Types TAT and TAX Wet Tantalum Capacitor – CLR 79 (MIL-C-39006/22) CLR 81 (MIL-C-39006/25)

Commercial Types TAT for CLR79 and TAX for CLR81



Military Types **CLR79** and **CLR81** and CDE's commercial equivalent **TAT** and **TAX**, all with Teflon inner-seal, glass-to-metal hermetic outer-seal, tantalum case construction, have higher ripple current capability and are more reliable than silver case units with their risk of short circuit failure from silver whiskers. The tantalum case with its sintered and anodized cathode connection affords a 3 V reverse voltage capability, and dc leakage current as little as 2 µA at 125° C.

General Specifications

Operating Temperature:	-55°C to +125°C, with voltage derating above 85°C, (Max voltage at 125ºC is 2/3 of the value at 85ºC)
Working Voltage:	6 to 125 WVdc
Tolerance:	±10%, ±20%, ±5%
Capacitance:	1.7 to 2200 µF

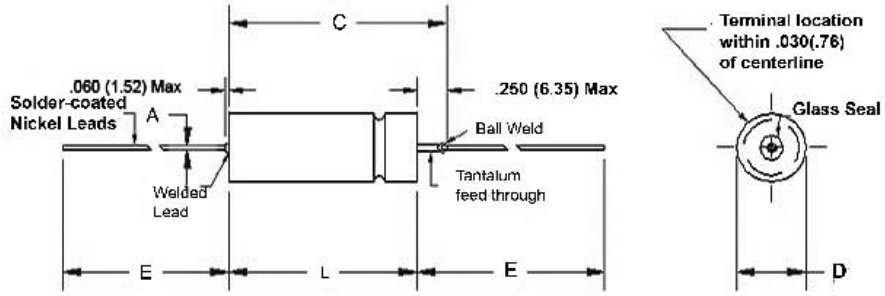
Key Features

- Three volts reverse voltage capability
- High ripple current capability
- Tantalum case
- Hermetically sealed
- Low ESR, Low DCL
- Extended range on TAX (M39006/25)
- Standard high vibration and shock requirements on MIL type

Applications

- Filtering, bypass, coupling, energy storage
- Low source impedance circuits
- High charging current circuits

Outline Dimensions



Dimensions

Inches (mm)

		Uninsulated	Uninsulated	Insulated	Insulated			E	
		D	L	D	L	C	A	Lead Length	Typical Weight
CDE Size	CASE	± .016(.41)	+ .031, -.016 (+.79, -.41)	Maximum	Maximum	Maximum	Lead dia.(Nom)	±.250(±.6.35)	(grams)
1	T1	.201(5.10)	.475(12.06)	.232(5.89)	.640(16.26)	.756(19.20)	.025 (.64)	1.50(38.10)	2
2	T2	.289(7.34)	.632(16.05)	.314(7.98)	.800(20.32)	.913(23.19)	.025 (.64)	2.25 (57.15)	5
3	T3	.387(9.83)	.747(18.97)	.418(10.62)	.900(22.86)	1.028(26.11)	.025 (.64)	2.25 (57.15)	8
4	T4	.387(9.83)	1.047(26.59)	.418(10.62)	1.200(30.48)	1.328(33.73)	.025 (.64)	2.25 (57.15)	15

Part Markings

COMMERCIAL PARTS

TAT ±20%	Series/Cap tol
20 µF	Capacitance
125Vdc	Voltage
00853	Cage Number
0335875	Date Code by year week, Lot Code
+ Indicates polarity	

MIL PARTS

M39006	Series
22HXXXX	Dash Number
J 000853	Jan/Cage Number
100 µF	Capacitance
30 Vdc	Voltage
0335	Date Code (Expressed by year–week)
875	Lot Code
+ Indicates polarity	

Part Number Nomenclature and Ordering

(Commercial Parts)

TAT	106	M	025	1	2
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series: TAT (M39006/22), TAX (M39006/25)
(2) Cap code: Expressed in Picofarads (1st two digits significant figures, 3rd digit number of zeros.)
(3) Tolerance: M = ±20%, K= ±10%, J= ±5%
(4) Voltage
(5) Sleeve: 0= No sleeve, 1= Polyester, 2= Polyimide
(6) Case code: 1= T1, 2=T2, 3=T3, 4=T4

(MIL Spec Parts)
Indicate the prefix M39006/22 followed by the appropriate MIL dash number. An example for a M39006/22 in a 100 µF, ±20% tolerance, 30 volts, M level, order as a **M39006/22H0113**.

Note: Parts without sleeves will not meet the MIL requirements for marking permanency (resistance to solvents).

