
400	2	205PHB400K2H	55	10	4.7	32x24.5x15	27.5	1.2		2
400	2.2	225PHB400K2H	55	10.5	4.4	32x24.5x15	27.5	1.2		2
400	2.5	255PHB400K2H	55	11	4.2	32x24.5x15	27.5	1.2		2
400	3	305PHB400K2H	55	14	3.6	32x33x18	27.5	1.2		2
400	3	305PHB400K4H	55	17	2.9	32x33x18	27.5	1.2	5.1	4
400	3.3	335PHB400K4H	55	17.5	2.8	32x33x18	27.5	1.2	5.1	4
400	3.3	335PHB400K2H	55	14	3.5	32x33x18	27.5	1.2		2
400	4	405PHB400K2H	55	14	3.2	32x33x18	27.5	1.2		2
400	4	405PHB400K4H	55	18.5	2.5	32x33x18	27.5	1.2	10.2	4
400	4.7	475PHB400K2H	55	14	2.8	32x37x22	27.5	1.2		2
400	4.7	475PHB400K4H	55	21.5	2.1	32x37x22	27.5	1.2	10.2	4
400	4.7	475PHB400K2J	40	13.5	3.9	42.5x28x17	37.5	1.2		2
400	5	505PHB400K2H	55	14	2.8	32x37x22	27.5	1.2		2
400	5	505PHB400K4H	55	22	2.1	32x37x22	27.5	1.2	10.2	4
400	5	505PHB400K2J	40	14	3.7	42.5x30x22	37.5	1.2		2
400	6.8	685PHB400K2J	40	14	3.3	42.5x30x22	37.5	1.2		2
400	6.8	685PHB400K4J	40	19.5	2.6	42.5x37x28	37.5	1.2	10.2	4
400	10	106PHB400K4J	40	24.5	2.1	42.5x37x28	37.5	1.2	20.3	4
400	10	106PHB400K2J	40	14	2.8	42.5x37x28	37.5	1.2		2
400	15	156PHB400K2J	40	14	2.4	42.5x45x30	37.5	1.2		2
400	15	156PHB400K4J	40	27	1.7	42.5x45x30	37.5	1.2	20.3	4
400	20	206PHB400K4R	20	24.5	3	57.5x45x30	52.5	1.2	20.3	4
400	20	206PHB400K2R	20	14	3.7	57.5x45x30	52.5	1.2		2
400	22	226PHB400K2R	20	14	3.6	57.5x50x35	52.5	1.2		2
400	22	226PHB400K4R	20	25.5	2.9	57.5x50x35	52.5	1.2	20.3	4
400	25	256PHB400K4R	20	26	2.8	57.5x50x35	52.5	1.2	20.3	4
400	25	256PHB400K2R	20	14	3.4	57.5x50x35	52.5	1.2		2
600	0.22	224PHB600K2G	95	3.5	13	26.5x16x7	22.5	0.8		2
600	0.33	334PHB600K2G	95	5	9.5	26.5x17x8.5	22.5	0.8		2
600	0.47	474PHB600K2G	95	6	8.3	26.5x18.5x10	22.5	0.8		2
600	0.47	474PHB600K2H	75	6	10	32x20x11	27.5	0.8		2
600	0.68	684PHB600K2G	95	7	6.9	26.5x22x13	22.5	0.8		2
600	0.68	684PHB600K2H	75	7	7.6	32x20x11	27.5	0.8		2
600	1	105PHB600K2H	75	8.5	6.1	32x22x13	27.5	1		2
600	1.5	155PHB600K2H	75	11.5	4.6	32x28x14	27.5	1.2		2
600	2	205PHB600K2H	75	14	3.9	32x33x18	27.5	1.2		2
600	2	205PHB600K4H	75	16	3.2	32x33x18	27.5	1.2	10.2	4
600	2.2	225PHB600K2H	75	14	3.9	32x33x18	27.5	1.2		2
600	2.2	225PHB600K4H	75	16.5	3.2	32x33x18	27.5	1.2	10.2	4
600	3	305PHB600K4H	75	21	2.6	32x37x22	27.5	1.2	10.2	4
600	3	305PHB600K2H	75	14	3.3	32x37x22	27.5	1.2		2
600	3	305PHB600K2J	55	14	4.3	42.5x30x22	37.5	1.2		2
600	3.3	335PHB600K2H	75	14	3.2	32x37x22	27.5	1.2		2
600	3.3	335PHB600K4H	75	21.5	2.5	32x37x22	27.5	1.2	10.2	4

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PHB

Metallized Polypropylene, High Frequency radial lead box

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
600	3.3	335PHB600K2J	55	14	4.1	42.5x30x22	37.5	1.2		2
600	4	405PHB600K2J	55	14	3.6	42.5x37x28	37.5	1.2		2
600	4	405PHB600K4J	55	17.5	2.9	42.5x37x28	37.5	1.2	10.2	4
600	4.7	475PHB600K4J	55	22	2.6	42.5x37x28	37.5	1.2	10.2	4
600	4.7	475PHB600K2J	55	14	3.3	42.5x37x28	37.5	1.2		2
600	5	505PHB600K2J	55	14	3.3	42.5x37x28	37.5	1.2		2
600	5	505PHB600K4J	55	22.5	2.6	42.5x37x28	37.5	1.2	10.2	4
600	6.8	685PHB600K4J	55	25.5	2.1	42.5x45x30	37.5	1.2	20.3	4
600	6.8	685PHB600K2J	55	14	2.8	42.5x45x30	37.5	1.2		2
600	9	905PHB600K2J	55	14	2.6	42.5x45x30	37.5	1.2		2
600	9	905PHB600K4J	55	27	1.9	42.5x45x30	37.5	1.2	20.3	4
600	10	106PHB600K4R	30	22	3.8	57.5x45x30	52.5	1.2	20.3	4
600	10	106PHB600K2R	30	14	4.5	57.5x45x30	52.5	1.2		2
600	15	156PHB600K2R	30	14	3.7	57.5x50x35	52.5	1.2		2
600	15	156PHB600K4R	30	25	3	57.5x50x35	52.5	1.2	20.3	4
700	0.15	154PHB700K2G	135	4	13	26.5x16x7	22.5	0.8		2
700	0.22	224PHB700K2G	135	4.5	11	26.5x17x8.5	22.5	0.8		2
700	0.33	334PHB700K2G	135	6	8.5	26.5x20x11	22.5	0.8		2
700	0.33	334PHB700K2H	105	6	11	32x20x11	27.5	0.8		2
700	0.47	474PHB700K2H	105	7.5	7.5	32x22x13	27.5	1		2
700	0.68	684PHB700K2H	105	9	6.1	32x24.5x15	27.5	1		2
700	1	105PHB700K2H	105	13	4.6	32x33x18	27.5	1.2		2
700	1	105PHB700K4H	105	15.5	3.9	32x33x18	27.5	1.2	10.2	4
700	1.5	155PHB700K4H	105	18	3.3	32x37x22	27.5	1.2	10.2	4
700	1.5	155PHB700K2H	105	14	4	32x37x22	37.5	1.2		2
700	1.5	155PHB700K2J	70	12	5.6	42.5x28x17	37.5	1.2		2
700	2	205PHB700K2H	105	14	3.5	32x37x22	27.5	1.2		2
700	2	205PHB700K4H	105	20	2.8	32x37x22	27.5	1.2	10.2	4
700	2	205PHB700K2J	70	13	4.9	42.5x30x22	37.5	1.2		2
700	2.2	225PHB700K2J	70	12	4.7	42.5x30x22	37.5	1.2		2
700	2.2	225PHB700K4J	70	15.5	4	42.5x37x28	37.5	1.2	10.2	2
700	3	305PHB700K2J	70	14	3.9	42.5x37x28	37.5	1.2		2
700	3	305PHB700K4J	70	20	3.2	42.5x37x28	37.5	1.2	10.2	4
700	3.3	335PHB700K4J	70	21.5	3.1	42.5x37x28	37.5	1.2	20.3	4
700	3.3	335PHB700K2J	70	14	3.8	42.5x37x28	37.5	1.2		2
700	4	405PHB700K2J	70	14	3.3	42.5x45x30	37.5	1.2		2
700	4	405PHB700K4J	70	22.5	2.7	42.5x45x30	37.5	1.2	20.3	4
700	4.7	475PHB700K4J	70	25	2.4	42.5x45x30	37.5	1.2	20.3	4
700	4.7	475PHB700K2J	70	14	3.1	42.5x45x30	37.5	1.2		2
700	5	505PHB700K2J	70	14	3	42.5x45x30	37.5	1.2		2
700	5	505PHB700K4J	70	25.5	2.3	42.5x45x30	37.5	1.2	20.3	4
700	6	605PHB700K4R	40	20	4.3	57.5x45x30	52.5	1.2	20.3	4
700	6	605PHB700K2R	40	14	5	57.5x45x30	52.5	1.2		2
700	6.8	685PHB700K2R	40	14	4.7	57.5x45x30	52.5	1.2		2
700	6.8	685PHB700K4R	40	21.5	4	57.5x45x30	52.5	1.2	20.3	4
700	8	805PHB700K4R	40	23.5	3.7	57.5x50x35	52.5	1.2	20.3	4
700	8	805PHB700K2R	40	14	4.4	57.5x50x35	52.5	1.2		2
700	9	905PHB700K2R	40	14	4.1	57.5x50x35	52.5	1.2		2
700	9	905PHB700K4R	40	25	3.4	57.5x50x35	52.5	1.2	20.3	4
850	0.1	104PHB850K2G	375	4	13	26.5x16x7	22.5	0.8		2
850	0.1	104PHB850K2H	300	4	15	32x17x9	27.5	0.8		2
850	0.15	154PHB850K2G	375	5	9.7	26.5x18.5x10	22.5	0.8		2
850	0.15	154PHB850K2H	300	5.5	11	32x20x11	27.5	0.8		2
850	0.22	224PHB850K2G	375	7	7.6	26.5x22x13	22.5	0.8		2
850	0.22	224PHB850K2H	300	6.5	8.3	32x20x11	27.5	0.8		2
850	0.33	334PHB850K2H	300	8	6.3	32x22x13	27.5	1		2
850	0.47	474PHB850K2H	300	9.5	5.1	32x24.5x15	27.5	1.2		2
850	0.68	684PHB850K2H	300	14	3.8	32x33x18	27.5	1.2		2

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PHB

Metallized Polypropylene, High Frequency radial lead box

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
850	0.68	684PHB850K4H	300	16	3.1	32x33x18	27.5	1.2	5.1	4
850	1	105PHB850K4H	300	20.5	2.4	32x37x22	27.5	1.2	10.2	4
850	1	105PHB850K2H	300	14	3.1	32x37x22	27.5	1.2		2
850	1	105PHB850K2J	200	13	4.2	42.5x28x17	37.5	1.2		2
850	1.5	155PHB850K2J	200	14	3.4	42.5x30x22	37.5	1.2		2
850	2	205PHB850K2J	200	14	3	42.5x37x28	37.5	1.2		2
850	2	205PHB850K4J	200	23	2.3	42.5x37x28	37.5	1.2	10.2	4
850	2.2	225PHB850K4J	200	24.5	2.3	42.5x37x28	37.5	1.2	10.2	4
850	2.2	225PHB850K2J	200	14	3	42.5x37x28	37.5	1.2		2
850	2.5	255PHB850K2J	200	14	2.8	42.5x37x28	37.5	1.2		2
850	2.5	255PHB850K4J	200	24	2.1	42.5x37x28	37.5	1.2	20.3	4
850	3	305PHB850K4J	200	27	1.8	42.5x45x30	37.5	1.2	20.3	4
850	3	305PHB850K2J	200	14	2.4	42.5x45x30	37.5	1.2		2
850	3.3	335PHB850K2J	200	14	2.4	42.5x45x30	37.5	1.2		2
850	3.3	335PHB850K4J	200	27	1.8	42.5x45x30	37.5	1.2	20.3	4
850	4	405PHB850K4R	110	25	2.5	57.5x45x30	52.5	1.2	20.3	4
850	4	405PHB850K2R	110	14	3.2	57.5x45x30	52.5	1.2		2
850	4.7	475PHB850K2R	110	14	2.8	57.5x45x30	52.5	1.2		2
850	4.7	475PHB850K4R	110	27	2.1	57.5x45x30	52.5	1.2	20.3	4
850	5.6	565PHB850K4R	110	27	2	57.5x50x35	52.5	1.2	20.3	4
850	5.6	565PHB850K2R	110	14	2.7	57.5x50x35	52.5	1.2		2
850	6	605PHB850K2R	110	14	2.6	57.5x50x35	52.5	1.2		2
850	6	605PHB850K4R	110	27	2	57.5x50x35	52.5	1.2	20.3	4

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PPB

Polypropylene Film Capacitors

Radial Leaded for Power Semiconductor Circuits



FEATURES	High Pulse Currents - High voltage
APPLICATIONS	Power Semiconductor Circuits – SCR Commutation Ballast controls – Switching Power Supplies

