Capacitance Range Chart

C3216 [EIA CC1206]

Capacitance Range Chart

Temperature Characteristics: C0G (0 ± 30ppm/ºC)
Rated Voltage: 630V (2J), 250V (2E), 100V (2A)

Capacitance (pF)	Cap Code	Tolerance	C0G		
			2J (630V)	2E (250V)	2A (100V)
100	101	J: ± 5%			
120	121				
150	151				
180	181				
220	221				
270	271				
330	331				
390	391				
470	471				
560	561				
680	681				
820	821				
1,000	102				
1,200	122				
1,500	152				
1,800	182				
2,200	222				
2,700	272				
3,300	332				
3,900	392				
4,700	472				
5,600	562				
6,800	682				
8,200	822				
10,000	103				

Capacitance Range Chart

Temperature Characteristics: X7R (±15%), X7S (±22%), X7T (+22/-33%)
Rated Voltage: 630V (2J), 450V (2W), 250V (2E), 100V (2A)

Capacitance (pF)	Cap Code	Tolerance	X7R			X7S	X7T		
			2J (630V)	2E (250V)	2A (100V)	2A (100V)	2J (630V)	2W (450V)	2E (250V)
1,000	102	K: ± 10%							
1,500	152	M: ± 20%							
2,200	222								
3,300	332								
4,700	472								
6,800	682								
10,000	103								
15,000	153								
22,000	223								
33,000	333								
47,000	473								
68,000	683								
100,000	104								
150,000	154								
220,000	224								
330,000	334								
470,000	474								
1,000,000	105								
2,200,000	225								

Standard Thickness

0.60 mm 0.85 mm 1.15 mm 1.30 mm 1.60 mm



Capacitance Range Table

C3216 [EIA CC1206]

Class 1 (Temperature Compensating)

Temperature Characteristics: C0G (-55 to 125ºC, 0±30 ppm/ºC)

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C3216C0G2A392J	C0G	100V	3,900	± 5%	0.60 ± 0.10
C3216C0G2A472J	C0G	100V	4,700	± 5%	0.85 ± 0.10
C3216C0G2A562J	C0G	100V	5,600	± 5%	0.85 ± 0.10
C3216C0G2A682J	C0G	100V	6,800	± 5%	1.15 ± 0.10
C3216C0G2A822J	C0G	100V	8,200	± 5%	1.15 ± 0.10
C3216C0G2A103J	C0G	100V	10,000	± 5%	1.15 ± 0.10
C3216C0G2E332J	C0G	250V	3,300	± 5%	0.85 ± 0.10
C3216C0G2E392J	C0G	250V	3,900	± 5%	1.15 ± 0.10
C3216C0G2E472J	C0G	250V	4,700	± 5%	1.15 ± 0.10
C3216C0G2E562J	C0G	250V	5,600	± 5%	1.15 ± 0.10
C3216C0G2E682J	C0G	250V	6,800	± 5%	1.60 ± 0.30
C3216C0G2E822J	C0G	250V	8,200	± 5%	1.60 ± 0.30
C3216C0G2J101J	C0G	630V	100	± 5%	0.60 ± 0.10
C3216C0G2J121J	C0G	630V	120	± 5%	0.60 ± 0.10
C3216C0G2J151J	C0G	630V	150	± 5%	0.60 ± 0.10
C3216C0G2J181J	C0G	630V	180	± 5%	0.60 ± 0.10
C3216C0G2J221J	C0G	630V	220	± 5%	0.60 ± 0.10
C3216C0G2J271J	C0G	630V	270	± 5%	0.60 ± 0.10
C3216C0G2J331J	C0G	630V	330	± 5%	0.60 ± 0.10
C3216C0G2J391J	C0G	630V	390	± 5%	0.60 ± 0.10
C3216C0G2J471J	C0G	630V	470	± 5%	0.85 ± 0.10
C3216C0G2J561J	C0G	630V	560	± 5%	0.85 ± 0.10
C3216C0G2J681J	C0G	630V	680	± 5%	0.85 ± 0.10
C3216C0G2J821J	C0G	630V	820	± 5%	0.85 ± 0.10
C3216C0G2J102J	C0G	630V	1,000	± 5%	0.85 ± 0.10
C3216C0G2J122J	C0G	630V	1,200	± 5%	0.85 ± 0.10
C3216C0G2J152J	C0G	630V	1,500	± 5%	1.15 ± 0.10
C3216C0G2J182J	C0G	630V	1,800	± 5%	1.15 ± 0.10
C3216C0G2J222J	C0G	630V	2,200	± 5%	1.15 ± 0.10
C3216C0G2J272J	C0G	630V	2,700	± 5%	1.60 ± 0.30
C3216C0G2J332J	C0G	630V	3,300	± 5%	1.60 ± 0.30

Class 2 (Temperature Stable)

Temperature Characteristics: X7R (-55 to +125ºC, ±15%)

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C3216X7R2A333K	X7R	100V	33,000	± 10%	1.15 ± 0.10
C3216X7R2A333M	X7R	100V	33,000	± 20%	1.15 ± 0.10
C3216X7R2A473K	X7R	100V	47,000	± 10%	1.15 ± 0.10
C3216X7R2A473M	X7R	100V	47,000	± 20%	1.15 ± 0.10
C3216X7R2A683K	X7R	100V	68,000	± 10%	1.60 ± 0.30
C3216X7R2A683M	X7R	100V	68,000	± 20%	1.60 ± 0.30
C3216X7R2A104K	X7R	100V	100,000	± 10%	1.60 ± 0.30
C3216X7R2A104M	X7R	100V	100,000	± 20%	1.60 ± 0.30
C3216X7R2A154K	X7R	100V	150,000	± 10%	1.60 ± 0.30