Ratings

TAT(CLR79) CDE Commercial Part Number	Cap (µF)	Cap Tol (±)	Case Code	Max DF %	Max ESR @+25°C (Ω)	Maximum DC Leakage (µA)		Max Ripple @ +85°C 40kHz (mA)	Maximum % Capacitance change from Room Temperature			Part Number MIL-C-M39006/22 Failure Rate Level/%1000 Hours		
						+25° C	+85°C & +125°C		-55°C	+85°C	+125°C	M (1.0)	P (0.1)	R (0.01)
6 Volts Maximum at 85°C(4 Volts at 125°C), Surge Voltage 6.9 at 85°C														
TAT306M 00611	30	20	1	9	3.98	1	2	820	-40	+10.5	+12	0001	0221	0441
TAT306K 00611	30	10	1	9	3.98	1	2	820	-40	+10.5	+12	0002	0222	0442
TAT306J 00611	30	5	1	9	3.98	1	2	820	-40	+10.5	+12	0003	0223	0443
TAT686M 00611	68	20	1	15	3.16	1	2	960	-40	+14	+16	0004	0224	0444
TAT686K 00611	68	10	1	15	3.16	1	2	960	-40	+14	+16	0005	0225	0445
TAT686J 00611	68	5	1	15	3.16	1	2	960	-40	+14	+16	0006	0226	0446
TAT147M 00612	140	20	2	21	1.99	1	3	1200	-40	+14	+16	0007	0227	0447
TAT147K 00612	140	10	2	21	1.99	1	3	1200	-40	+14	+16	0008	0228	0448
TAT147J 00612	140	5	2	21	1.99	1	3	1200	-40	+14	+16	0009	0229	0449
TAT277M 00612	270	20	2	45	2.21	1	6.5	1375	-44	+17.5	+20	0010	0230	0450
TAT277K 00612	270	10	2	45	2.21	1	6.5	1375	-44	+17.5	+20	0011	0231	0451
TAT277J 00612	270	5	2	45	2.21	1	6.5	1375	-44	+17.5	+20	0012	0232	0452
TAT337M 00613	330	20	3	36	1.45	2	7.9	1800	-44	+14	+16	0013	0233	0453
TAT337K 00613	330	10	3	36	1.45	2	7.9	1800	-44	+14	+16	0014	0234	0454
TAT337J 00613	330	5	3	36	1.45	2	7.9	1800	-44	+14	+16	0015	0235	0455
TAT567M 00613	560	20	3	55	1.30	2	13	1900	-64	+17.5	+20	0016	0236	0456
TAT567K 00613	560	10	3	55	1.30	2	13	1900	-64	+17.5	+20	0017	0237	0457
TAT567J 00613	560	5	3	55	1.30	2	13	1900	-64	+17.5	+20	0018	0238	0458
TAT128M 00614	1200	20	4	90	1.00	3	14	2265	-80	+25	+25	0019	0239	0459
TAT128K 00614	1200	10	4	90	1.00	3	14	2265	-80	+25	+25	0020	0240	0460
8 Volts Maximum at 85°C(5 Volts at 125°C), Surge Voltage 9.2 at 85°C														
TAT256M 00811	25	20	1	7.5	3.98	1	2	820	-40	+10.5	+12	0021	0241	0461
TAT256K 00811	25	10	1	7.5	3.98	1	2	820	-40	+10.5	+12	0022	0242	0462
TAT256J 00811	25	5	1	7.5	3.98	1	2	820	-40	+10.5	+12	0023	0243	0463
TAT566M 00811	56	20	1	14	3.32	1	2	900	-40	+14	+16	0024	0244	0464
TAT566K 00811	56	10	1	14	3.32	1	2	900	-40	+14	+16	0025	0245	0465
TAT566J 00811	56	5	1	14	3.32	1	2	900	-40	+14	+16	0026	0246	0466
TAT127M 00812	120	20	2	20	2.21	1	2	1220	-44	+17.5	+20	0027	0247	0467
TAT127K 00812	120	10	2	20	2.21	1	2	1220	-44	+17.5	+20	0028	0248	0468
TAT127J 00812	120	5	2	20	2.21	1	2	1220	-44	+17.5	+20	0029	0249	0469
TAT227M 00812	220	20	2	37	2.23	1	7	1370	-44	+17.5	+20	0030	0250	0470
TAT227K 00812	220	10	2	37	2.23	1	7	1370	-44	+17.5	+20	0031	0251	0471
TAT227J 00812	220	5	2	37	2.23	1	7	1370	-44	+17.5	+20	0032	0252	0472
TAT297M 00813	290	20	3	34	1.56	2	6	1770	-64	+17.5	+20	0033	0253	0473
TAT297K 00813	290	10	3	34	1.56	2	6	1770	-64	+17.5	+20	0034	0254	0474
TAT297J 00813	290	5	3	34	1.56	2	6	1770	-64	+17.5	+20	0035	0255	0475
TAT437M 00813	430	20	3	46	1.42	2	14	1825	-64	+17.5	+20	0036	0256	0476
TAT437K 00813	430	10	3	46	1.42	2	14	1825	-64	+17.5	+20	0037	0257	0477
TAT437J 00813	430	5	3	46	1.42	2	14	1825	-64	+17.5	+20	0038	0258	0478
TAT857M 00814	850	20	4	60	0.94	4	16	2330	-80	+25	+25	0039	0259	0479
TAT857K 00814	850	10	4	60	0.94	4	16	2330	-80	+25	+25	0040	0260	0480

Types TAT and TAX Wet Tantalum Capacitor – CLR 79 (MIL-C-39006/22) CLR 81 (MIL-C-39006/25)

TAT(CLR79) CDE Commercial Part Number	Cap (µF)	Cap Tol (±)	Case Code	Max DF %	Max ESR @+25°C (Ω)	Maximum DC Leakage (µA)		Max Ripple @ +85°C 40kHz (mA)	Maximum % Capacitance change from Room Temperature			Part Number MIL-C-M39006/22 Failure Rate Level/%1000 Hours		
						+25° C	+85°C & +125°C		-55°C	+85°C	+125°C	M (1.0)	P (0.1)	R (0.01)
10 Volts Maximum at 85°C(7 Volts at 125°C), Surge Voltage 11.5 at 85°C														
TAT206M 01011	20	20	1	6	3.98	1	2	820	-32	+10.5	+12	0041	0261	0481
TAT206K 01011	20	10	1	6	3.98	1	2	820	-32	+10.5	+12	0042	0262	0482
TAT206J 01011	20	5	1	6	3.98	1	2	820	-32	+10.5	+12	0043	0263	0483
TAT476M 01011	47	20	1	13	3.67	1	2	855	-36	+14	+16	0044	0264	0484
TAT476K 01011	47	10	1	13	3.67	1	2	855	-36	+14	+16	0045	0265	0485
TAT476J 01011	47	5	1	13	3.67	1	2	855	-36	+14	+16	0046	0266	0486
TAT107M 01012	100	20	2	15	1.99	1	4	1200	-36	+14	+16	0047	0267	0487
TAT107K 01012	100	10	2	15	1.99	1	4	1200	-36	+14	+16	0048	0268	0488
TAT107J 01012	100	5	2	15	1.99	1	4	1200	-36	+14	+16	0049	0269	0489
TAT187M 01012	180	20	2	30	2.21	1	7	1365	-36	+14	+16	0050	0270	0490
TAT187K 01012	180	10	2	30	2.21	1	7	1365	-36	+14	+16	0051	0271	0491
TAT187J 01012	180	5	2	30	2.21	1	7	1365	-36	+14	+16	0052	0272	0492
TAT257M 01013	250	20	3	30	1.59	2	10	1720	-40	+14	+16	0053	0273	0493
TAT257K 01013	250	10	3	30	1.59	2	10	1720	-40	+14	+16	0054	0274	0494
TAT257J 01013	250	5	3	30	1.59	2	10	1720	-40	+14	+16	0055	0275	0495
TAT397M 01013	390	20	3	44	1.50	2	16	1800	-64	+17.5	+20	0056	0276	0496
TAT397K 01013	390	10	3	44	1.50	2	16	1800	-64	+17.5	+20	0057	0277	0497
TAT397J 01013	390	5	3	44	1.50	2	16	1800	-64	+17.5	+20	0058	0278	0498
TAT757M 01014	750	20	4	50	0.88	4	16	2360	-80	+25	+25	0059	0279	0499
TAT757K 01014	750	10	4	50	0.88	4	16	2360	-80	+25	+25	0060	0280	0500
15 Volts Maximum at 85°C(10 Volts at 125°C), Surge Voltage 17.2 at 85°C														
TAT156M 01511	15	20	1	5	4.42	1	2	780	-24	+10.5	+12	0061	0281	0501
TAT156K 01511	15	10	1	5	4.42	1	2	780	-24	+10.5	+12	0062	0282	0502
TAT156J 01511	15	5	1	5	4.42	1	2	780	-24	+10.5	+12	0063	0283	0503
TAT336M 01511	33	20	1	10	4.02	1	2	820	-28	+14	+16	0064	0284	0504
TAT336K 01511	33	10	1	10	4.02	1	2	820	-28	+14	+16	0065	0285	0505
TAT336J 01511	33	5	1	10	4.02	1	2	820	-28	+14	+16	0066	0286	0506
TAT706M 01512	70	20	2	13	2.46	1	4	1150	-28	+14	+16	0067	0287	0507
TAT706K 01512	70	10	2	13	2.46	1	4	1150	-28	+14	+16	0068	0288	0508
TAT706J 01512	70	5	2	13	2.46	1	4	1150	-28	+14	+16	0069	0289	0509
TAT127M 01512	120	20	2	18	1.99	1	7	1450	-28	+17.5	+20	0070	0290	0510
TAT127K 01512	120	10	2	18	1.99	1	7	1450	-28	+17.5	+20	0071	0291	0511
TAT127J 01512	120	5	2	18	1.99	1	7	1450	-28	+17.5	+20	0072	0292	0512
TAT177M 01513	170	20	3	25	1.95	2	10	1480	-32	+14	+16	0073	0293	0513
TAT177K 01513	170	10	3	25	1.95	2	10	1480	-32	+14	+16	0074	0294	0514
TAT177J 01513	170	5	3	25	1.95	2	10	1480	-32	+14	+16	0075	0295	0515
TAT277M 01513	270	20	3	32	1.57	2	16	1740	-56	+17.5	+20	0076	0296	0516
TAT277K 01513	270	10	3	32	1.57	2	16	1740	-56	+17.5	+20	0077	0297	0517
TAT277J 01513	270	5	3	32	1.57	2	16	1740	-56	+17.5	+20	0078	0298	0518
TAT547M 01514	540	20	4	40	0.98	6	24	2330	-80	+25	+25	0079	0299	0519
TAT547K 01514	540	10	4	40	0.98	6	24	2330	-80	+25	+25	0080	0300	0520
25 Volts Maximum at 85°C(15 Volts at 125°C), Surge Voltage 28.8 at 85°C														
TAT106M 02511	10	20	1	4	5.31	1	2	715	-16	+8	+9	0081	0301	0521
TAT106K 02511	10	10	1	4	5.31	1	2	715	-16	+8	+9	0082	0302	0522
TAT106J 02511	10	5	1	4	5.31	1	2	715	-16	+8	+9	0083	0303	0523
TAT226M 02511	22	20	1	6.6	3.98	1	2	825	-20	+10.5	+12	0084	0304	0524
TAT226K 02511	22	10	1	6.6	3.98	1	2	825	-20	+10.5	+12	0085	0305	0525