Operating Temperature Range	**-55°C to +105°C**							
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional							
AC voltage (50/60 Hz)	**WVDC**	**250**	**400**	**630**	**1000**	**1600**	**2000**	
	VAC	160	200	400	630	650	700	
	For T>+85°C , The voltage (DC/AC)must be decreased by (1.5/2.25)% per °C							
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤0.1uF**	**0.1uF<C≤1uF**	**C>1uF**				
	1	0.05%	0.04%	0.05%				
	10	0.05%	0.06%	-				
	100	0.16%	-	-				
Insulation Resistance @25°C (<70% RH)for 1 minute at 100VDC applied	**Capacitance**		**Insulation Resistance**					
	≤0.33µF		100000 MΩ					
	>0.33µF		30000 MΩxµF					
Self Inductance	<1 nano-Henry per mm of lead spacing							
Capacitance Drift Factor	<0.5% after 2 years at 40°C							
Load Life	**2000 Hours, +85C with 125% of rated voltage**							
	Capacitance Change	≤1% of initially measured value						
	Dissipation Factor	≤0.001 at 10kHz and 25°C for C≤1uF ≤0.001 at 1kHz and 25°C for C>1uF						
	Insulation Resistance	≥50% of maximum specified value						
Reliability (0.5xRated Voltage, 40°C) 1 FIT=1 failure/1 billion component hours	2 Fit, VDC≤400 WVDC 1 Fit, VDC>400 WVDC							
	Capacitance Change	≤10% of initially measured value						
	Dissipation Factor	≤200% of initially specified value						
	Insulation Resistance	≥50% of maximum specified value						
Damp Heat test	**56 days at40°C with 90 to 95%RH, +40°C and no voltage applied**							
	Capacitance Change	≤5% of initially measured value						
	Dissipation Factor	≤0.005 at 1kHz and 25°C						
	Insulation Resistance	≥50% of maximum specified value						
Self Inductance	<1 nano-Henry per mm of lead spacing							
Capacitance Drift Factor	<0.5% after 2 years at 40°C							
Capacitance Temperature Coefficient	-200 ppm/°C, ±100ppm/°C							
Dielectric Strength	**Terminal to Terminal**					**Terminal to case**		
	160% of rated VDC or 150% VAC applied for 2 Seconds and 25°C					3kVAC @ 50/60 Hz applied between terminals and case for 60 seconds at 25°C		
Dielectric	Polypropylene							
Construction	Metallized film							
Plastic Case and Epoxy Resin	Flame Retardant materials (UL 94V-0)							
Leads	Lead free tinned copper leads							

Special Order Options

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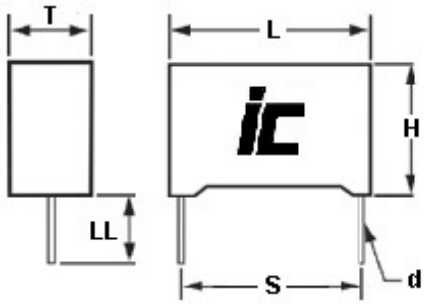
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PPB

Polypropylene Film Capacitors

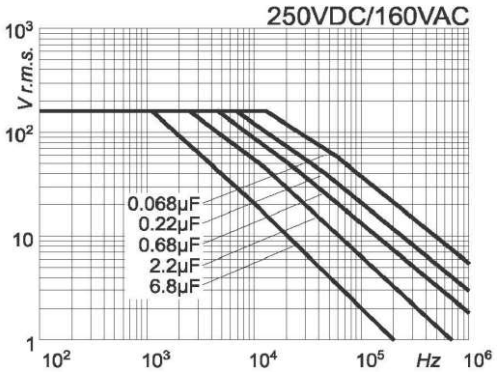
Radial Leaded for Power Semiconductor Circuits

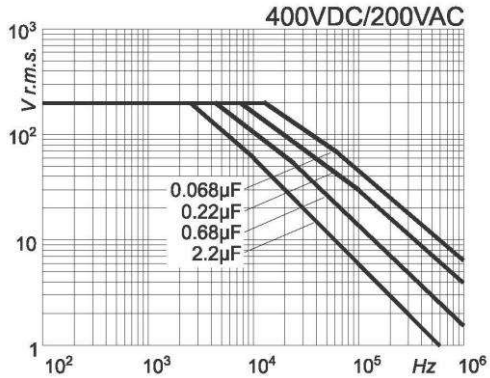


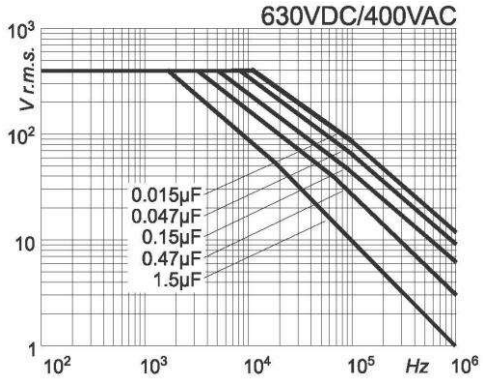


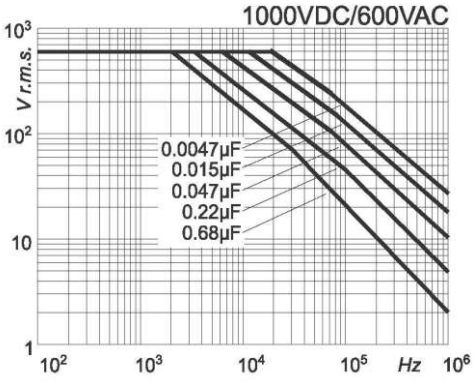
L	18	26.5	32	42.5
S	15	22.5	27.5	37.5
d	0.8	0.8	0.8	1.0
LL	5.0±1.0	5.0±1.0	30±5.0	30±5.0

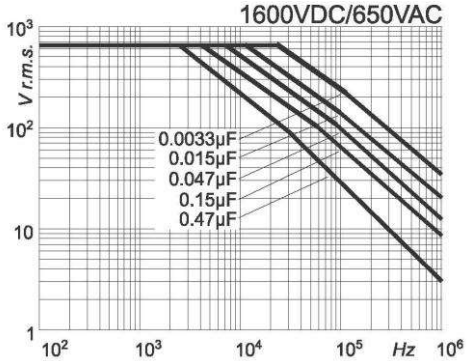
Permissible (sinusoidal) AC voltage versus frequency for a temperature rise of 10°C
Not for across the line applications

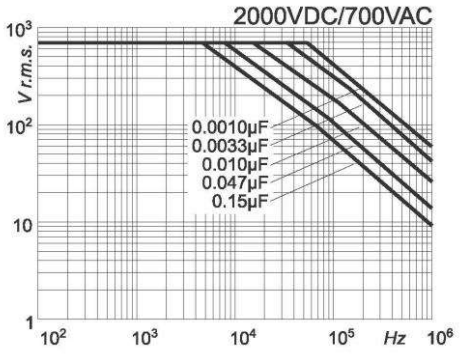












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PPB

High Voltage Pulse Radial Lead Snubber

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
250	0.047	473PPB250K	560	18x11x5	15	0.8
250	0.068	683PPB250K	560	18x12x6	15	0.8
250	0.1	104PPB250K	560	18x13.5x7.5	15	0.8
250	0.15	154PPB250K	560	18x14.5x8.5	15	0.8
250	0.22	224PPB250KB	560	18x16x10	15	0.8
250	0.22	224PPB250K	320	26.5x15x6	22.5	0.8
250	0.33	334PPB250K	320	26.5x17x8.5	22.5	0.8
250	0.47	474PPB250K	320	26.5x18.5x10	22.5	0.8
250	0.68	684PPB250KB	320	26.5x20x11	22.5	0.8
250	0.68	684PPB250K	240	32x20x11	27.5	0.8
250	1	105PPB250KG	320	26.5x22x13	22.5	0.8
250	1	105PPB250K	240	32x20x11	27.5	0.8
250	1.5	155PPB250K	240	32x24.5x15	27.5	0.8
250	2.2	225PPB250K	240	32x28x14	27.5	0.8
250	2.2	225PPB250KB	170	42.5x28x17	37.5	1
250	3.3	335PPB250K	170	42.5x30x22	37.5	1
250	4.7	475PPB250K	170	42.5x30x22	37.5	1
250	6.8	685PPB250K	170	42.5x37x28	37.5	1
400	0.033	333PPB400K	910	18x11x5	15	0.8
400	0.047	473PPB400K	910	18x12x6	15	0.8
400	0.068	683PPB400K	910	18x13.5x7.5	15	0.8
400	0.1	104PPB400K	910	18x14.5x8.5	15	0.8
400	0.15	154PPB400KE	910	18x16x10	15	0.8
400	0.15	154PPB400K	520	26.5x16x7	22.5	0.8
400	0.22	224PPB400K	520	26.5x18.5x10	22.5	0.8
400	0.33	334PPB400K	520	26.5x20x11	22.5	0.8
400	0.33	334PPB400KH	400	32x17x9	27.5	0.8
400	0.47	474PPB400KG	520	26.5x22x13	22.5	0.8
400	0.47	474PPB400K	400	32x22x13	27.5	0.8
400	0.68	684PPB400K	400	32x24.5x15	27.5	0.8
400	1	105PPB400KB	400	32x33x18	27.5	1
400	1	105PPB400K	280	42.5x28x17	37.5	1
400	1.5	155PPB400K	280	42.5x28x17	37.5	1
400	2.2	225PPB400K	280	42.5x30x22	37.5	1
400	3.3	335PPB400K	280	42.5x37x28	37.5	1
630	0.0047	472PPB630K	3300	18x11x5	15	0.8
630	0.0068	682PPB630K	3300	18x11x5	15	0.8
630	0.01	103PPB630K	3300	18x11x5	15	0.8
630	0.015	153PPB630K	3300	18x11x5	15	0.8
630	0.022	223PPB630K	3300	18x12x6	15	0.8
630	0.033	333PPB630K	3300	18x13.5x7.5	15	0.8
630	0.047	473PPB630KB	3300	18x16x10	15	0.8
630	0.047	473PPB630K	2050	26.5x15x6	22.5	0.8
630	0.068	683PPB630K	2050	26.5x16x7	22.5	0.8
630	0.1	104PPB630K	2050	26.5x17x8.5	22.5	0.8
630	0.15	154PPB630KG	1500	26.5x20x11	22.5	0.8
630	0.15	154PPB630K	1500	32x20x11	27.5	0.8
630	0.22	224PPB630K	1500	32x22x13	27.5	0.8
630	0.33	334PPB630K	1500	32x24.5x15	27.5	0.8
630	0.47	474PPB630KB	1500	32x33x18	27.5	1
630	0.47	474PPB630K	950	42.5x28x16	37.5	1
630	0.68	684PPB630K	950	42.5x28x17	37.5	1
630	1	105PPB630K	950	42.5x30x22	37.5	1
630	1.5	155PPB630K	950	42.5x37x28	37.5	1
1000	0.0033	332PPB102K	5500	18x11x5	15	0.8
1000	0.0047	472PPB102K	5500	18x11x5	15	0.8
1000	0.0068	682PPB102K	5500	18x11x5	15	0.8

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
1000	0.01	103PPB102KE	6200	18x12x6	15	0.8
1000	0.01	103PPB102K	2500	26.5x15x6	22.5	0.8
1000	0.015	153PPB102KB	5500	18x13.5x7.5	15	0.8
1000	0.015	153PPB102K	2600	26.5x15x6	22.5	0.8
1000	0.022	223PPB102KB	5500	18x14.5x8.5	15	0.8
1000	0.022	223PPB102K	2600	26.5x15x6	22.5	0.8
1000	0.033	333PPB102K	2600	26.5x16x7	22.5	0.8
1000	0.047	473PPB102K	2600	26.5x17x8.5	22.5	0.8
1000	0.068	683PPB102K	2600	26.5x18.5x10	22.5	0.8
1000	0.1	104PPB102KG	2600	26.5x22x13	22.5	0.8
1000	0.1	104PPB102K	1850	32x20x11	27.5	0.8
1000	0.15	154PPB102K	1850	32x22x13	27.5	0.8
1000	0.22	224PPB102K	1850	32x28x14	27.5	0.8
1000	0.33	334PPB102KB	1850	32x33x18	27.5	1
1000	0.33	334PPB102K	1200	42.5x28.5x16	37.5	1
1000	0.47	474PPB102K	1200	42.5x30x22	37.5	1
1000	0.68	684PPB102K	1200	42.5x37x28	37.5	1
1000	1	105PPB102K	1200	42.5x37x28	37.5	1
1600	0.0022	222PPB162K	7500	18x11x5	15	0.8
1600	0.0033	332PPB162K	7500	18x12x6	15	0.8
1600	0.0047	472PPB162K	7500	18x13.5x7.5	15	0.8
1600	0.0068	682PPB162K	7500	18x14.5x8.5	15	0.8
1600	0.01	103PPB162KB	7500	18x16x10	15	0.8
1600	0.01	103PPB162K	3800	26.5x15.5x6	22.5	0.8
1600	0.015	153PPB162K	3800	26.5x16x7	22.5	0.8
1600	0.022	223PPB162K	3800	26.5x17x8.5	22.5	0.8
1600	0.033	333PPB162K	3800	26.5x18.5x10	22.5	0.8
1600	0.047	473PPB162KG	3800	26.5x22x13	22.5	0.8
1600	0.047	473PPB162K	2700	32x20x11	27.5	0.8
1600	0.068	683PPB162K	2700	32x22x13	27.5	0.8
1600	0.1	104PPB162K	2700	32x28x14	27.5	0.8
1600	0.15	154PPB162KB	2700	32x33x18	27.5	1
1600	0.15	154PPB162K	1700	42.5x28x17	37.5	1
1600	0.22	224PPB162K	1700	42.5x28x17	37.5	1
1600	0.33	334PPB162K	1700	42.5x30x22	37.5	1
1600	0.47	474PPB162K	1700	42.5x37x28	37.5	1
2000	0.001	102PPB202KE	9000	18x11x5	15	0.8
2000	0.001	102PPB202K	6200	26.5x15x6	22.5	0.8
2000	0.0015	152PPB202KE	9000	18x11x5	15	0.8
2000	0.0022	222PPB202KE	9000	18x12x6	15	0.8
2000	0.0033	332PPB202KB	9000	18x13.5x7.5	15	0.8
2000	0.0033	332PPB202K4	6200	26.5x15x6	22.5	0.8
2000	0.0047	72PPB202KB	9000	18x14.5x8.5	15	0.8
2000	0.0047	472PPB202K	6200	26.5x15x6	22.5	0.8
2000	0.0068	682PPB202KB	9000	18x16x10	15	0.8
2000	0.0068	682PPB202K	6200	26.5x15x6	22.5	0.8
2000	0.01	103PPB202K	6200	26.5x17x8.5	22.5	0.8
2000	0.015	153PPB202K	6200	26.5x18.5x10	22.5	0.8
2000	0.022	223PPB202KG	6200	26.5x22x13	22.5	0.8
2000	0.022	223PPB202K	4200	32x20x11	27.5	0.8
2000	0.033	333PPB202K	4200	32x22x13	27.5	0.8
2000	0.047	473PPB202K	4200	32x24.5x15	27.5	0.8
2000	0.068	683PPB202K	4200	32x28x14	27.5	0.8
2000	0.1	104PPB202KB	4200	32x33x18	27.5	1
2000	0.1	104PPB202K	2600	42.5x28x17	37.5	1
2000	0.15	154PPB202K	2600	42.5x30x22	37.5	1
2000	0.22	224PPB202K	2600	42.5x37x28	37.5	1