Capacitance Range Table

C3216 [EIA CC1206]

Class 2 (Temperature Stable)

Temperature Characteristics: X7R (-55 to +125ºC, ±15%), X7S (-55 to +125ºC, ±22%), X7T (-55 to +125ºC, +22/-33%)

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C3216X7R2A154M	X7R	100V	150,000	± 20%	1.60 ± 0.30
C3216X7R2A224K	X7R	100V	220,000	± 10%	1.15 ± 0.10
C3216X7R2A224M	X7R	100V	220,000	± 20%	1.15 ± 0.10
C3216X7R2A334K	X7R	100V	330,000	± 10%	1.30 ± 0.15
C3216X7R2A334M	X7R	100V	330,000	± 20%	1.30 ± 0.15
C3216X7R2A474K	X7R	100V	470,000	± 10%	1.60 ± 0.30
C3216X7R2A474M	X7R	100V	470,000	± 20%	1.60 ± 0.30
C3216X7R2A105K	X7R	100V	1,000,000	± 10%	1.60 ± 0.30
C3216X7R2A105M	X7R	100V	1,000,000	± 20%	1.60 ± 0.30
C3216X7R2E153K	X7R	250V	15,000	± 10%	1.15 ± 0.10
C3216X7R2E153M	X7R	250V	15,000	± 20%	1.15 ± 0.10
C3216X7R2E223K	X7R	250V	22,000	± 10%	1.15 ± 0.10
C3216X7R2E223M	X7R	250V	22,000	± 20%	1.15 ± 0.10
C3216X7R2E333K	X7R	250V	33,000	± 10%	1.60 ± 0.30
C3216X7R2E333M	X7R	250V	33,000	± 20%	1.60 ± 0.30
C3216X7R2E473K	X7R	250V	47,000	± 10%	1.60 ± 0.30
C3216X7R2E473M	X7R	250V	47,000	± 20%	1.60 ± 0.30
C3216X7R2E683K	X7R	250V	68,000	± 10%	1.60 ± 0.30
C3216X7R2E683M	X7R	250V	68,000	± 20%	1.60 ± 0.30
C3216X7R2E104K	X7R	250V	100,000	± 10%	1.60 ± 0.30
C3216X7R2E104M	X7R	250V	100,000	± 20%	1.60 ± 0.30
C3216X7R2J102K	X7R	630V	1,000	± 10%	1.15 ± 0.10
C3216X7R2J102M	X7R	630V	1,000	± 20%	1.15 ± 0.10
C3216X7R2J152K	X7R	630V	1,500	± 10%	1.15 ± 0.10
C3216X7R2J152M	X7R	630V	1,500	± 20%	1.15 ± 0.10
C3216X7R2J222K	X7R	630V	2,200	± 10%	1.15 ± 0.10
C3216X7R2J222M	X7R	630V	2,200	± 20%	1.15 ± 0.10
C3216X7R2J332K	X7R	630V	3,300	± 10%	1.15 ± 0.10
C3216X7R2J332M	X7R	630V	3,300	± 20%	1.15 ± 0.10
C3216X7R2J472K	X7R	630V	4,700	± 10%	1.15 ± 0.10
C3216X7R2J472M	X7R	630V	4,700	± 20%	1.15 ± 0.10
C3216X7R2J682K	X7R	630V	6,800	± 10%	1.15 ± 0.10
C3216X7R2J682M	X7R	630V	6,800	± 20%	1.15 ± 0.10
C3216X7R2J103K	X7R	630V	10,000	± 10%	1.15 ± 0.10
C3216X7R2J103M	X7R	630V	10,000	± 20%	1.15 ± 0.10
C3216X7R2J153K	X7R	630V	15,000	± 10%	1.30 ± 0.15
C3216X7R2J153M	X7R	630V	15,000	± 20%	1.30 ± 0.15
C3216X7R2J223K	X7R	630V	22,000	± 10%	1.30 ± 0.15
C3216X7R2J223M	X7R	630V	22,000	± 20%	1.30 ± 0.15
C3216X7R2J333K	X7R	630V	33,000	± 10%	1.60 ± 0.30
C3216X7R2J333M	X7R	630V	33,000	± 20%	1.60 ± 0.30
C3216X7S2A225K	X7S	100V	2,200,000	± 10%	1.60 ± 0.30
C3216X7S2A225M	X7S	100V	2,200,000	± 20%	1.60 ± 0.30
C3216X7T2E154K	X7T	250V	150,000	± 10%	1.30 ± 0.15

Capacitance Range Table

C3216 [EIA CC1206]

Class 2 (Temperature Stable)

Temperature Characteristics: X7T (-55 to +125ºC, +22/-33%)

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C3216X7T2E224K	X7T	250V	220,000	± 10%	1.60 ± 0.30
C3216X7T2W683K	X7T	450V	68,000	± 10%	1.30 ± 0.15
C3216X7T2W104K	X7T	450V	100,000	± 10%	1.60 ± 0.30
C3216X7T2J103K	X7T	630V	10,000	± 10%	0.85 ± 0.10
C3216X7T2J153K	X7T	630V	15,000	± 10%	0.85 ± 0.10
C3216X7T2J223K	X7T	630V	22,000	± 10%	1.15 ± 0.10
C3216X7T2J333K	X7T	630V	33,000	± 10%	1.15 ± 0.10
C3216X7T2J473K	X7T	630V	47,000	± 10%	1.60 ± 0.30