TAT(CLR79) CDE Commercial Part Number	Cap (µF)	Cap Tol (±)	Case Code	Max DF %	Max ESR @+25°C (Ω)	Maximum DC Leakage (µA)		Max Ripple @ +85°C 40kHz (mA)	Maximum % Capacitance change from Room Temperature			Part Number MIL-C-M39006/22 Failure Rate Level/%1000 Hours		
						+25°C	+85°C & +125°C		-55°C	+85°C	+125°C	M (1.0)	P (0.1)	R (0.01)
25 Volts Maximum at 85°C(15 Volts at 125°C), Surge Voltage 28.8 at 85°C														
TAT226J 02511	22	5	1	6.6	3.98	1	2	825	-20	+10.5	+12	0086	0306	0526
TAT506M 02512	50	20	2	11	2.92	1	2	1130	-28	+13	+15	0087	0307	0527
TAT506K 02512	50	10	2	11	2.92	1	2	1130	-28	+13	+15	0088	0308	0528
TAT506J 02512	50	5	2	11	2.92	1	2	1130	-28	+13	+15	0089	0309	0529
TAT107M 02512	100	20	2	15	1.99	1	10	1435	-28	+13	+15	0090	0310	0530
TAT107K 02512	100	10	2	15	1.99	1	10	1435	-28	+13	+15	0091	0311	0531
TAT107J 02512	100	5	2	15	1.99	1	10	1435	-28	+13	+15	0092	0312	0532
TAT127M 02513	120	20	3	21	2.32	2	6	1450	-32	+13	+15	0093	0313	0533
TAT127K 02513	120	10	3	21	2.32	2	6	1450	-32	+13	+15	0094	0314	0534
TAT127J 02513	120	5	3	21	2.32	2	6	1450	-32	+13	+15	0095	0315	0535
TAT187M 02513	180	20	3	26	1.92	2	18	1525	-48	+13	+15	0096	0316	0536
TAT187K 02513	180	10	3	26	1.92	2	18	1525	-48	+13	+15	0097	0317	0537
TAT187J 02513	180	5	3	26	1.92	2	18	1525	-48	+13	+15	0098	0318	0538
TAT357M 02514	350	20	4	35	1.33	7	28	1970	-70	+25	+25	0099	0319	0539
TAT357K 02514	350	10	4	35	1.33	7	28	1970	-70	+25	+25	0100	0320	0540
30 Volts Maximum at 85°C(20 Volts at 125°C), Surge Voltage 34.5 at 85°C														
TAT805M 03011	8	20	1	4	6.64	1	2	640	-16	+8	+12	0101	0321	0541
TAT805K 03011	8	10	1	4	6.64	1	2	640	-16	+8	+12	0102	0322	0542
TAT805J 03011	8	5	1	4	6.64	1	2	640	-16	+8	+12	0103	0323	0543
TAT156M 03011	15	20	1	5	4.42	1	2	780	-20	+10.5	+12	0104	0324	0544
TAT156K 03011	15	10	1	5	4.42	1	2	780	-20	+10.5	+12	0105	0325	0545
TAT156J 03011	15	5	1	5	4.42	1	2	780	-20	+10.5	+12	0106	0326	0546
TAT406M 03012	40	20	2	10	3.32	1	5	1120	-24	+10.5	+12	0107	0327	0547
TAT406K 03012	40	10	2	10	3.32	1	5	1120	-24	+10.5	+12	0108	0328	0548
TAT406J 03012	40	5	2	10	3.32	1	5	1120	-24	+10.5	+12	0109	0329	0549
TAT686M 03012	68	20	2	13	2.54	1	8	1285	-24	+13	+15	0110	0330	0550
TAT686K 03012	68	10	2	13	2.54	1	8	1285	-24	+13	+15	0111	0331	0551
TAT686J 03012	68	5	2	13	2.54	1	8	1285	-24	+13	+15	0112	0332	0552
TAT107M 03013	100	20	3	17	2.26	2	12	1450	-28	+10.5	+12	0113	0333	0553
TAT107K 03013	100	10	3	17	2.26	2	12	1450	-28	+10.5	+12	0114	0334	0554
TAT107J 03013	100	5	3	17	2.26	2	12	1450	-28	+10.5	+12	0115	0335	0555
TAT157M 03013	150	20	3	23	2.03	2	18	1525	-48	+13	+15	0116	0336	0556
TAT157K 03013	150	10	3	23	2.03	2	18	1525	-48	+13	+15	0117	0337	0557
TAT157J 03013	150	5	3	23	2.03	2	18	1525	-48	+13	+15	0118	0338	0558
TAT307M 03014	300	20	4	31	1.37	8	32	1950	-60	+25	+25	0119	0339	0559
TAT307K 03014	300	10	4	31	1.37	8	32	1950	-60	+25	+25	0120	0340	0560
50 Volts Maximum at 85°C(330 Volts at 125°C), Surge Voltage 57.5 at 85°C														
TAT505M 05011	5	20	1	3	7.96	1	2	580	-16	+5	+6	0121	0341	0561
TAT505K 05011	5	10	1	3	7.96	1	2	580	-16	+5	+6	0122	0342	0562
TAT505J 05011	5	5	1	3	7.96	1	2	580	-16	+5	+6	0123	0343	0563
TAT106M 05011	10	20	1	4	5.31	1	2	715	-24	+8	+9	0124	0344	0564
TAT106K 05011	10	10	1	4	5.31	1	2	715	-24	+8	+9	0125	0345	0565
TAT106J 05011	10	5	1	4	5.31	1	2	715	-24	+8	+9	0126	0346	0566
TAT256M 05012	25	20	2	8	4.25	1	5	1005	-20	+10.5	+12	0127	0347	0567
TAT256K 05012	25	10	2	8	4.25	1	5	1005	-20	+10.5	+12	0128	0348	0568
TAT256J 05012	25	5	2	8	4.25	1	5	1005	-20	+10.5	+12	0129	0349	0569
TAT476M 05012	47	20	2	11	3.11	1	9	1155	-28	+13	+15	0130	0350	0570