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PPR

Polypropylene Film Capacitors

Small Size for High Pulse Current Applications



FEATURES	High Pulse Currents - High voltage
APPLICATIONS	Power Semiconductor Circuits – SCR Commutation – Ballasts Controls – Switching Power Supplies

Operating Temperature Range	**-55°C to +105°C**					
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional					
AC voltage (50/60 Hz)	**WVDC**	**630**	**1000**	**1600**	**2000**	
	VAC	400	630	650	700	
	DC: For T>+85°C , The voltage must be decreased by 1.5% per °C AC: For T> +75°C, The voltage must be decreased by 1.75% per °C					
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤0.1uF**	**0.1uF<C≤1uF**	**C>1uF**		
	1	0.04%	0.04%	0.05%		
	10	0.05%	0.06%	-		
	100	0.16%	-	-		
Insulation Resistance @25°C (<70% RH)for 1 minute at 100VDC applied	**Capacitance**	**Insulation Resistance**				
	≤0.33µF	100000 MΩ				
	>0.33µF	30000 MΩxµF				
Self Inductance	<1 nano-Henry per mm of lead spacing					
Capacitance Drift Factor	<0.5% after 2 years at 40°C					
Load Life	**2000 Hours, +85C with 125% of rated voltage**					
	Capacitance Change	≤1% of initially measured value				
	Dissipation Factor	≤0.001 at 10kHz and 25°C for C≤1uF ≤0.001 at 1kHz and 25°C for C>1uF				
	Insulation Resistance	≥50% of maximum specified value				
Reliability (0.5xRated Voltage, 40°C) 1 FIT=1 failure/1 billion component hours	1 Fit					
	Capacitance Change	≤10% of initially measured value				
	Dissipation Factor	≤200% of initially specified value				
	Insulation Resistance	≥50% of maximum specified value				
Damp Heat test	**56 days at40°C with 90 to 95%RH, +40°C and no voltage applied**					
	Capacitance Change	≤5% of initially measured value				
	Dissipation Factor	≤0.005 at 1kHz and 25°C				
	Insulation Resistance	≥50% of maximum specified value				
Self Inductance	<1 nano-Henry per mm of lead spacing					
Capacitance Drift Factor	<0.5% after 2 years at 40°C					
Capacitance Temperature Coefficient	-200 ppm/°C, ±100ppm/°C					
Dielectric Strength	**Terminal to Terminal**					
	160% of rated VDC applied for 2 Seconds and 25°C					
Dielectric	Polypropylene					
Construction	Metallized film					
Coating	Flame Retardant plastic box (UL 94V-1) with epoxy resin fill (UL94V0)					
Leads	Lead free tinned copper leads					

Special Order Options

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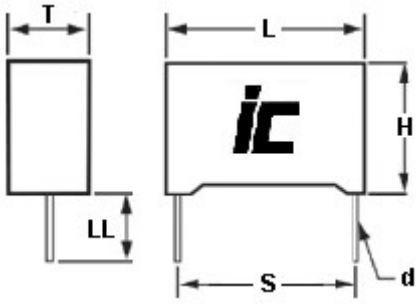
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PPR

Polypropylene Film Capacitors

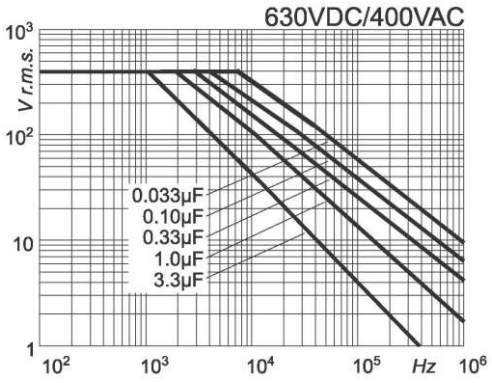
Small Size for High Pulse Current Applications

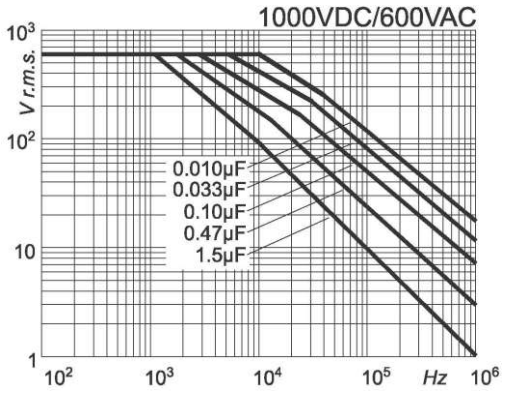


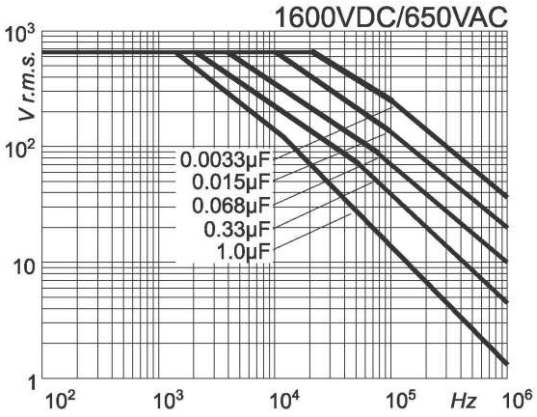


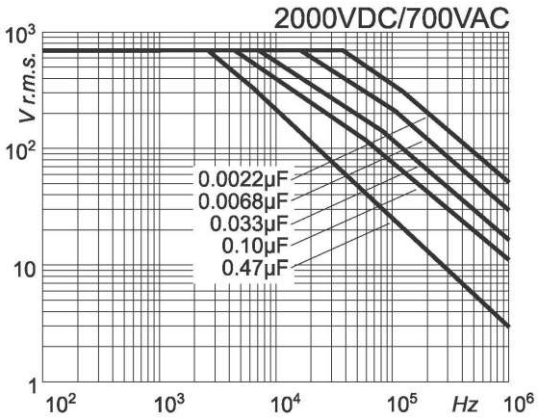
L	18	26.5	32	42.5
S	15	22.5	27.5	37.5
d	0.8	0.8	0.8	1.2
LL	5.0±1.0	5.0±1.0	30±5.0	30±5.0

Permissible (sinusoidal) AC voltage versus frequency for a temperature rise of 10°C
Not for across the line applications









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PPR

High Voltage Pulse Radial Lead Snubber

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
630	0.022	223PPR630KE	2500	18x11x5	15	0.8
630	0.033	333PPR630KE	2500	18x12x6	15	0.8
630	0.047	473PPR630KE	2500	18x13.5x7.5	15	0.8
630	0.068	683PPR630KE	2500	18x14.5x8.5	15	0.8
630	0.068	683PPR630KG	1500	26.5x15x6	22.5	0.8
630	0.1	104PPR630KE	2500	18x16x10	15	0.8
630	0.1	104PPR630KG	1500	26.5x15x6	22.5	0.8
630	0.15	154PPR630KG	1500	26.5x17x8.5	22.5	0.8
630	0.15	154PPR630KH	900	32x17x9	27.5	0.8
630	0.22	224PPR630KG	1500	26.5x18.5x10	22.5	0.8
630	0.22	224PPR630KH	900	32x17x9	27.5	0.8
630	0.33	334PPR630KG	1500	26.5x22x12	22.5	0.8
630	0.33	334PPR630KH	900	32x20x11	27.5	0.8
630	0.47	474PPR630KH	900	32x22x13	27.5	0.8
630	0.68	684PPR630KH	900	32x24.5x15	27.5	0.8
630	1	105PPR630KH	900	32x33x18	27.5	0.8
630	1	105PPR630KJ	450	42.5x28x17	37.5	1
630	1.5	155PPR630KH	900	32x37x22	27.5	0.8
630	1.5	155PPR630KJ	450	42.5x30x22	37.5	1
630	2.2	225PPR630KJ	450	42.5x37x28	37.5	1
630	3.3	335PPR630KJ	450	42.5x45x30	37.5	1
630	3.9	395PPR630KJ	450	42.5x45x30	37.5	1
1000	0.01	103PPR102KE	3300	18x11x5	15	0.8
1000	0.015	153PPR102KE	3300	18x12x6	15	0.8
1000	0.022	223PPR102KE	3300	18x13.5x7.5	15	0.8
1000	0.033	333PPR102KE	3300	18x14.5x8.5	15	0.8
1000	0.033	333PPR102KG	2100	26.5x15x6	22.5	0.8
1000	0.047	473PPR102KG	2100	26.5x16x7	22.5	0.8
1000	0.068	683PPR102KG	2100	26.5x17x8.5	22.5	0.8
1000	0.1	104PPR102KG	2100	26.5x18.5x10	22.5	0.8
1000	0.1	104PPR102KH	1000	32x17x9	27.5	0.8
1000	0.15	154PPR102KG	2100	26.5x22x13	22.5	0.8
1000	0.15	154PPR102KH	1000	32x20x11	27.5	0.8
1000	0.22	224PPR102KH	1000	32x22x13	27.5	0.8
1000	0.33	334PPR102KH	1000	32x28x14	27.5	0.8
1000	0.47	474PPR102KH	1000	32x33x18	27.5	0.8
1000	0.68	684PPR102KH	1000	32x37x22	27.5	0.8
1000	0.68	684PPR102KJ	500	42.5x30x22	37.5	1
1000	1	105PPR102KJ	500	42.5x37x28	37.5	1
1000	1.5	155PPR102KJ	500	42.5x37x28	37.5	1
1000	1.8	185PPR102KJ	500	42.5x45x30	37.5	1
1600	0.0033	332PPR162KE	6000	18x11x5	15	0.8
1600	0.0047	472PPR162KE	6000	18x11x5	15	0.8

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
1600	0.0068	682PPR162KE	6000	18x11x5	15	0.8
1600	0.01	103PPR162KE	6000	18x12x6	15	0.8
1600	0.015	153PPR162KE	6000	18x13.5x7.5	15	0.8
1600	0.022	223PPR162KE	6000	18x14.5x8.5	15	0.8
1600	0.022	223PPR162KG	3000	26.5x15x6	22.5	0.8
1600	0.033	333PPR162KG	3000	26.5x16x7	22.5	0.8
1600	0.047	473PPR162KG	3000	26.5x18.5x10	22.5	0.8
1600	0.047	473PPR162KH	2000	32x17x9	27.5	0.8
1600	0.068	683PPR162KG	3000	26.5x20x11	22.5	0.8
1600	0.068	683PPR162KH	2000	32x17x9	27.5	0.8
1600	0.1	104PPR162KG	3000	26.5x22x13	22.5	0.8
1600	0.1	104PPR162KH	2000	32x20x11	27.5	0.8
1600	0.15	154PPR162KH	2000	32x24.5x15	27.5	0.8
1600	0.22	224PPR162KH	2000	32x33x18	27.5	0.8
1600	0.33	334PPR162KH	2000	32x33x18	27.5	0.8
1600	0.33	334PPR162KJ	1200	42.5x28x17	37.5	1
1600	0.47	474PPR162KH	2000	32x37x22	27.5	0.8
1600	0.47	474PPR162KJ	1200	42.5x30x22	37.5	1
1600	0.68	684PPR162KJ	1200	42.5x37x28	37.5	1
1600	1	105PPR162KJ	1200	42.5x45x30	37.5	1
2000	0.0022	222PPR202KE	7000	18x11x5	15	0.8
2000	0.0033	332PPR202KE	7000	18x12x6	15	0.8
2000	0.0047	472PPR202KE	7000	18x13.5x7.5	15	0.8
2000	0.0068	682PPR202KE	7000	18x13.5x7.5	15	0.8
2000	0.01	103PPR202KE	7000	18x16x10	15	0.8
2000	0.01	103PPR202KG	3500	26.5x15x6	22.5	0.8
2000	0.015	153PPR202KG	3500	26.5x16x7	22.5	0.8
2000	0.022	223PPR202KG	3500	26.5x17x8.5	22.5	0.8
2000	0.022	223PPR202KH	2300	32x17x9	27.5	0.8
2000	0.033	333PPR202KG	3500	26.5x18.5x10	22.5	0.8
2000	0.033	333PPR202KH	2300	32x17x9	27.5	0.8
2000	0.047	473PPR202KG	3500	26.5x22x13	22.5	0.8
2000	0.047	473PPR202KH	2300	32x20x11	27.5	0.8
2000	0.068	683PPR202KH	2300	32x22x13	27.5	0.8
2000	0.1	104PPR202KH	2300	32x28x14	27.5	0.8
2000	0.15	154PPR202KH	2300	32x33x18	27.5	0.8
2000	0.15	154PPR202KJ	1500	42.5x28x17	37.5	1
2000	0.22	224PPR202KH	2300	32x37x22	27.5	0.8
2000	0.22	224PPR202KJ	1500	42.5x30x22	37.5	1
2000	0.33	334PPR202KJ	1500	42.5x37x28	37.5	1
2000	0.47	474PPR202KJ	1500	42.5x37x28	37.5	1
2000	0.56	564PPR202KJ	1500	42.5x45x30	37.5	1

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PSB/RSB

Metallized Polypropylene Film Capacitors

Radial Leaded with Double Sided Electrodes



FEATURES — Power Semiconductor Module Protection - High Pulse and rms Current – Multiple Leads

APPLICATIONS — Power Semiconductor Circuits – Resonant Circuits – Induction Heaters – Switching Power Supplies

Operating Temperature Range	**PSB: -40°C to +100°C, observing voltage and current derating RSB: -40°C to +85°C**								
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional								
Non-Recurrent SVDC	**WVDC**	**700**	**850**	**1000**	**1200**	**1500**	**2000**	**2500**	**3000**
	VAC (RSB)	1100	1300 (1200)	1550 (1300)	1750 (1600)	2200	2600 (2400)	3300	4000 (3500)
AC voltage (50/60 Hz)	**WVDC**	**700**	**850**	**1000**	**1200**	**1500**	**2000**	**2500**	**3000**
	VAC	380/420	500	575	630	650	700	725	750
	For T>+85°C , The voltage (DC/AC)must be decreased by (1.5/2.5)% per °C								
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤1uF**	**C>1uF**						
	1	0.05%	0.06%						
Insulation Resistance @25°C (<70% RH)for 1 minute at 100VDC applied	**Insulation Resistance**								
	30000 MΩxuF (not to exceed 30GΩ)								
Self Inductance	<1 nano-Henry per mm of lead spacing								
Capacitance Drift Factor	<0.5% after 2 years at 40°C								
Life Expectancy	100000 Hours @WVDC 30000 Hours @ VAC								
	Capacitance Change	≤3% of initially measured value							
Failure quota	300/ Billion component hours								
Damp Heat test	**56 days at40°C with 90 to 95%RH, +40°C and no voltage applied**								
	Capacitance Change	≤2% of initially measured value							
	Dissipation Factor	≤0.001 at 1kHz and 25°C							
	Insulation Resistance	≥50% of maximum specified value							
Self Inductance	<1 nano-Henry per mm of lead spacing								
Capacitance Drift Factor	<0.5% after 2 years at 40°C								
Capacitance Temperature Coefficient	-200 ppm/°C, ±100ppm/°C								
Dielectric Strength	**Terminal to Terminal**						**Terminal to case**		
	160% of rated VDC or 150% VAC applied for 2 Seconds and 25°C						3kVAC @ 50/60 Hz applied between terminals and case for 60 seconds at 25°C		
Dielectric	Polypropylene								
Construction	Double Metallized film with internal series connections								
Coating	Flame Retardant plastic box with epoxy resin (UL94V-0)								
Leads	Lead free tinned copper leads								

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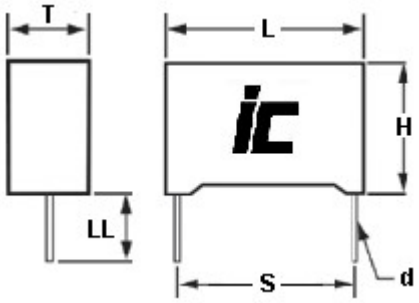
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PSB/RSB

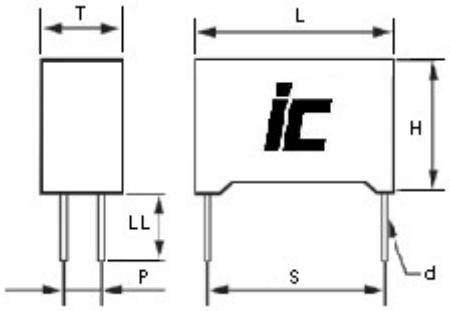
Metallized Polypropylene Film Capacitors

Radial Leaded with Double Sided Electrodes

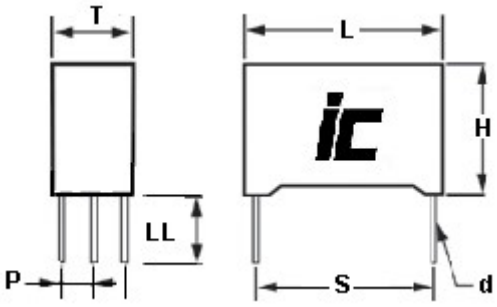




WVDC	ALL	≤850	850<v<2000		2500		ALL	ALL
L	27.5	32	32	32	32	32	42.5	57.5
H	ALL	20	22,24.5	>24.5	33	>33	ALL	ALL
T	ALL	ALL	≤15	>15	<18	>18	ALL	ALL
S	22.5	27.5	27.5	27.5	27.5	27.5	37.5	52.5
d	0.8	0.8	1.0	1.2	1.0	1.2	1.2	1.2
LL	5±1 (25±5 Optional)							



L	32	32	32	42.5	42.5	57.5
H	>22	22>H>,24.5	≥28	≥37	>37	ALL
P	10.2	≤15	≤15	>18	ALL	20.3
S	27.5	27.5	27.5	37.5	37.5	52.5
d	0.8	1.0	1.0	1.2	1.2	1.2
LL	5.5±1.5					



L	57.5
H	ALL
T	ALL
S	52.5±0.4
P	10.2±05
LL	5.5±1.5
d	1.2±0.05

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
700	0.1	104PSB700K2G	1200	4	13.3	26.5x16x7	22.5	0.8		2
700	0.15	154PSB700K2G	1200	5.5	9.5	26x19x10	22.5	0.8		2
700	0.22	224PSB700K2G	1200	6.5	7	26.5x20x11	22.5	0.8		2
700	0.22	224PSB700K2H	900	6.5	8	32x20x11	27.5	0.8		2
700	0.33	334PSB700K2H	1500	8.5	6	32x22x13	27.5	1		2
700	0.47	474PSB700K2H	900	10	4.8	32x24.5x15	27.5	1		2
700	0.68	684PSB700K2H	900	14	3.8	32x33x18	27.5	1.2		2
700	0.68	684PSB700K4H	900	17	3.1	32x33x18	27.5	1.2	5.1	4
700	1	105PSB700K4H	900	21	2.5	32x37x22	27.5	1.2	10.2	4
700	1	105PSB700K2H	900	14	3.2	32x37x22	27.5	1.2		2
700	1	105PSB700K2J	600	13.5	4	42.5x28x17	37.5	1.2		2
700	1.5	155PSB700K2J	600	14	3.6	42.5x30x22	37.5	1.2		2
700	1.8	185RSB700K4H	720	19.5	2.8	32x37x22	27.5	1.2	10.2	4
700	1.8	185RSB700K4H	720	19.5	2.8	32x37x22	27.5	1.2	10.5	4
700	2	205PSB700K4J	600	22.5	2.5	42.5x37x28	37.5	1.2	10.2	4
700	2	205PSB700K4JA	600	22.5	2.5	41.5x40x20	37.5	1.2	10.2	4
700	2	205PSB700K2J	600	14	3.2	42.5x37x28	37.5	1.2		2
700	2	205PSB700K2JA	600	14	3.2	41.5x40x20	37.5	1.2		2
700	2	205RSB700K2J	455	13	4.9	42x32x17	37.5	1.2		2
700	2.2	225RSB700K2J	455	13.5	4.6	42.5x30x22	37.5	1.2		2
700	2.2	225PSB700K2J	600	14	3.1	42.5x37x28	37.5	1.2		2
700	2.2	225PSB700K4J	600	23	2.4	42.5x37x28	37.5	1.2	20.3	4
700	2.5	255PSB700K4J	600	24.5	2.2	42.5x37x28	37.5	1.2	20.3	4
700	2.5	255PSB700K4JA	600	27	2.2	41.5x44x24	37.5	1.2	10.2	4
700	2.5	255RSB700K2J	455	14	4.5	42.5x33.5x22	37.5	1.2		2
700	2.5	255PSB700K2J	600	14	2.7	42.5x37x28	37.5	1.2		2
700	2.5	255PSB700K2JA	600	14	2.7	41.5x44x24	37.5	1.2		2
700	3	305PSB700K2J	600	14	2.7	42.5x45x30	37.5	1.2		2
700	3	305PSB700K4J	600	27	2	42.5x45x30	37.5	1.2	20.3	4
700	3.3	335PSB700K4J	600	27	2	42.5x45x30	37.5	1.2	20.3	4
700	3.3	335PSB700K6J	600	29.5	1.9	42.5x45x30	37.5	1.2	10.2	6
700	3.3	335PSB700K2J	600	14	2.7	42.5x45x30	37.5	1.2		2
700	3.3	335RSB700K4J	455	19.5	3.3	42.5x37x28	37.5	1.2	10.2	4
700	3.3	335RSB700K2J	455	14	4	42.5x37x28	37.5	1.2		2
700	4	405PSB700K2R	360	14	3.1	57.5x45x30	52.5	1.2		2
700	4	405PSB700K6R	200	27	2.4	57.5x45x30	52.5	1.2	10.2	6
700	4	405PSB700K4R	360	27	2.4	57.5x45x30	52.5	1.2	20.3	4
700	4.7	475RSB700K4J	455	24.5	2.7	42.5x45x30	37.5	1.2	20.3	4
700	4.7	475RSB700K2J	455	14	3.4	42.5x45x30	37.5	1.2		2
700	4.7	475PSB700K2R	360	14	2.9	57.5x50x35	52.5	1.2		2
700	4.7	475PSB700K4R	360	27	2.2	57.5x50x35	52.5	1.2	20.3	4
700	4.7	475PSB102K6R	500	37.5	1.7	57.5x57.5x38	52.5	1.2	10.2	6
700	4.7	475PSB700K6R	360	30	2.1	57.5x50x35	52.5	1.2	10.2	6
700	5	505RSB700K4J	455	24.5	2.7	42.5x45x30	37.5	1.2	20.3	4
700	5	505RSB700K2J	455	14	3.4	42.5x45x30	37.5	1.2		2
700	5	505PSB700K2R	360	14	2.9	57.5x50x35	52.5	1.2		2
700	5	505PSB700K6R	360	30.5	2.1	57.5x50x35	52.5	1.2	10.2	6
700	5	505PSB700K4R	360	27	2.2	57.5x50x35	52.5	1.2	20.3	4
700	5.6	565PSB700K4R	360	27	1.9	57.5x50x35	52.5	1.2	20.3	4
700	5.6	565PSB700K6R	360	32	1.8	57.5x50x35	52.5	1.2	10.2	6
700	5.6	565PSB700K2R	360	14	2.6	57.5x50x35	52.5	1.2		2
700	6.3	635PSB700K2R	360	14	2.6	57.5x50x35	52.5	1.2		2
700	6.3	635PSB700K4R	360	27	1.9	57.5x50x35	52.5	1.2	20.3	4
700	6.3	635PSB700K6R	360	33.5	1.8	57.5x50x35	52.5	1.2	10.2	6
700	6.8	685PSB700K6R	360	35.5	1.7	57.5x57.5x38	52.5	1.2	10.2	6
700	6.8	685PSB700K4R	360	27	1.8	57.5x57.5x38	52.5	1.2	20.3	4
700	6.8	685RSB700K4R	285	23.5	3.3	57.5x45x30	52.5	1.2	20.3	4
700	6.8	685RSB700K2R	285	14	4	57.5x45x30	52.5	1.2		2