Types TAT and TAX Wet Tantalum Capacitor – CLR 79 (MIL-C-39006/22) CLR 81 (MIL-C-39006/25)

TAT(CLR79) CDE Commercial Part Number	Cap (µF)	Cap Tol (±)	Case Code	Max DF %	Max ESR @+25°C (Ω)	Maximum DC Leakage (µA)		Max Ripple @ +85°C 40kHz (mA)	Maximum % Capacitance change from Room Temperature			Part Number MIL-C-M39006/22 Failure Rate Level/%1000 Hours		
						+25°C	+85°C & +125°C		-55°C	+85°C	+125°C	M (1.0)	P (0.1)	R (0.01)
TAT476K 05012	47	10	2	11	3.11	1	9	1155	-28	+13	+15	0131	0351	0571
TAT476J 05012	47	5	2	11	3.11	1	9	1155	-28	+13	+15	0132	0352	0572
TAT606M 05013	60	20	3	12	2.65	2	12	1335	-16	+10.5	+12	0133	0353	0573
TAT606K 05013	60	10	3	12	2.65	2	12	1335	-16	+10.5	+12	0134	0354	0574
TAT606J 05013	60	5	3	12	2.65	2	12	1335	-16	+10.5	+12	0135	0355	0575
TAT826M 05013	82	20	3	15	2.43	2	16	1400	-32	+13	+15	0136	0356	0576
TAT826K 05013	82	10	3	15	2.43	2	16	1400	-32	+13	+15	0137	0357	0577
TAT826J 05013	82	5	3	15	2.43	2	16	1400	-32	+13	+15	0138	0358	0578
TAT167M 05014	160	20	4	17	1.41	8	32	1900	-50	+25	+25	0139	0359	0579
TAT167K 05014	160	10	4	17	1.41	8	32	1900	-50	+25	+25	0140	0360	0580
60 Volts Maximum at 85°C(40 Volts at 125°C), Surge Voltage 69 at 85°C														
TAT405M 06011	4	20	1	2.8	9.29	1	2	525	-16	+5	+6	0141	0361	0581
TAT405K 06011	4	10	1	2.8	9.29	1	2	525	-16	+5	+6	0142	0362	0582
TAT405J 06011	4	5	1	2.8	9.29	1	2	525	-16	+5	+6	0143	0363	0583
TAT825M 06011	8.2	20	1	4	6.47	1	2	625	-24	+8	+9	0144	0364	0584
TAT825K 06011	8.2	10	1	4	6.47	1	2	625	-24	+8	+9	0145	0365	0585
TAT825J 06011	8.2	5	1	4	6.47	1	2	625	-24	+8	+9	0146	0366	0586
TAT206M 06012	20	20	2	7	4.64	1	5	930	-16	+10.5	+12	0147	0367	0587
TAT206K 06012	20	10	2	7	4.64	1	5	930	-16	+10.5	+12	0148	0368	0588
TAT206J 06012	20	5	2	7	4.64	1	5	930	-16	+10.5	+12	0149	0369	0589
TAT396M 06012	39	20	2	10	3.4	1	9	1110	-28	+10.5	+12	0150	0370	0590
TAT396K 06012	39	10	2	10	3.4	1	9	1110	-28	+10.5	+12	0151	0371	0591
TAT396J 06012	39	5	2	10	3.4	1	9	1110	-28	+10.5	+12	0152	0372	0592
TAT506M 06013	50	20	3	10	2.65	2	12	1330	16	+10.5	+12	0153	0373	0593
TAT506K 06013	50	10	3	10	2.65	2	12	1330	16	+10.5	+12	0154	0374	0594
TAT506J 06013	50	5	3	10	2.65	2	12	1330	16	+10.5	+12	0155	0375	0595
TAT686M 06013	68	20	3	13	2.54	2	16	1365	-32	+10.5	+12	0156	0376	0596
TAT686K 06013	68	10	3	13	2.54	2	16	1365	-32	+10.5	+12	0157	0377	0597
TAT686J 06013	68	5	3	13	2.54	2	16	1365	-32	+10.5	+12	0158	0378	0598
TAT147M 06014	140	20	4	16	1.52	8	32	1850	-40	+20	+20	0159	0379	0599
TAT147K 06014	140	10	4	16	1.52	8	32	1850	-40	+20	+20	0160	0380	0600
75 Volts Maximum at 85°C(50 Volts at 125°C), Surge Voltage 86.2 at 85°C														
TAT355M 07511	3.5	20	1	2.5	9.48	1	2	525	-16	+5	+6	0161	0381	0601
TAT355K 07511	3.5	10	1	2.5	9.48	1	2	525	-16	+5	+6	0162	0382	0602
TAT355J 07511	3.5	5	1	2.5	9.48	1	2	525	-16	+5	+6	0163	0383	0603
TAT685M 07511	6.8	20	1	3.5	6.83	1	2	610	-20	8	+9	0164	0384	0604
TAT685K 07511	6.8	10	1	3.5	6.83	1	2	610	-20	8	+9	0165	0385	0605
TAT685J 07511	6.8	5	1	3.5	6.83	1	2	610	-20	8	+9	0166	0386	0606
TAT156M 07512	15	20	2	6	5.31	1	5	890	-16	+8	+9	0167	0387	0607
TAT156K 07512	15	10	2	6	5.31	1	5	890	-16	+8	+9	0168	0388	0608
TAT156J 07512	15	5	2	6	5.31	1	5	890	-16	+8	+9	0169	0389	0609
TAT336M 07512	33	20	2	10	4.02	1	10	1000	-24	+10.5	+15	0170	0390	0610
TAT336K 07512	33	10	2	10	4.02	1	10	1000	-24	+10.5	+15	0171	0391	0611
TAT336J07512	33	5	2	10	4.02	1	10	1000	-24	+10.5	+15	0172	0392	0612
TAT406M 07513	40	20	3	9	2.99	2	12	1250	-16	+10.5	+12	0173	0393	0613
TAT406K 07513	40	10	3	9	2.99	2	12	1250	-16	+10.5	+12	0174	0394	0614
TAT406J 07513	40	5	3	9	2.99	2	12	1250	-16	+10.5	+12	0175	0395	0615
TAT566M 07513	56	20	3	11	2.61	2	17	1335	-28	+10.5	+12	0176	0396	0616