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
700	8	805PSB700K4R	360	27	1.7	57.5x57.5x38	52.5	1.2	20.3	4
700	8	805PSB700K6R	360	38	1.6	57.5x57.5x38	52.5	1.2	10.2	6
700	10	106RSB700K6R	285	30	2.4	57.5x50x35	52.5	1.2	10.2	6
700	10	106RSB700K2R	285	14	3.2	57.5x50x35	52.5	1.2		2
700	10	106RSB700K4R	285	27	2.5	57.5x50x35	52.5	1.2	20.3	4
700	12	126RSB700K4R	285	27	2.2	57.5x57.5x38	52.5	1.2	20.3	4
700	12	126RSB700K6R	285	34	2.1	57.5x57.5x38	52.5	1.2	10.2	6
850	0.068	683PSB850K2G	1550	4	14	26.5x16x7	22.5	0.8		2
850	0.1	104PSB850K2G	1550	5	10.4	26.5x18.5x10	22.5	0.8		2
850	0.15	154PSB850K2G	1550	6.5	7.5	26.5x20x11	22.5	0.8		2
850	0.15	154PSB850K2H	1120	6.5	8.6	32x20x11	27.5	0.8		2
850	0.22	224PSB850K2H	1120	8	6.4	32x22x13	27.5	1		2
850	0.33	334PSB850K2H	1900	10	4.9	32x24.5x15	27.5	1		2
850	0.47	474PSB850K2H	1120	14	3.9	32x33x18	27.5	1.2		2
850	0.47	474PSB850K4H	1120	16.5	3.2	32x33x18	27.5	1.2	10.2	4
850	0.68	684PSB850K4H	1120	20.5	2.6	32x37x22	27.5	1.2	10.2	4
850	0.68	684PSB850K2H	1120	14	3.3	32x37x22	27.5	1.2		2
850	0.68	684RSB850K2H	900	12	5.6	32x33x18	27.5	1.2		2
850	0.68	684PSB850K2J	510	13	4.3	42.5x28x17	37.5	1.2		2
850	0.82	824RSB850K4H	900	13	5.1	32x33x18	27.5	1.2		4
850	0.82	824PSB850K2J	750	14	3.8	42x32x14	37.5	1.2		2
850	1	105RSB850K2H	900	14	4.6	32x37x22	27.5	1.2		2
850	1	105RSB850K4H	900	17	3.9	32x37x22	27.5	1.2	10.2	4
850	1	105PSB850K2J	750	14	3.3	42.5x30x22	37.5	1.2		2
850	1	105PSB850K4J	750	18.5	2.6	42.5x37x28	37.5	1.2	10.2	4
850	1.2	125PSB850K4J	900	20	2.4	42.5x33.5x22	37.5	1.2	10.2	4
850	1.2	125RSB850K2J	600	11.5	6.1	42x32x17	37.5	1.2		2
850	1.2	125PSB850K2J	900	14	3.1	42.5x33.5x22	37.5	1.2		2
850	1.5	155PSB850K2JA	750	14	2.9	41.5x44x24	37.5	1.2		2
850	1.5	155RSB850K2J	600	12.5	5.5	42.5x30x22	37.5	1.2		2
850	1.5	155PSB850K4JA	750	26	2.3	41.5x44x24	37.5	1.2	10.2	4
850	1.5	155PSB850K2J	750	14	2.9	42.5x37x28	37.5	1.2		2
850	1.5	155PSB850K4J	750	24	2.3	42.5x37x28	37.5	1.2	20.3	4
850	2	205PSB850K4J	750	27	2.1	42.5x45x30	37.5	1.2	20.3	4
850	2	205PSB850K6J	750	29	2	42.5x45x30	37.5	1.2	10.2	6
850	2	205PSB850K2J	750	14	2.7	42.5x45x30	37.5	1.2		2
850	2	205RSB850K4J	600	17	4.2	42.5x37x28	37.5	1.2	10.2	4
850	2	205RSB850K4JA	600	17	4.2	41.5x40x20	37.5	1.2	10.2	4
850	2	205RSB850K2J	600	14	4.9	42.5x37x28	37.5	1.2		2
850	2	205RSB850K2JA	600	14	4.9	41.5x40x20	37.5	1.2		2
850	2.2	225RSB850K2J	600	14	4.8	42.5x37x28	37.5	1.2		2
850	2.2	225RSB850K4J	600	17.5	4.1	42.5x37x28	37.5	1.2	20.3	4
850	2.2	225PSB850K2J	750	14	2.7	42.5x45x30	37.5	1.2		2
850	2.2	225PSB850K6J	750	30	2	42.5x45x30	37.5	1.2	10.2	6
850	2.2	225PSB850K4J	750	27	2.1	42.5x45x30	37.5	1.2	20.3	4
850	2.5	255RSB850K4J	600	21	3.7	41.5x44x24	37.5	1.2	10.2	4
850	2.5	255RSB850K2J	600	14	4.4	41.5x44x24	37.5	1.2		2
850	2.5	255PSB850K2R	450	14	2.9	57.5x45x30	52.5	1.2		2
850	2.5	255PSB850K4R	450	27	2.2	57.5x45x30	52.5	1.2	20.3	4
850	3	305RSB850K4J	600	22	3.3	42.5x45x30	37.5	1.2	20.3	4
850	3	305RSB850K2J	600	14	4	42.5x45x30	37.5	1.2		2
850	3	305PSB850K2R	450	14	3	57.5x45x30	52.5	1.2		2
850	3	305PSB850K4R	450	27	2.3	57.5x45x30	52.5	1.2	20.3	4
850	3	305PSB850K6R	450	29	2.2	57.5x45x30	52.5	1.2	10.2	6
850	3.3	335RSB850K4J	600	23	3.2	42.5x45x30	37.5	1.2	20.3	4
850	3.3	335RSB850K2J	600	14	3.9	42.5x45x30	37.5	1.2		2
850	3.3	335PSB850K2R	450	14	2.6	57.5x45x30	52.5	1.2		2
850	3.3	335PSB850K6R	450	30	2.1	57.5x45x30	52.5	1.2	10.2	6

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
850	3.3	335PSB850K4R4	450	27	2	57.5x45x30	52.5	1.2	20.3	4
850	4	05PSB850K4R	450	27	2	57.5x50x35	52.5	1.2	20.3	4
850	4	405PSB850K6R	450	32.5	1.9	57.5x50x35	52.5	1.2	10.2	6
850	4	405PSB850K2R	450	14	2.6	57.5x50x35	52.5	1.2		2
850	4	405RSB850K4R	360	22	3.7	57.5x45x30	52.5	1.2	20.3	4
850	4	405RSB850K2R	360	14	4.3	57.5x45x30	52.5	1.2		2
850	4.7	475PSB850K2R	450	14	2.5	57.5x50x35	52.5	1.2		2
850	4.7	475PSB850K4R	450	27	1.9	57.5x50x35	52.5	1.2	20.3	4
850	4.7	475PSB850K6R	450	34.5	1.8	57.5x50x35	52.5	1.2	10.2	6
850	5.6	565PSB850K6R	450	37	1.6	57.5x57.5x38	52.5	1.2	10.2	6
850	5.6	565PSB850K4R	450	27	1.7	57.5x57.5x38	52.5	1.2	20.3	4
850	5.6	565RSB850K4R	360	26.5	3	57.5x50x35	52.5	1.2	20.3	4
850	5.6	565RSB850K2R	360	14	3.6	57.5x50x35	52.5	1.2		2
850	6	605PSB850K4R	450	27	1.7	57.5x57.5x38	52.5	1.2	20.3	4
850	6	605PSB850K6R	450	38	1.6	57.5x57.5x38	52.5	1.2	10.2	6
850	6.8	685RSB850K6R	360	29.5	2.6	57.5x57.5x38	52.5	1.2	10.2	6
850	6.8	685RSB850K4R	360	27	2.7	57.5x57.5x38	52.5	1.2	20.3	4
850	8	805RSB850K4R	360	27	2.4	57.5x57.5x38	52.5	1.2	20.3	4
850	8	805RSB850K6R	360	33	2.3	57.5x57.5x38	52.5	1.2	10.2	6
1000	0.047	473PSB102K2G	1800	3.5	18.5	26.5x16x7	22.5	0.8		2
1000	0.068	683PSB102K2G	1800	4.5	13.7	26.5x17x8.5	22.5	0.8		2
1000	0.1	104PSB102K2G	1800	5.5	9.9	26.5x20x11	22.5	0.8		2
1000	0.1	104PSB102K2H	1300	5	11	32x17x9	27.5	0.8		2
1000	0.15	154PSB102K2G	1800	7	7.3	26.5x22x13	22.5	0.8		2
1000	0.15	154PSB102K2H	1300	6.5	8.2	32x20x11	27.5	0.8		2
1000	0.22	224PSB102K2H	1300	8.5	5.7	32x22x13	27.5	1		2
1000	0.33	334PSB102K2H	1300	12.5	4.5	32x28x14	27.5	1.2		2
1000	0.47	474PSB102K2H	1300	14	3.7	32x33x18	27.5	1.2		2
1000	0.47	474PSB102K4H	1300	17	3	32x33x18	27.5	1.2	10.2	4
1000	0.47	474PSB102K2J	870	12	4.7	42.5x28x17	37.5	1.2		2
1000	0.68	684RSB102K4H	1300	17	4	32x37x22	27.5	1.2	10.2	4
1000	0.68	684RSB102K2H	1300	14	4.7	32x37x22	27.5	1.2		2
1000	0.68	684RSB102K2J	750	11.5	5.9	42.5x28x17	37.5	1.2		2
1000	0.68	684PSB102K2J	870	14	4.1	42.5x30x22	37.5	1.2		2
1000	0.68	684PSB102K4J	870	17	3.4	42.5x37x28	37.5	1.2	10.2	4
1000	1	105PSB102K4J	870	22	2.9	42.5x37x28	37.5	1.2	10.2	4
1000	1	105PSB102K2J	870	14	3.6	42.5x37x28	37.5	1.2		2
1000	1	105PSB102K2JA	870	14	3	41.5x44x24	37.5	1.2		2
1000	1	105PSB102K4JA	870	22	2.9	41.5x40x20	37.5	1.2	10.2	2
1000	1	105RSB102K4J	750	15.5	4	42.5x30x22	37.5	1.2	10.2	4
1000	1	105RSB102K2J	750	14	4.7	42.5x30x22	37.5	1.2		2
1000	1.5	155RSB102K2J	750	14	4	42.5x37x28	37.5	1.2		2
1000	1.5	155RSB102K4J	750	19.5	3.3	42.5x37x28	37.5	1.2	10.2	4
1000	1.5	155PSB102K2J	870	14	3	42.5x45x30	37.5	1.2		2
1000	1.5	155PSB102K4J	870	26	2.3	42.5x45x30	37.5	1.2	20.3	4
1000	1.8	185RSB102K4J	750	22.5	3.2	41.5x44x24	37.5	1.2	10.2	4
1000	1.8	185RSB102K2J	750	14	3.9	41.5x44x24	37.5	1.2		2
1000	2	205RSB102K2J	750	14	3.9	42.5x45x30	37.5	1.2		2
1000	2	205RSB102K4J	750	23	3.2	42.5x45x30	37.5	1.2	20.3	4
1000	2	205PSB102K2R	500	14	3.4	57.5x45x30	52.5	1.2		2
1000	2	205PSB102K4R	500	26	2.7	57.5x45x30	52.5	1.2	20.3	4
1000	2.2	225RSB102K4J	750	24	3.1	42.5x45x30	37.5	1.2	20.3	4
1000	2.2	225RSB102K2J	750	14	3.8	42.5x45x30	37.5	1.2		2
1000	2.2	225PSB102K2R	500	14	3.3	57.5x45x30	52.5	1.2		2
1000	2.2	225PSB102K4R	500	26	2.6	57.5x45x30	52.5	1.2	20.3	4
1000	3	305RSB102K2R	450	14	3.9	57.5x45x30	37.5	1.2		2
1000	3	305RSB102K4R	450	23.5	3.2	57.5x45x30	37.5	1.2	20.3	4
1000	3	305PSB102K2R	500	14	2.9	57.5x50x35	52.5	1.2		2

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
1000	3	305PSB102K4R	500	27	2.2	57.5x50x35	52.5	1.2	20.3	4
1000	3	305PSB102K6R	500	31.5	2.1	57.5x50x35	52.5	1.2	10.2	6
1000	3.3	335PSB102K6R	500	32.5	2	57.5x50x35	52.5	1.2	10.2	6
1000	3.3	335PSB102K4R	500	27	2.1	57.5x50x35	52.5	1.2	20.3	4
1000	3.3	335RSB102K4R	1485	24	3.1	57.5x45x30	52.5	1.2	20.3	2
1000	3.3	335PSB102K2R	500	14	2.8	57.5x50x35	52.5	1.2		2
1000	3.3	335RSB102K2R	450	14	3.8	57.5x45x30	52.5	1.2		2
1000	4	405RSB102K2R	450	14	3.5	57.5x50x35	52.5	1.2		2
1000	4	405RSB102K4R	450	27	2.8	57.5x50x35	52.5	1.2	20.3	4
1000	4	405PSB102K4R	500	27	2	57.5x57.5x38	52.5	1.2	20.3	4
1000	4	405PSB102K6R	500	34	1.9	57.5x57.5x38	52.5	1.2	10.2	6
1000	4.7	475PSB102K4R	500	27	1.8	57.5x57.5x38	52.5	1.2	20.3	4
1000	4.7	475RSB102K4R	450	27	2.7	57.5x50x35	52.5	1.2	20.3	4
1000	4.7	475RSB102K2R	450	14	3.3	57.5x50x35	52.5	1.2		2
1000	5.6	565RSB102K6R	450	31	2.4	57.5x57.5x38	52.5	1.2	10.2	6
1000	5.6	565RSB102K4R	450	27	2.5	57.5x57.5x38	52.5	1.2	20.3	4
1000	6	605RSB102K4R	450	27	2.4	57.5x57.5x38	52.5	1.2	20.3	4
1000	6	605RSB102K6R	450	33	2.3	57.5x57.5x38	52.5	1.2	10.2	6
1200	0.033	333PSB122K2G	2000	3	23	26.5x16x7	22.5	0.8		2
1200	0.047	473PSB122K2G	4000	3.5	16.9	26.5x17x8.5	22.5	0.8		2
1200	0.068	683PSB122K2G	2000	4.5	12.7	26.5x18.5x10	22.5	0.8		2
1200	0.068	683PSB122K2H	1500	4.5	14.3	32x17x9	27.5	0.8		2
1200	0.1	104PSB122K2G	2000	6	9.7	26.5x22x13	22.5	0.8		2
1200	0.1	104PSB122K2H	1500	6	10.6	32x20x11	27.5	0.8		2
1200	0.15	154PSB122K2H	1500	7.5	7.6	32x22x13	27.5	1		2
1200	0.22	224PSB122K2H	1500	9.5	5.4	32x24.5x15	27.5	1		2
1200	0.33	334PSB122K2H	1500	13.5	4.3	32x33x18	27.5	1.2		2
1200	0.33	334PSB122K4H	1500	15.5	3.6	32x33x18	27.5	1.2		4
1200	0.33	334PSB122K2J	1000	11.5	5.9	42.5x28x17	37.5	1.2		2
1200	0.47	474PSB122K2H	1500	14	3.4	32x37x22	27.5	1.2		2
1200	0.47	474RSB122K2H	1120	12.5	5.7	32x33x18	27.5	1.2		2
1200	0.47	474PSB122K4H	1500	20.5	2.7	32x37x22	27.5	1.2		4
1200	0.47	474PSB122K2J	1000	13.5	4.8	42.5x30x22	37.5	1.2		2
1200	0.68	684RSB122K2H	1120	14	5	32x37x22	27.5	1.2		2
1200	0.68	684RSB122K4H	1120	16	4.3	32x37x22	27.5	1.2	10.2	4
1200	0.68	684PSB122K4J	1000	17.5	3.4	42.5x37x28	37.5	1.2	10.2	4
1200	0.68	684RSB122K2J	870	11.5	6.1	42x32x17	37.5	1.2		2
1200	0.68	684PSB122K2J	1000	14	4.1	42.5x37x28	37.5	1.2		2
1200	0.82	824PSB122K2J	1000	14	3.8	41.5x40x20	37.5	1.2		2
1200	0.82	824RSB122K2J	870	13	5.4	42.5x30x22	37.5	1.2		2
1200	0.82	824PSB122K4J	1000	20.5	3.1	41.5x40x20	37.5	1.2	10.2	4
1200	1	105PSB122K4J	1000	22	2.8	42.5x37x28	37.5	1.2	20.3	4
1200	1	105PSB122K2JA	1000	14	3.5	41.5x44x24	37.5	1.2		2
1200	1	105RSB122K4J	870	17.5	4.1	41.5x40x20	37.5	1.2	10.2	4
1200	1	105PSB122K2J	1000	14	3.5	42.5x37x28	37.5	1.2		2
1200	1	105PSB122K4JA	1000	23.5	2.8	41.5x44x24	37.5	1.2	10.2	2
1200	1	105RSB122K2J	870	14	4.8	41.5x40x20	37.5	1.2		2
1200	1.2	125RSB122K4J	870	19	3.7	42.5x37x28	37.5	1.2	10.2	4
1200	1.2	125PSB122K2J	1000	14	3.2	42.5x45x30	37.5	1.2		2
1200	1.2	125RSB122K2J	870	14	4.4	42.5x37x28	37.5	1.2		2
1200	1.2	125PSB122K4J	1000	25	2.5	42.5x45x30	37.5	1.2	20.3	4
1200	1.5	155PSB122K4J	1000	27	2.2	42.5x45x30	37.5	1.2	20.3	4
1200	1.5	155RSB122K2J	870	14	4	41.5x44x24	37.5	1.2		2
1200	1.5	155PSB122K2J	100	14	2.9	42.5x45x30	37.5	1.2		2
1200	1.5	155RSB122K4J	870	21.5	3.3	41.5x44x24	37.5	1.2	10.2	4
1200	2	205PSB122K2R	575	14	3.2	57.5x45x30	52.5	1.2		2
1200	2	205PSB122K4R	575	26.5	2.5	57.5x45x30	52.5	1.2	20.3	4
1200	2	205PSB122K6R	575	29	2.4	57.5x45x30	52.5	1.2	10.2	6

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
1200	2.2	225PSB122K4R	575	27	2.4	57.5x50x35	52.5	1.2	20.3	4
1200	2.2	225PSB122K6R	575	31	2.3	57.5x50x35	52.5	1.2	10.2	6
1200	2.2	225PSB122K2R	575	14	3	57.5x50x35	52.5	1.2		2
1200	2.2	225RSB122K4R	500	22	3.7	57.5x45x30	52.5	1.2	10.2	4
1200	2.2	225RSB122K2R	500	14	4.4	57.5x45x30	52.5	1.2		2
1200	2.5	255RSB122K2R	500	14	4.2	57.5x45x30	52.5	1.2		2
1200	2.5	255RSB122K4R	500	23	3.5	57.5x45x30	52.5	1.2	20.3	4
1200	2.5	255PSB122K2R	575	14	2.8	57.5x50x35	52.5	1.2		2
1200	2.5	255PSB122K4R	575	27	2.2	57.5x50x35	52.5	1.2	20.3	4
1200	2.5	255PSB122K6R	575	32	2.1	57.5x50x35	52.5	1.2	10.2	6
1200	3.3	335PSB122K6R	575	36	1.9	57.5x57.5x38	52.5	1.2	10.2	6
1200	3.3	335RSB122K4R	500	27	3	57.5x50x35	52.5	1.2	20.3	4
1200	3.3	335PSB122K4R	575	27	2	57.5x57.5x38	52.5	1.2	20.3	4
1200	3.3	335RSB122K2R	500	14	3.7	57.5x50x35	52.5	1.2		2
1200	3.6	365PSB122K4R	575	27	1.9	57.5x57.5x38	52.5	1.2	20.3	4
1200	3.6	365PSB122K6R	575	37.5	1.8	57.5x57.5x38	52.5	1.2	10.2	6
1200	4	405RSB122K6R	500	29	2.5	57.5x57.5x38	52.5	1.2	10.2	6
1200	4	405RSB122K4R	600	25	3.8	57.5x50x35	52.5	1.2	20.3	4
1200	4.7	475RSB122K4R	500	27	2.4	57.5x57.5x38	52.5	1.2	20.3	4
1200	4.7	475RSB122K6R	500	33	2.3	57.5x57.5x38	52.5	1.2	10.2	6
1500	0.022	223PSB152K2G	2500	2.5	30	26.5x16x7	22.5	0.8		2
1500	0.033	333PSB152K2G	2500	3.5	22	26.5x17x8.5	22.5	0.8		2
1500	0.047	473PSB152K2G	2500	4	16.5	26.5x18.5x10	22.5	0.8		2
1500	0.047	473PSB152K2H	1900	4	18.2	32x17x9	27.5	0.8		2
1500	0.068	683PSB152K2G	2500	5.5	12.3	26.5x22x13	22.5	0.8		2
1500	0.068	683PSB152K2H	1900	5	13.8	32x20x11	27.5	0.8		2
1500	0.1	104PSB152K2H	1900	6.5	9.5	32x22x13	27.5	0.8		2
1500	0.15	154PSB152K2H	1900	8.5	7.1	32x24.5x15	27.5	1		2
1500	0.22	224PSB152K2H	1900	12.5	5.1	32x33x18	27.5	1.2		2
1500	0.22	224PSB152K4H	1900	14	4.4	32x33x18	27.5	1.2	10.2	4
1500	0.22	224PSB152K2J	1220	10.5	6.9	42.5x28x17	37.5	1.2		2
1500	0.33	334PSB152K2H	1900	14	4.1	32x37x22	27.5	1.2		2
1500	0.33	334RSB152K2H	1220	12	6	32x33x18	27.5	1.2		2
1500	0.33	334PSB152K4H	1900	18	3.4	32x37x22	27.5	1.2	10.2	4
1500	0.33	334PSB152K2J	1220	12.5	5.4	42.5x30x22	37.5	1.2		2
1500	0.47	474RSB152K2H	1500	14	4.8	32x37x22	27.5	1.2		2
1500	0.47	474RSB152K4H	1500	16.5	4.1	32x37x22	27.5	1.2	10.2	4
1500	0.47	474PSB152K4J	1220	16	3.8	42.5x37x28	37.5	1.2	10.2	4
1500	0.47	474PSB152K2J	1220	14	4.5	42.5x37x28	37.5	1.2		2
1500	0.56	564PSB152K2J	1220	14	4.2	41.5x40x20	37.5	1.2		2
1500	0.56	564PSB152K4J	1220	19.5	3.5	41.5x40x20	37.5	1.2	10.2	4
1500	0.68	684PSB152K4J	1220	20.5	3.2	41.5x44x24	37.5	1.2	10.2	4
1500	0.68	684PSB152K4J	1220	20.5	3.2	42.5x37x28	37.5	1.2	10.2	4
1500	0.68	684RSB152K2J	1000	13	5.5	42.5x33.5x22	37.5	1.2		2
1500	0.68	684PSB152K2JA	1220	14	3.9	41.5x44x24	37.5	1.2		2
1500	0.68	684PSB152K2J	1220	14	3.9	42.5x37x28	37.5	1.2		2
1500	0.75	754PSB152K2J	1220	14	3.6	41.5x44x24	37.5	1.2		2
1500	0.75	754PSB152K4J	1220	23.5	2.9	41.5x44x24	37.5	1.2	10.2	4
1500	1	105PSB152K4J	1220	26	2.6	42.5x45x30	37.5	1.2	20.3	4
1500	1	105RSB152K2J	1000	14	4.8	42.5x37x28	37.5	1.2		2
1500	1	105RSB152K2JA	1000	14	4.8	41.5x44x24	37.5	1.2		2
1500	1	105PSB152K2J	1220	14	3.3	42.5x45x30	37.5	1.2		2
1500	1	105RSB152K4J	1000	18	4.1	42.5x37x28	37.5	1.2	20.3	4
1500	1	105RSB152K4JA	1000	19.5	4.1	41.5x44x24	37.5	1.2	10.2	4
1500	1.2	125PSB152K2R	725	14	3.6	57.5x45x30	52.5	1.2		2
1500	1.2	125PSB152K4R	725	25	2.9	57.5x45x30	52.5	1.2	20.3	4
1500	1.5	155RSB152K2J	1000	14	4	42.5x45x30	37.5	1.2		2
1500	1.5	155RSB152K4J	1000	23	3.3	42.5x45x30	37.5	1.2	20.3	4

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
1500	1.5	155PSB152K2R	725	14	3.3	57.5x50x35	52.5	1.2		2
1500	1.5	155PSB152K4R	725	27	2.6	57.5x50x35	52.5	1.2	20.3	4
1500	1.8	185PSB152K4R	725	27	2.4	57.5x50x35	52.5	1.2	20.3	4
1500	1.8	185PSB152K6R	725	30.5	2.3	57.5x50x35	52.5	1.2	10.2	6
1500	1.8	185PSB152K2R	725	14	3.1	57.5x50x35	52.5	1.2		2
1500	2	205RSB152K2R	575	14	4.3	57.5x45x30	52.5	1.2		2
1500	2	205RSB152K4R	575	22.5	3.6	57.5x45x30	52.5	1.2	20.3	4
1500	2.2	225PSB152K4R	725	27	3	57.5x57.5x38	52.5	1.2	20.3	4
1500	2.2	225RSB152K4R	575	24.5	3.5	57.5x50x35	52.5	1.2	20.3	4
1500	2.2	225RSB152K2R	575	14	4.2	57.5x50x35	52.5	1.2		2
1500	2.5	255RSB152K2R	575	14	4	57.5x50x35	52.5	1.2		2
1500	2.5	255PSB152K4R	725	27	2.2	57.5x57.5x38	52.5	1.2	20.3	4
1500	2.5	255RSB152K4R	575	26	3.3	57.5x50x35	52.5	1.2	20.3	4
1500	2.5	255PSB152K6R	725	35	2.1	57.5x57.5x38	52.5	1.2	10.2	6
1500	3.3	335RSB152K6R	575	31	2.7	57.5x57.5x38	52.5	1.2	10.2	6
1500	3.3	335RSB152K4R	575	27	2.8	57.5x57.5x38	52.5	1.2	20.3	4
2000	0.015	153PSB202K2G	3600	2	38	26.5x16x7	22.5	0.8		2
2000	0.022	223PSB202K2G	3600	3	28	26.5x17x8.5	22.5	0.8		2
2000	0.033	333PSB202K2G	3600	4.5	20.5	26.5x20x11	22.5	0.8		2
2000	0.033	333PSB202K2H	2550	4	23.7	32x20x11	27.5	0.8		2
2000	0.047	473PSB202K2G	3600	5	14.8	26.5x22x13	22.5	0.8		2
2000	0.047	473PSB202K2H	2550	4.5	16.8	32x20x11	27.5	0.8		2
2000	0.068	683PSB202K2H	2550	6	12.1	32x22x13	27.5	0.8		2
2000	0.1	104PSB202K2H	2550	7.5	8.4	32x24.5x15	27.5	1		2
2000	0.15	154PSB202K2H	2550	11	6.5	32x33x18	27.5	1.2		2
2000	0.15	154PSB202K4H	2550	12.5	5.8	32x33x18	27.5	1.2	10.2	4
2000	0.15	154PSB202K2J	1600	9.5	8.1	42.5x28x17	37.5	1.2		2
2000	0.22	224PSB202K2H	2550	14	5.2	32x37x22	27.5	1.2		2
2000	0.22	224RSB202K2H	1900	11	8.1	32x33x18	27.5	1.2		2
2000	0.22	224PSB202K4H	2550	16	4.5	32x37x22	27.5	1.2	10.2	4
2000	0.22	224PSB202K2J	1600	12	5.9	42.5x30x22	37.5	1.2		2
2000	0.33	334RSB202K2H	1900	14	5.8	32x37x22	27.5	1.2		2
2000	0.33	334RSB202K4H	1600	15.5	5.1	32x37x22	27.5	1.2	10.2	4
2000	0.33	334PSB202K4J	1600	17.5	4.2	42.5x37x28	37.5	1.2	10.2	4
2000	0.33	334PSB202K2J	1600	14	4.9	42.5x37x28	37.5	1.2		2
2000	0.33	334RSB202K2J	1600	11	7.4	42.5x30x22	37.5	1.2		2
2000	0.33	334PSB202K2JA	1600	14	4.9	41.5x40x20	37.5	1.2		2
2000	0.33	334PSB202K4JA	1600	18	4.2	41.5x40x20	37.5	1.2	10.2	4
2000	0.47	474PSB202K4JA	1600	21.5	3.4	41.5x44x24	37.5	1.2	10.2	4
2000	0.47	474PSB202K2JA	1600	14	4.1	41.5x44x24	37.5	1.2		2
2000	0.47	474RSB202K2J	1220	13	6.1	42.5x33.5x22	37.5	1.2		2
2000	0.47	474PSB202K2J	1600	14	4.1	42.5x37x28	37.5	1.2		2
2000	0.47	474PSB202K4J	1600	20	3.4	42.5x37x28	37.5	1.2	20.3	4
2000	0.56	564PSB202K4J	1600	23.5	3.1	42.5x45x30	37.5	1.2	20.3	4
2000	0.56	564PSB202K2J	1600	14	3.8	42.5x45x30	37.5	1.2		2
2000	0.68	684RSB202K2J	1220	14	5.4	42.5x37x28	37.5	1.2		2
2000	0.68	684RSB202K2JA	1220	14	5.4	51.5x44x24	37.5	1.2		2
2000	0.68	684RSB202K4JA	1220	18.5	4.7	41.5x44x24	37.5	1.2	10.2	4
2000	0.68	684RSB202K4J	1220	17	4.7	42.5x37x28	37.5	1.2	10.2	4
2000	0.68	684PSB202K2R	930	14	4.4	57.5x45x30	52.5	1.2		2
2000	0.68	684PSB202K4R	930	22	3.6	57.5x45x30	52.5	1.2	20.3	4
2000	0.82	824RSB202K4J	1220	20	4.2	42.5x45x30	37.5	1.2	20.3	4
2000	0.82	824PSB202K6R	580	24	3.1	57.5x45x30	52.5	1.2	10.2	6
2000	0.82	824PSB202K4R	930	23.5	3.2	57.5x45x30	52.5	1.2	20.3	4
2000	0.82	824PSB202K2R	930	14	3.9	57.5x45x30	52.5	1.2		2
2000	1	105RSB202K2J	1220	14	4.5	42.5x45x30	37.5	1.2		2
2000	1	105RSB202K4J	1220	21.5	3.8	42.5x45x30	37.5	1.2	20.3	4
2000	1	105PSB202K2R	930	14	3.6	57.5x50x35	52.5	1.2		2