TAT(CLR79) CDE Commercial Part Number	Cap (µF)	Cap Tol (±)	Case Code	Max DF %	Max ESR @+25°C (Ω)	Maximum DC Leakage (µA)		Max Ripple @ +85°C 40kHz (mA)	Maximum % Capacitance change from Room Temperature			Part Number MIL-C-M39006/22 Failure Rate Level/%1000 Hours		
						+25°C	+85°C & +125°C		-55°C	+85°C	+125°C	M (1.0)	P (0.1)	R (0.01)
75 Volts Maximum at 85°C(50 Volts at 125°C), Surge Voltage 86.2 at 85°C														
TAT566K 07513	56	10	3	11	2.61	2	17	1335	-28	10.5	+15	0177	0397	0617
TAT566J 07513	56	5	3	11	2.61	2	17	1335	-28	10.5	+15	0178	0398	0618
TAT117M 07514	110	20	4	12	1.45	9	36	1850	-35	+20	+20	0179	0399	0619
TAT117K 07514	110	10	4	12	1.45	9	36	1850	-35	+20	+20	0180	0400	0620
100 Volts Maximum at 85°C(65Volts at 125°C), Surge Voltage 115 at 85°C														
TAT255M 10011	2.5	20	1	2	10.62	1	2	505	-16	+7	+8	0181	0401	0621
TAT255K 10011	2.5	10	1	2	10.62	1	2	505	-16	+7	+8	0182	0402	0622
TAT255J 10011	2.5	5	1	2	10.62	1	2	505	-16	+7	+8	0183	0403	0623
TAT475M 10011	4.7	20	1	3	8.47	1	2	565	-16	+7	+8	0184	0404	0624
TAT475K 10011	4.7	10	1	3	8.47	1	2	565	-16	+7	+8	0185	0405	0625
TAT475J 10011	4.7	5	1	3	8.47	1	2	565	-16	+7	+8	0186	0406	0626
TAT116M 10012	11	20	2	5	6.03	1	4	835	-16	+8	+8	0187	0407	0627
TAT116K 10012	11	10	2	5	6.03	1	4	835	-16	+8	+8	0188	0408	0628
TAT116J 10012	11	5	2	5	6.03	1	4	835	-16	+8	+8	0189	0409	0629
TAT226M 10012	22	20	2	7.5	4.52	1	9	965	-16	+8	+8	0190	0410	0630
TAT226K 10012	22	10	2	7.5	4.52	1	9	965	-16	+8	+8	0191	0411	0631
TAT226J 10012	22	5	2	7.5	4.52	1	9	965	-16	+8	+8	0192	0412	0632
TAT306M 10013	30	20	3	7	3.10	2	12	1240	-16	+8	+8	0193	0413	0633
TAT306K 10013	30	10	3	7	3.10	2	12	1240	-16	+8	+8	0194	0414	0634
TAT306J 10013	30	5	3	7	3.10	2	12	1240	-16	+8	+8	0195	0415	0635
TAT436M 10013	43	20	3	8.5	2.62	2	17	1335	-20	+8	+8	0196	0416	0636
TAT436K 10013	43	10	3	8.5	2.62	2	17	1335	-20	+8	+8	0197	0417	0637
TAT436J10013	43	5	3	8.5	2.62	2	17	1335	-20	+8	+8	0198	0418	0638
TAT866M 10014	86	20	4	10	1.54	9	36	1800	-25	+15	+15	0199	0419	0639
TAT866K 10014	86	10	4	10	1.54	9	36	1800	-25	+15	+15	0200	0420	0640
125 Volts Maximum at 85°C(85 Volts at 125°C), Surge Voltage 144 at 85°C														
TAT175M 12511	1.7	20	1	2	15.61	1	2	415	-16	+7	+8	0201	0421	0641
TAT175K 12511	1.7	10	1	2	15.61	1	2	415	-16	+7	+8	0202	0422	0642
TAT175J 12511	1.7	5	1	2	15.61	1	2	415	-16	+7	+8	0203	0423	0643
TAT365M 12511	3.6	20	1	2.7	9.95	1	2	520	-16	+7	+8	0204	0424	0644
TAT365K 12511	3.6	10	1	2.7	9.95	1	2	520	-16	+7	+8	0205	0425	0645
TAT365J 12511	3.6	5	1	2.7	9.95	1	2	520	-16	+7	+8	0206	0426	0646
TAT905M 12512	9	20	2	5	7.37	1	5	755	-16	+7	+8	0207	0427	0647
TAT905K 12512	9	10	2	5	7.37	1	5	755	-16	+7	+8	0208	0428	0648
TAT905J 12512	9	10	2	5	7.37	1	5	755	-16	+7	+8	0209	0429	0649
TAT146M 12512	14	20	2	6	5.69	1	7	860	-16	+7	+8	0210	0430	0650
TAT146K 12512	14	10	2	6	5.69	1	7	860	-16	+7	+8	0211	0431	0651
TAT146J 12512	14	5	2	6	5.69	1	7	860	-16	+7	+8	0212	0432	0652
TAT186M 12513	18	20	3	5	3.69	2	9	1130	-16	+7	+8	0213	0433	0653
TAT186K 12513	18	10	3	5	3.69	2	9	1130	-16	+7	+8	0214	0434	0654
TAT186J 12513	18	5	3	5	3.69	2	9	1130	-16	+7	+8	0215	0435	0655
TAT256M 12513	25	20	3	6	3.18	2	13	1200	-16	+7	+8	0216	0436	0656
TAT256K 12513	25	10	3	6	3.18	2	13	1200	-16	+7	+8	0217	0437	0657
TAT256J 12513	25	5	3	6	3.18	2	13	1200	-16	+7	+8	0218	0438	0658
TAT566M 12514	56	20	4	6.5	1.54	10	40	1800	-25	+15	+15	0219	0439	0659
TAT566K 12514	56	10	4	6.5	1.54	10	40	1800	-25	+15	+15	0220	0440	0660

TAX (CLR81) CDE Commercial Part Number	Cap (µF)	Cap Tol (±)	Case Code	Max DF %	Max ESR @+25°C (Ω)	Maximum DC Leakage (µA)		Max Ripple @ +85°C 40kHz (mA)	Maximum % Capacitance Change from Room Temperature			Part Number MIL-C-M39006/25 Failure Rate Level/%1000 Hours		
						+25°C	+85°C & +125°C		-55°C	+85°C	+125°C	M (1.0)	P (0.1)	R (0.01)
6 Volts Maximum at 85°C(4 Volts at 125°C), Surge Voltage 6.9 at 85°C														
TAX227M 00611	220	20	1	50	3.02	2	9	1000	-64	+13	+16	0001	0089	0177
TAX227K 00611	220	10	1	50	3.02	2	9	1000	-64	+13	+16	0002	0090	0178
TAX827M 00612	820	20	2	155	2.51	3	14	1500	-88	+16	+20	0003	0091	0179
TAX827K 00612	820	10	2	155	2.51	3	14	1500	-88	+16	+20	0004	0092	0180
TAX158M 00613	1500	20	3	172	1.52	5	20	1900	-90	+20	+25	0005	0093	0181
TAX158K 00613	1500	10	3	172	1.52	5	20	1900	-90	+20	+25	0006	0094	0182
TAX228M 00614	2200	20	4	170	1.03	6	24	2300	-90	+25	+30	0007	0095	0183
TAX228K 00614	2200	10	4	170	1.03	6	24	2300	-90	+25	+30	0008	0096	0184
8 Volts Maximum at 85°C(5 Volts at 125°C), Surge Voltage 9.2 at 85°C														
TAX187M 00811	180	20	1	41	3.02	2	9	1000	-60	+13	+16	0009	0097	0185
TAX187K 00811	180	10	1	41	3.02	2	9	1000	-60	+13	+16	0010	0098	0186
TAX687M 00812	680	20	2	130	2.54	3	14	1500	-83	+16	+20	0011	0099	0187
TAX687K 00812	680	10	2	130	2.54	3	14	1500	-83	+16	+20	0012	0100	0188
TAX158M 00813	1500	20	3	170	1.50	5	20	1900	-90	+20	+25	0013	0101	0189
TAX158K 00813	1500	10	3	170	1.50	5	20	1900	-90	+20	+25	0014	0102	0190
TAX188M 00814	1800	20	4	138	1.02	7	25	2300	-90	+25	+30	0015	0103	0191
TAX188K 00814	1800	10	4	138	1.02	7	25	2300	-90	+25	+30	0016	0104	0192
10 Volts Maximum at 85°C(7 Volts at 125°C), Surge Voltage 11.5 at 85°C														
TAX157M 01011	150	20	1	34	3.01	2	9	900	-55	+13	+16	0017	0105	0193
TAX157K 01011	150	10	1	34	3.01	2	9	900	-55	+13	+16	0018	0106	0194
TAX567M 01012	560	20	2	106	2.51	3	16	1450	-77	+16	+20	0019	0107	0195
TAX567K 01012	560	10	2	106	2.51	3	16	1450	-77	+16	+20	0020	0108	0196
TAX128M 01013	1200	20	3	137	1.51	5	20	1850	-88	+20	+25	0021	0109	0197
TAX128K 01013	1200	10	3	137	1.51	5	20	1850	-88	+20	+25	0022	0110	0198
TAX158M 01014	1500	20	4	114	1.01	7	25	2300	-88	+25	+30	0023	0111	0199
TAX158K 01014	1500	10	4	114	1.01	7	25	2300	-88	+25	+30	0024	0112	0200
15 Volts Maximum at 85°C(10 Volts at 125°C), Surge Voltage 17.2 at 85°C														
TAX107M 01511	100	20	1	30	3.98	2	9	900	-44	+13	+16	0025	0113	0201
TAX107K 01511	100	10	1	30	3.98	2	9	900	-44	+13	+16	0026	0114	0202
TAX397M 01512	390	20	2	74	2.52	3	16	1450	-66	+16	+20	0027	0115	0203
TAX397K 01512	390	10	2	74	2.52	3	16	1450	-66	+16	+20	0028	0116	0204
TAX827M 01513	820	20	3	111	1.80	6	24	1800	-77	+20	+25	0029	0117	0205
TAX827K 01513	820	10	3	111	1.80	6	24	1800	-77	+20	+25	0030	0118	0206
TAX108M 01514	1000	20	4	92	1.22	8	32	2300	-77	+25	+30	0031	0119	0207
TAX108K 01514	1000	10	4	92	1.22	8	32	2300	-77	+25	+30	0032	0120	0208
25 Volts Maximum at 85°C(15 Volts at 125°C), Surge Voltage 28.8 at 85°C														
TAX686M 02511	68	20	1	22	4.29	2	9	850	-40	+12	+15	0033	0121	0209
TAX686K 02511	68	10	1	22	4.29	2	9	850	-40	+12	+15	0034	0122	0210
TAX277M 02512	270	20	2	55	2.70	3	16	1400	-62	+13	+16	0035	0123	0211
TAX277K 02512	270	10	2	55	2.70	3	16	1400	-62	+13	+16	0036	0124	0212
TAX567M 02513	560	20	3	76	1.80	7	28	1750	-72	+20	+25	0037	0125	0213
TAX567K 02513	560	10	3	76	1.80	7	28	1750	-72	+20	+25	0038	0126	0214
TAX687M 02514	680	20	4	63	1.23	8	32	2100	-72	+25	+30	0039	0127	0215
TAX687K 02514	680	10	4	63	1.23	8	32	2100	-72	+25	+30	0040	0128	0216
30 Volts Maximum at 85°C(20 Volts at 125°C), Surge Voltage 34.5 at 85°C														
TAX566M 03011	56	20	1	22	5.21	2	9	800	-38	+12	+15	0041	0129	0217
TAX566K 03011	56	10	1	22	5.21	2	9	800	-38	+12	+15	0042	0130	0218
TAX227M 03012	220	20	2	42	2.53	3	16	1200	-60	+13	+16	0043	0131	0219
TAX227K 03012	220	10	2	42	2.53	3	16	1200	-60	+13	+16	0044	0132	0220