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
2000	1	105PSB202K4R	930	27	2.9	57.5x50x35	52.5	1.2	20.3	4
2000	1	105PSB202K6R	580	27	2.9	57.5x50x35	52.5	1.2	10.2	6
2000	1.2	125PSB202K6R	930	29.5	2.5	57.5x50x35	52.5	1.2	10.2	6
2000	1.2	125PSB202K4R	930	27	2.6	57.5x50x35	52.5	1.2	20.3	4
2000	1.2	125PSB202K2R	930	14	3.3	57.5x50x35	52.5	1.2		2
2000	1.2	125RSB202K2R	870	14	4.8	57.5x45x30	52.5	1.2		2
2000	1.2	125RSB202K4R	870	21.5	4.1	57.5x45x30	52.5	1.2	20.3	4
2000	1.5	155RSB202K4R	725	24.5	3.7	57.5x50x35	52.5	1.2	20.3	4
2000	1.5	155RSB202K2R	725	14	4.4	57.5x50x35	52.5	1.2		2
2000	1.5	155PSB202K6R	930	33	2.2	57.5x57.5x38	52.5	1.2	10.2	6
2000	1.5	155PSB202K4R	930	27	2.3	57.3x57.5x38	52.5	1.2	20.3	4
2000	1.7	175PSB202K6R	930	34.5	2.1	57.5x57.5x38	52.5	1.2	10.2	6
2000	2.2	225RSB202K6R	725	29.5	3	57.5x55x40	52.5	1.2	10.2	6
2000	2.2	225RSB202K4R	725	27	3.1	57.5x55x40	52.5	1.2	20.3	4
2500	0.0068	682PSB252K2G	4900	1.5	70	26.5x16x7	22.5	0.8		2
2500	0.01	103PSB252K2G	4900	2	51	26.5x17x8.5	22.5	0.8		2
2500	0.015	153PSB252K2G	4900	2.5	36	26.5x18.5x10	22.5	0.8		2
2500	0.022	223PSB252K2G	4900	3.5	26.5	26.5x22x13	22.5	0.8		2
2500	0.022	223PSB252K2H	3350	3.5	30.5	32x20x11	27.5	0.8		2
2500	0.033	333PSB252K2H	3350	4	22.5	32x22x13	27.5	0.8		2
2500	0.047	473PSB252K2H	3350	5.5	16	32x24.5x15	27.5	0.8		2
2500	0.068	683PSB252K2H	3350	8.5	11.3	32x33x18	27.5	1		2
2500	0.1	104PSB252K2H	3350	10.5	7.6	32x33x18	27.5	1.2		2
2500	0.1	104PSB252K4H	3350	11.5	6.9	32x33x18	27.5	1.2		4
2500	0.1	104PSB252K2J	2050	8	11.5	42.5x28x17	37.5	1.2		2
2500	0.15	154RSB252K2J	2550	10	9.1	32x33x18	27.5	1.2		2
2500	0.15	154PSB252K2J	3350	13.5	6	32x37x22	27.5	1.2		2
2500	0.15	154PSB252K4J	3350	14.5	5.3	32x37x22	27.5	1.2	10.2	4
2500	0.15	154PSB252K2J	2050	10.5	7.9	42.5x30x22	37.5	1.2		2
2500	0.22	224RSB252K2H	2550	12.5	7.1	32x37x22	27.5	1.2		2
2500	0.22	224RSB252K2J	1600	10	8.3	42x32x17	27.5	1.2		2
2500	0.22	224PSB252K2JA	2050	14	6	41.5x40x20	37.5	1.2		2
2500	0.22	224PSB252K2J	2050	14	6	42.5x37x28	37.5	1.2		2
2500	0.22	224PSB252K4JA	2050	16	5.3	41.5x40x20	37.5	1.2	10.2	4
2500	0.22	224PSB252K4J	2050	16	5.3	42.5x37x28	37.5	1.2		4
2500	0.3	304PSB252K4J	2050	20	4.1	41.5x44x24	37.5	1.2	10.2	4
2500	0.3	304PSB252K2J	2050	14	4.8	41.5x44x24	37.5	1.2		2
2500	0.33	334PSB252K2J	2050	14	4.6	42.5x45x30	37.5	1.2		2
2500	0.33	334PSB252K2J	2050	14	4.6	42.5x45x30	37.5	1.2		2
2500	0.33	334PSB252K4J	1400	19.5	3.9	42.5x45x30	37.5	1.2		4
2500	0.33	334PSB252K4J	1400	19.5	3.9	42.5x45x30	37.5	1.2		4
2500	0.39	394PSB252K4J	2050	22	3.5	42.5x45x30	37.5	1.2		4
2500	0.39	394PSB252K2J	2050	14	4.4	42.5x45x30	37.5	1.2		2
2500	0.47	474RSB252K2J	1600	14	5.5	42.5x37x28	37.5	1.2		2
2500	0.47	474RSB252K2JA	1600	14	5.5	41.5x44x24	37.5	1.2		2
2500	0.47	474RSB252K4J	1600	16.5	4.8	42.5x37x28	37.5	1.2	10.2	4
2500	0.47	474RSB252K4JA	1600	18	4.8	41.5x44x24	37.5	1.2	10.2	4
2500	0.47	474PSB252K4R	1150	21	4	57.5x45x30	52.5	1.2	20.3	4
2500	0.47	474PSB252K2R	1150	14	4.7	57.5x45x30	52.5	1.2		2
2500	0.56	564PSB252K2R	1150	14	4.3	57.5x45x30	52.5	1.2		2
2500	0.56	564PSB252K4R	1150	22.5	3.6	57.5x45x30	52.5	1.2	20.3	4
2500	0.68	684PSB252K4R	1150	24.5	3.3	57.5x50x35	52.5	1.2	20.3	4
2500	0.68	684RSB252K4R	930	18	5.1	57.5x45x30	52.5	1.2	20.3	4
2500	0.68	684PSB252K6R	750	23	3.6	57.5x50x35	52.5	1.2	10.2	6
2500	0.68	684PSB252K2R	1150	14	4	57.5x50x35	52.5	1.2		2
2500	0.68	684RSB252K2R	930	14	5.8	57.5x45x30	52.5	1.2		2
2500	0.82	824PSB252K2R	1150	14	3.6	57.5x50x35	52.5	1.2		2
2500	0.82	824PSB252K2R	1150	14	3.6	57.5x50x35	52.5	1.2		2

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
2500	0.82	824RSB252K2R	930	14	5.3	57.5x45x30	52.5	1.2		4
2500	0.82	824PSB252K4R	750	26.5	3	57.5x50x35	52.5	1.2	20.3	4
2500	0.82	824PSB252K4R	750	26.5	3	57.5x50x35	52.5	1.2	20.3	4
2500	1	105PSB252K4R	1150	27	2.8	57.5x57.5x38	52.5	1.2	20.3	4
2500	1	105RSB252K2R	930	14	4.9	57.5x50x35	52.5	1.2		2
2500	1	105PSB252K6R	1150	30.5	2.7	57.5x57.5x38	52.5	1.2	10.2	lugs
2500	1.2	125RSB252K2R	930	14	4.4	57.5x50x35	52.5	1.2		2
2500	1.2	125RSB252K4R	930	25	3.7	57.5x50x35	52.5	1.2	20.3	4
2500	1.5	155RSB252K4R	930	27	3.3	57.5x57.5x38	52.5	1.2	20.3	4
2500	1.5	155RSB252K6R	930	29	3.2	57.5x57.5x38	52.5	1.2	10.2	6
3000	0.0047	472PSB302K2G	6300	1.5	87	26.5x16x7	22.5	0.8		2
3000	0.0068	682PSB302K2G	6300	2	64	26.5x17x8.5	22.5	0.8		2
3000	0.01	103PSB302K2G	6300	2.5	46	26.5x20x11	22.5	0.8		2
3000	0.01	103PSB302K2H	4350	2.5	54	32x20x11	27.5	0.8		2
3000	0.015	153PSB302K2G	6300	3	33	26.5x22x13	22.5	0.8		2
3000	0.015	153PSB302K2H	4350	3	38	32x20x11	27.5	0.8		2
3000	0.022	223PSB302K2H	4350	4	26.5	32x22x13	27.5	0.8		2
3000	0.033	333PSB302K2H	4350	5	19	32x24.5x15	27.5	0.8		2
3000	0.033	333PSB302K4H	2750	7	18.3	32x33x18	27.5	1.2	5.1	4
3000	0.047	473PSB302K4H	4350	8.5	13.3	32x33x18	27.5	1.2	10.2	4
3000	0.047	473PSB302K2H	4350	7.5	14	32x33x18	27.5	1		2
3000	0.068	683PSB302K2H	4350	10	10.4	32x37x22	27.5	1.2		2
3000	0.068	683PSB302K4H	4350	11	9.6	32x37x22	27.5	1.2	10.2	4
3000	0.068	683PSB302K2J	2500	7.5	12.3	42.5x28x17	37.5	1.2		2
3000	0.1	104RSB302K2H	3350	9	11	32x33x18	27.5	1.2		2
3000	0.1	104PSB302K2J	2500	9.5	9.3	42.5x30x22	37.5	1.2		2
3000	0.1	104RSB302K2J	2050	7	15.5	42.5x28x14	37.5	1.2		2
3000	0.1	104PSB302K4J	2500	10.5	8.6	42.5x30x22	37.5	1.2	10.2	4
3000	0.12	124PSB302K4J	2500	13.5	7.6	41.5x40x20	37.5	1.2	10.2	4
3000	0.12	124PSB302K2J	2500	12	8.3	41.5x40x20	37.5	1.2		2
3000	0.15	154RSB302K2H	3350	10	9.1	32x37x22	27.5	1.2		2
3000	0.15	154RSB302K2H	3350	12	8.5	32x37x22	27.5	1.2		2
3000	0.15	154RSB302K2J	2050	9	10.8	42x32x17	37.5	1.2		2
3000	0.15	154PSB302K2J	2500	14	6.7	42.5x37x28	37.5	1.2		2
3000	0.15	154PSB302K2JA	2500	14	6.7	41.5x44x24	37.5	1.2		2
3000	0.15	154PSB302K4JA	2500	16	6	41.5x44x24	37.5	1.2	10.2	4
3000	0.15	154PSB302K4J	2500	15	6	42.5x37x28	37.5	1.2	20.3	4
3000	0.18	184PSB302K4J	2500	17.5	5.3	41.5x44x24	37.5	1.2	10.2	4
3000	0.18	184PSB302K2J	2500	14	6	41.5x44x24	37.5	1.2		2
3000	0.22	224RSB302K2J	2050	12.5	8.1	42.5x37x28	37.5	1.2		2
3000	0.22	224RSB302K4J	2050	13.5	7.4	42.5x37x38	37.5	1.2	10.2	4
3000	0.22	224RSB302K4JA	2050	14	7.4	41.5x40x20	37.5	1.2	10.2	4
3000	0.22	224PSB302K2J	2050	14	5.1	42.5x45x30	37.5	1.2		2
3000	0.22	224RSB302K2JA	2050	12.5	8.1	41.5x40x20	37.5	1.2		2
3000	0.22	224RSB302K2J	2050	12.5	8.1	42.5x37x28	37.5	1.2		2
3000	0.22	224PSB302K4J	2050	18.5	4.4	42.5x45x30	37.5	1.2	20.3	4
3000	0.33	334RSB302K2J	2050	14	6.2	42.5x45x30	37.5	1.2		2
3000	0.33	334RSB302K4J	2050	18	5.5	42.5x45x30	37.5	1.2	10.2	4
3000	0.33	334PSB302K2R	900	14	5.1	57.5x45x30	52.5	1.2		2
3000	0.33	334PSB302K4R	1120	20.5	4.4	57.5x45x30	52.5	1.2	20.3	4
3000	0.47	474PSB302K4R	1400	23.5	3.9	57.5x50x35	52.5	1.2	20.3	4
3000	0.47	474PSB302K2R	1400	14	4.6	57.5x50x35	52.5	1.2		2
3000	0.47	474RSB302K2R	1150	14	6.6	57.5x45x30	52.5	1.2		2
3000	0.47	474RSB302K4R	1150	18	5.9	57.5x45x30	52.5	1.2	10.2	4
3000	0.63	634PSB302K4R	1400	26.5	3.5	57.5x57.5x38	52.5	1.2	20.3	4
3000	0.63	634PSB302K6R	1400	27.5	3.4	57.5x57.5x38	52.5	1.2	10.2	6
3000	0.68	684RSB302K4R	1150	20.5	5.2	57.5x50x35	52.5	1.2	20.3	4
3000	0.68	684RSB302K2R	1150	14	5.9	57.5x50x35	52.5	1.2		2