TAX (CLR81) CDE Commercial Part Number	Cap (µF)	Cap Tol (±)	Case Code	Max DF %	Max ESR @+25°C (Ω)	Maximum DC Leakage (µA)		Max Ripple @ +85°C 40kHz (mA)	Maximum % Capacitance Change from Room Temperature			Part Number MIL-C-M39006/25 Failure Rate Level/%1000 Hours		
						+25°C	+85°C & +125°C		-55°C	+85°C	+125°C	M (1.0)	P (0.1)	R (0.01)
30 Volts Maximum at 85°C(20 Volts at 125°C), Surge Voltage 34.5 at 85°C														
TAX477M 03013	470	20	3	64	1.81	8	32	1500	-65	+20	+25	0045	0133	0221
TAX477K 03013	470	10	3	64	1.81	8	32	1500	-65	+20	+25	0046	0134	0222
TAX567M 03014	560	20	4	55	1.30	9	36	2000	-65	+25	+30	0047	0135	0223
TAX567K 03014	560	10	4	55	1.30	9	36	2000	-65	+25	+30	0048	0136	0224
50 Volts Maximum at 85°C(30 Volts at 125°C), Surge Voltage 57.5 at 85°C														
TAX336M 05011	33	20	1	12.3	4.95	2	9	700	-29	+10	+12	0049	0137	0225
TAX336K 05011	33	10	1	12.3	4.95	2	9	700	-29	+10	+12	0050	0138	0226
TAX127M 05012	120	20	2	22.5	2.49	4	24	1200	-42	+12	+15	0051	0139	0227
TAX127K 05012	120	10	2	22.5	2.49	4	24	1200	-42	+12	+15	0052	0140	0228
TAX277M 05013	270	20	3	37	1.82	8	32	1450	-46	+20	+25	0053	0141	0229
TAX277K 05013	270	10	3	37	1.82	8	32	1450	-46	+20	+25	0054	0142	0230
TAX337M 05014	330	20	4	38	1.53	9	36	1900	-46	+25	+30	0055	0143	0231
TAX337K 05014	330	10	4	38	1.53	9	36	1900	-46	+25	+30	0056	0144	0232
60 Volts Maximum at 85°C(40 Volts at 125°C), Surge Voltage 69 at 85°C														
TAX276M 06011	27	20	1	10.2	5.01	3	12	700	-24	+10	+12	0057	0145	0233
TAX276K 06011	27	10	1	10.2	5.01	3	12	700	-24	+10	+12	0058	0146	0234
TAX107M 06012	100	20	2	19	2.52	4	20	1100	-36	+12	+15	0059	0147	0235
TAX107K 06012	100	10	2	19	2.52	4	20	1100	-36	+12	+15	0060	0148	0236
TAX227M 06013	220	20	3	30	1.81	8	32	1400	-40	+16	+20	0061	0149	0237
TAX227K 06013	220	10	3	30	1.81	8	32	1400	-40	+16	+20	0062	0150	0238
TAX277M 06014	270	20	4	27	1.33	9	36	1850	-45	+20	+25	0063	0151	0239
TAX277K 06014	270	10	4	27	1.33	9	36	1850	-45	+20	+25	0064	0152	0240
75 Volts Maximum at 85°C(50 Volts at 125°C), Surge Voltage 86.2 at 85°C														
TAX226M 07511	22	20	1	8.5	5.13	3	12	600	-19	+10	+12	0065	0153	0241
TAX226K 07511	22	10	1	8.5	5.13	3	12	600	-19	+10	+12	0066	0154	0242
TAX826M 07512	82	20	2	15.2	2.46	4	24	1000	-30	+12	+15	0067	0155	0243
TAX826K 07512	82	10	2	15.2	2.46	4	24	1000	-30	+12	+15	0068	0156	0244
TAX187M 07513	180	20	3	24.4	1.80	9	36	1300	-35	+16	+20	0069	0157	0245
TAX187K 07513	180	10	3	24.4	1.80	9	36	1300	-35	+16	+20	0070	0158	0246
TAX227M 07514	220	20	4	37	2.23	10	40	1800	-40	+20	+25	0071	0159	0247
TAX227K 07514	220	10	4	37	2.23	10	40	1800	-40	+20	+25	0072	0160	0248
100 Volts Maximum at 85°C(65Volts at 125°C), Surge Voltage 115 at 85°C														
TAX106M10011	10	20	1	4.5	5.97	3	12	800	-17	+10	+12	0073	0161	0249
TAX106K10011	10	10	1	4.5	5.97	3	12	800	-17	+10	+12	0074	0162	0250
TAX396M10012	39	20	2	10.4	3.54	5	24	1300	-20	+12	+15	0075	0163	0251
TAX396K10012	39	10	2	10.4	3.54	5	24	1300	-20	+12	+15	0076	0164	0252
TAX686M10013	68	20	3	11.3	2.21	10	40	1600	-30	+14	+16	0077	0165	0253
TAX686K10013	68	10	3	11.3	2.21	10	40	1600	-30	+14	+16	0078	0166	0254
TAX127M10014	120	20	4	25	2.76	12	48	2000	-35	+15	+17	0079	0167	0255
TAX127K10014	120	10	4	25	2.76	12	48	2000	-35	+15	+17	0080	0168	0256
125 Volts Maximum at 85°C(85 Volts at 125°C), Surge Voltage 144 at 85°C														
TAX685M12511	6.8	20	1	6	11.71	3	12	700	-14	+10	+12	0081	0169	0257
TAX685K12511	6.8	10	1	6	11.71	3	12	700	-14	+10	+12	0082	0170	0258
TAX276M12512	27	20	2	7.2	3.54	5	24	1200	-18	+12	+15	0083	0171	0259
TAX276K12512	27	10	2	7.2	3.54	5	24	1200	-18	+12	+15	0084	0172	0260
TAX476M12513	47	20	3	7.9	2.23	10	40	1500	-26	+14	+16	0085	0173	0261
TAX476K12513	47	10	3	7.9	2.23	10	40	1500	-26	+14	+16	0086	0174	0262
TAX826M12514	82	20	4	17.4	2.82	12	48	1900	-30	+15	+17	0087	0175	0263
TAX826K12514	82	10	4	17.4	2.82	12	48	1900	-30	+15	+17	0088	0176	0264

Performance Testing

Seal: MIL-STD-202 - Method 112

- Conditions A, or D, and C

Specified Pulse Shock Test: MIL-STD-202 - Method 213 includes the following:

- Condition D (500g's)
- Mount the capacitor by its body securely on a fixture taking special care not to squeeze the leads.
- While testing apply DC rated voltage. Record whether open or short circuiting, arching, or intermittent contact occurs. Use detecting equipment capable of detecting a disruption at a period of time up to 0.5 ms.
- At the conclusion of testing examine the capacitors for evidence of arcing, breakdown, or mechanical damage.

Thermal Shock: MIL-STD-202 – Method 107, Condition A (with step 3 at +125°C)

In accordance with MIL-PRF-39006, the following shall apply:.

- Take measurements before and after cycling.
- Take measurements at 15-minute intervals at 300 cycles (Group C).
- Take final measurements at room temperature.

High Frequency Vibration: MIL-STD-202 - Method 204 includes the following:

- Condition H (80g's)
- Mount the capacitor body securely on a fixture with the leads firmly supported.
- Apply DC rated voltage while measuring specific electrical load conditions.
- The vibration duration is 4 hours in two perpendicular directions for an overall time of 8 hours.
- Take measurements during the last cycle vibration to determine open, short-circuiting or intermittent operation. Use detecting equipment capable of detecting a disruption at a period of time of 0.5ms or greater. Assess the units for mechanical damage and test for these electrical requirements:.
    - DC Leakage — Not greater than 1.25 initial limit
    - Capacitance — No change greater than ±5% of the initial limit
    - DF — Not greater than 1.15 of initial limit

Random Vibration: MIL-STD-202 – Method 214

- Test condition II-K (51 g's)

Salt atmosphere: MIL-STD-202 – Method 101

- Condition B 48 hours

Solderability: MIL-STD-202 – Method 208

- Test both terminations with the insertion depth of flux and solder within .062" of welded seam.

Lead Terminal Strength:

- Pull Test: MIL-STD-202 – Method 211, condition A
- Wire-lead bend: Per MIL-PRF-39006.
- During the test securely clamp the capacitor body. Apply a force of 3 pounds or 1.4 kg for 30 seconds.

Moisture resistance: MIL-STD-202- Method 106, which includes the following:

- Mount the capacitor body securely on a fixture taking special care not to squeeze the leads.
- Apply 6 volts, polarizing and load voltage
- At the time of the capacitors complete their final cycle remove them from the humidity chamber and measure per MIL-PRF-30006 for DC Leakage, dissipation factor, and capacitance.
    - DCL: 125% (Maximum) of +25°C value of standard ratings table
    - ΔCap: Within ±8% of initial measurement
    - DF: 115% (maximum) of initial requirement

Dielectric withstanding voltage

- MIL-STD-202 – Method 301, 2000 VDC minimum

Insulation Resistance (IR): MIL-STD-202 – Method 302, condition B

- 100 Megohms minimum

Low temperature storage: MIL-STD-810 – Method 502

- DCL and DF: Initial requirements
- ΔCap within ±5% of initial measurement

Low and high temperature stability: –55°C to +125°C.

Measure capacitors for thermal stability by testing at these temperatures in this order: +25°C, –55°C, +25°C, +85°C, +125°C, and +25°C. Measure Capacitance and DF at the temperatures listed below with the exception of the DCL, which is not measured at –55°C.

- Step 1 (+25°C)
  DCL and DF: See standard ratings table
  ΔCap: Within tolerance of standard ratings table
- Step 2 (–55°C)
  Impedance and ΔCap: See standard ratings table
- Step 3 (+25°C)
  DCL and DF: See standard ratings table
  ΔCap: Within ±5% of step one value
- Step 4 (+85°C)
  ΔCap, DCL, and DF: See standard ratings table
- Step 5 (+125°C)
  ΔCap, DCL, and DF: See standard ratings table
- Step 6 (+25°C)
  DCL and DF: See standard ratings table
  ΔCap: Within ±5% of step one value

Resistance to Soldering Heat: MIL-STD-202- Method 210, condition C

- DCL and DF: See standard ratings table
- ΔCap: Within ±5% of initial measurement

Life test at 85°C/125°C, 2000 hours: MIL-STD-202 – Method 108

- DCL and DF: See standard ratings table
- ΔCap: Within ±10% of initial measurement

Cross Reference

	Cornell Dubilier						
Type	Series	MIL Type	Kemet	Sprague	Tansitor	Mallory	Arcotronics
Typical ESR, C,V	TAT	M39006/22	T192	135D	AQ/HAQ	THT/TLX	TH
Extended Range	TAX	M39006/25	T195	135D	AR/HAR	THT/TLX	TH

These capacitor types are not exactly the same. Review the specifications before purchase to assure interchangeability

Application Guide

RIPPLE CURRENT MULTIPLIERS FOR FREQUENCY, TEMPERATURE, AND APPLIED PEAK VOLTAGE

APPLIED RIPPLE CURRENT FREQUENCY																				
	120 Hz				1 kHz				10 kHz				40 kHz				100 kHz			
	OPERATING TEMPERATURE °C																			
AMBIENT STILL AIR	≤55°	85°	105°	125°	≤55°	85°	105°	125°	≤55°	85°	105°	125°	≤55°	85°	105°	125°	≤55°	85°	105°	125°
% OF + 85° RATED PEAK VOLTAGE	RIPPLE CURRENT MULTIPLIERS																			
100%	.60	.39	-	-	.72	.45	-	-	.88	.55	-	-	1.0	.63	-	-	1.1	.69	-	-
90%	.60	.46	-	-	.72	.55	-	-	.88	.67	-	-	1.0	.77	-	-	1.1	.85	-	-
80%	.60	.52	.35	-	.72	.62	.42		.88	.76	.52	-	1.0	.87	.59	-	1.1	.96	.65	-
70%	.60	.58	.36	-	.72	.70	.52		.88	.85	.64	-	1.0	.97	.73	-	1.1	1.07	.80	-
66 2/3% and below	.60	.60	.37	.27	.72	.72	.55	.32	.88	.88	.68	.40	1.0	1.0	.77	.45	1.1	1.1	.85	.50

RIPPLE CURRENT

The ripple current listed in the Ratings Table for each capacitor rating is the macimum permissible rms ripple current at 40 kHz, 85 ºC and 2/3 of the 85 ºC peak voltage.

The rms ripple rating at 85°C and 40 kHz is based on a maximum internal temperature rise of 50°C. The maximum allowable internal temperature rise decreases linearly from 50°C to 10°C at an ambient of 125°C.

RIPPLE CURRENT MULTIPLIERS

The rms ripple current capability is shown in the Standard Ratings Table for each rating at 85°C ambient and at 40 kHz. For operation at other temperatures and frequencies use the multipliers shown in the Ripple Current Multipliers Table.

SHELF LIFE

These capacitors have an expected shelf life of ten or more years when stored at room temperature. Cold storage has no adverse effects on the capacitor.

RIPPLE VOLTAGE

The peak of the applied AC ripple voltage plus the applied DC voltage must not exceed the DC voltage rating of the capacitor either forward or reverse.

Capacitors must be biased such that the negative peak is not more negative than –3 volts and the positive peak does not exceed the voltage rating of the capacitor.

The applied DC voltage should be of sufficient magnitude to prevent polarity reversal in excess of 3 volts at 85 °C and 2 volts at 125 °C.

CAUTIONS AGAINST MISAPPLICATION

1. Do not operate at temperatures above the maxi mum rated.
2. Do not exceed rated WVdc and Surge Voltage of the capacitor.
3. Do not apply ripple voltage or ripple current in excess of specification limits.

Violations of above can be hazardous and can cause capacitor failure or equipment failure.