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PSB_RSB

2,4,6 Radial Lead, High Current/low ESR

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims LxHxT (mm)	S (MM)	d (MM)	P (MM)	# Leads
3000	0.82	824RSB302K2R	930	14	5.3	57.5x50x35	52.5	1.2		2
3000	0.82	824RSB302K4R	1150	22.5	4.6	57.5x50x35	52.5	1.2	20.3	4
3000	1	105RSB302K6R	1150	26.5	3.9	57.5x57.5x38	52.5	1.2	10.2	6
3000	1	105RSB302K4R	930	25	4	57.5x57.5x38	52.5	1.2	20.3	4

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Type RA Angstor® Radial PET Film Capacitors



The RA style capacitor is constructed in an efficient rugged self-encased size. The non-inductive multilayer metallized polyester film capacitor features a small size, high dv/dt capability, very low ESR at high frequency and a self-healing capability. RA type capacitors are ideal for use in high frequency switching power supplies, noise suppression, EMI reduction and long-life applications.

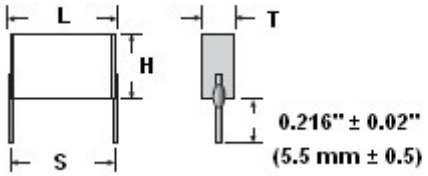
Highlights

- Efficient size
- Self healing
- Low ESR/ESL
- High dv/dt
- Wave solderable

Specifications

Capacitance Range (at 1 kHz)	0.1 to 10 µF
Capacitance Tolerance	Standard Tolerance ±10% (K), Optional ±5% (J) or ±20% (M)
Rated Voltage	100, 250, 400, 500 Vdc
Operating Temperature Range	–55 °C to 125 °C
Dissipation Factor (at 1 kHZ/25 °C)	≤1.0%
Insulation Resistance	≥1,000 MΩ x µF - Need not exceed 1,000 MΩ Test Voltage for 100 Vdc rating: 10 Vdc Test Voltage for >100 Vdc rating : 100 Vdc
Dielectric Strength	1.6 x rated VDC for 2 seconds max. **Bold P.N.: 1.3 x rated VDC for 2 seconds max.**
Self Inductance (typical)	2 to 6 nh
Temperature Range	-55° to +125°C at Rated DC Voltage **Bold P.N.: -55° to +125°C** (derate voltage 1.25% / °C above +85°C)
Life Test:	Apply 1.25 x the rated DC voltage for 1000 hours at +85°C. After the test, the capacitance, DF, and IR should meet the following: Capacitance change: ≤ 5.0% DF will meet the initial specification Insulation Resistance will meet the initial specification
Moisture Test:	Subject the capacitor to +85°C / 85% RH for 21 days without voltage. After the test, the capacitance, DF, and IR should meet the following: Capacitance change: ≤ 7.0% DF will meet the initial specification Insulation Resistance ≥ 30% of the initial limit
Long Term Stability :	After 2 years of storage in a standard environment. Capacitance change: ≤2.0%
Vibration	Mil Std 202 Method 204D
Solder Resistance	260°C, 5 sec. Capacitance change: ≤ 2.0%

Outline Drawing



Type RA Angstor® Radial PET Film Capacitors

Ratings

Catalog Part Number	Capacitance (uF)	Dimensions (in.)					Dimensions (mm)					Max. dv/dt (V/us)
		L Max.	T Max.	H Max.	S ± 0.02	d	L Max.	T Max.	H Max.	S ± 0.5	d	
100 Vdc / 80 Vac												
224K100RA3-FA	0.22	0.350	0.155	0.280	0.295	0.025	8.9	3.9	7.1	7.5	0.6	75
474K100RA3-FA	0.47	0.350	0.180	0.305	0.295	0.025	8.9	4.6	7.7	7.5	0.6	65
105K100RA4-FA	1.0	0.450	0.175	0.285	0.394	0.025	11.4	4.4	7.2	10	0.6	35
225K100RA3-FA	2.2	0.350	0.250	0.350	0.295	0.025	8.9	6.3	8.9	7.5	0.6	25
225K100RA4-FA	2.2	0.450	0.205	0.285	0.394	0.025	11.4	5.2	7.2	10	0.6	25
335K100RA4-FA	3.3	0.450	0.250	0.350	0.394	0.025	11.4	6.3	8.9	10	0.6	25
405K100RA4-FA	4.0	0.450	0.200	0.380	0.394	0.032	11.4	5.1	9.7	10	0.8	20
505K100RA4-FA	5.0	0.450	0.220	0.480	0.394	0.032	11.4	5.6	12.2	10	0.8	20
106K100RA6-FA	10.0	0.650	0.260	0.460	0.591	0.032	16.5	6.6	11.7	15	0.8	13
250 Vdc / 160 Vac												
104K250RA4-FA	0.10	0.450	0.160	0.255	0.394	0.025	11.4	4.1	6.5	10	0.6	100
224K250RA4-FA	0.22	0.450	0.190	0.305	0.394	0.025	11.4	4.8	7.7	10	0.6	75
334K250RA4-FA	0.33	0.450	0.250	0.330	0.394	0.025	11.4	6.3	8.4	10	0.6	75
474K250RA4-FA	0.47	0.450	0.210	0.305	0.394	0.025	11.4	5.3	7.7	10	0.6	55
474K250RA6-FA	0.47	0.650	0.230	0.340	0.591	0.032	16.5	5.8	8.6	15	0.8	50
105K250RA6-FA	1.0	0.650	0.240	0.340	0.591	0.032	16.5	6.1	8.6	15	0.8	35
400 Vdc / 250 Vac												
224K400RA6-FA	0.22	0.650	0.230	0.340	0.591	0.032	16.5	5.8	8.6	15	0.8	65
474K400RA6-FA	0.47	0.650	0.290	0.440	0.591	0.032	16.5	7.4	11.1	15	0.8	120
500 Vdc / 250 Vac												
504K500RA6-FA	0.5	0.650	0.280	0.540	0.591	0.032	16.5	7.1	13.7	15	0.8	120

Part numbers highlighted in yellow are stocked

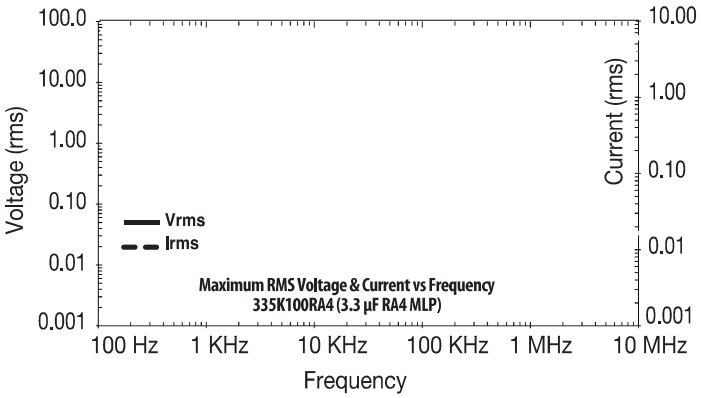
Part Numbering System

224	K	100	RA	3	-FA
Capacitance	**Tolerance**	**Voltage**	**Type**	**Case Size**	**RoHS**
224 = 0.22 µF	K = ±10%	100 = 100 Vdc		3 = 0.3"=7.5 mm 4 = 0.4"=10 mm 6 = 0.6"=15 mm	-FA = 6/6 Compliant w Sn plated wire leads (Blank = 5/6 compliant w SnPb wire lead finish)

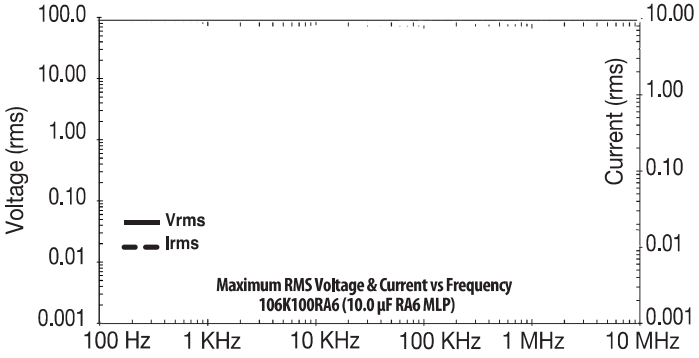
Type RA Angstor® Radial PET Film Capacitors

Typical Performance Curves

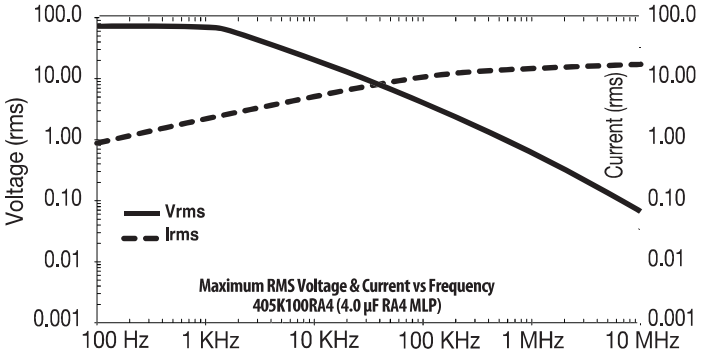
3.3 µF 100 VDC RA4



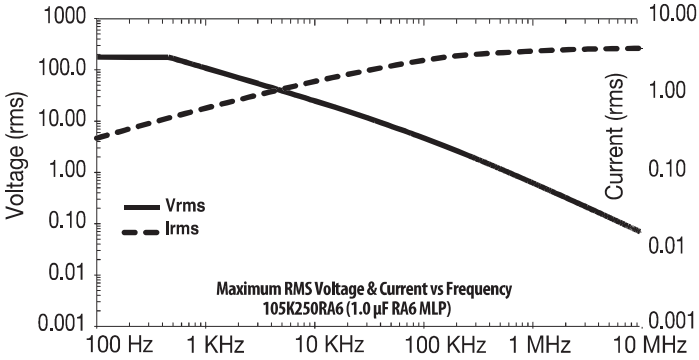
10.0 µF 100 VDC RA6



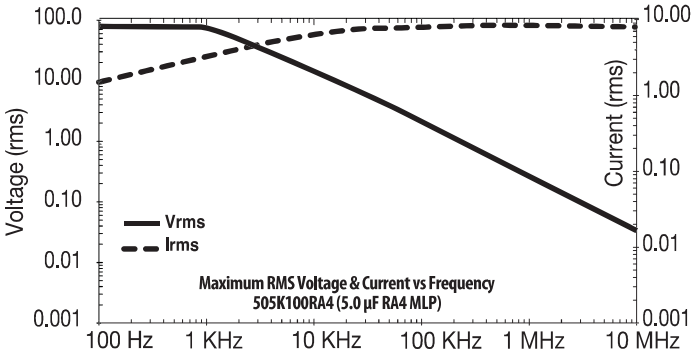
4.0 µF 100 VDC RA4



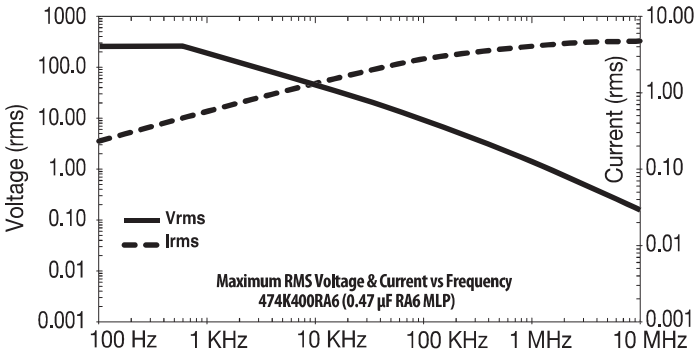
1.0 µF 250 VDC RA6



5.0 µF 100 VDC RA4



0.47 µF 400 VDC RA6



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