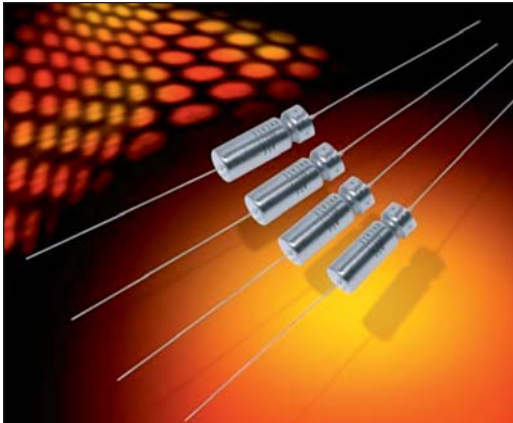


MIL-PRF-39006 Series



Military Conventional Wet Tantalum



This data sheet contains the MIL-PRF-39006 ratings for which AVX is a qualified approved supplier. This will be continually updated as the qualification expands. For COTS-Plus equivalent ratings please refer to the TWC data sheet located on the website.

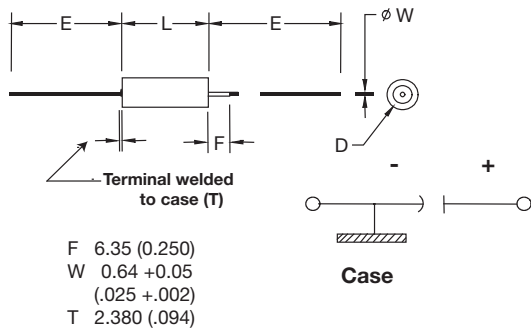
This design is an axial leaded tubular case. It includes a welded tantalum can and header assembly that provides a hermetic seal to withstand harsh environments. The 1000 hour failure rates of 1%, 0.1% and 0.01% correspond to "M", "P", and "R" respectively.

For details on testing conditions please refer to MIL-PRF-39006.

Currently qualified M39006 ratings include:

- /22 "M" Level: 6V to 100V: dashes -0001 to -0200
- /25 "M" Level: 25V to 100V: dashes -0033 to -0080
- /30 "M" Level: 6V to 100V: dashes -0001 to -0200
- /31 "M" Level: 25V to 100V: dashes -0033 to -0080

OUTLINE DIMENSIONS



CASE DIMENSIONS: millimeters (inches)

DSCC Case Size	AVX Case Size	L	D	D	E
		+0.79 (0.031) -0.41 (0.016)	Basic Case ±0.41 (0.016)	Insulated Case Max	±6.35 (0.250)
T1	A	11.51 (0.453)	4.78 (0.188)	5.56 (0.219)	38.10 (1.500)
T2	B	16.28 (0.641)	7.14 (0.281)	7.92 (0.312)	57.15 (2.250)
T3	D	19.46 (0.766)	9.52 (0.375)	10.31 (0.406)	57.15 (2.250)
T4	E	26.97 (1.062)	9.52 (0.375)	10.31 (0.406)	57.15 (2.250)

VOLTAGE RATINGS (Operating Temperature -55°C to 125°C)

Voltage (DC)												
Rated Voltage: (V_r)	85°C	6	8	10	15	25	30	50	60	75	100	125
Derated Voltage: (V_o)	125°C	4	5	6	10	15	20	30	40	50	65	85
Surge Voltage: (V_s)	85°C	6.9	9.2	11.5	17.3	28.8	34.5	57.5	69	86.3	115	144

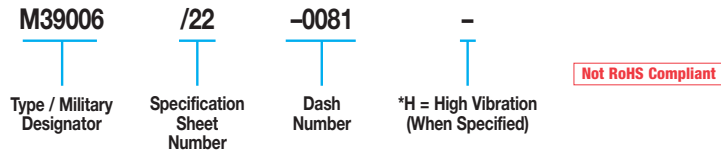


MIL-PRF-39006 Series



Military Conventional Wet Tantalum

HOW TO ORDER MILITARY M39006 PART NUMBER:



*High vibration qualified parts are currently under development. Please contact the factory for additional details and availability.

RIPPLE CURRENT MULTIPLIERS vs. Frequency, temperature and applied voltage^{1/2/3/}

Frequency of Applied Ripple Current		120Hz				800Hz				1kHz			
		≤55	85	105	125	≤55	85	105	125	≤55	85	105	125
Ambient Still Air Temperature (°C)													
% of	100%	0.60	0.39	–	–	0.71	0.43	–	–	0.72	0.45	–	–
85°C	90%	0.60	0.46	–	–	0.71	0.55	–	–	0.72	0.55	–	–
Rated	80%	0.60	0.52	0.35	–	0.71	0.62	0.42	–	0.72	0.62	0.42	–
Peak	70%	0.60	0.58	0.44	–	0.71	0.69	0.52	–	0.72	0.70	0.52	–
Voltage	66-2/3%	0.60	0.60	0.46	0.27	0.71	0.71	0.55	0.32	0.72	0.72	0.55	0.32

Frequency of Applied Ripple Current		10kHz				40kHz				100kHz			
		≤55	85	105	125	≤55	85	105	125	≤55	85	105	125
Ambient Still Air Temperature (°C)													
% of	100%	0.88	0.55	–	–	1.00	0.63	–	–	1.10	0.69	–	–
85°C	90%	0.88	0.67	–	–	1.00	0.77	–	–	1.10	0.85	–	–
Rated	80%	0.88	0.76	0.52	–	1.00	0.87	0.59	–	1.10	0.96	0.65	–
Peak	70%	0.88	0.85	0.64	–	1.00	0.97	0.73	–	1.10	1.07	0.80	–
Voltage	66-2/3%	0.88	0.88	0.68	0.40	1.00	1.00	0.77	0.45	1.10	1.10	0.85	0.50

1/ At 125°C the rated voltage of the capacitors decreases to 66 2/3 of the 85°C rated voltage.

2/ The peak of the applied ac ripple voltage plus the applied dc voltage must not exceed the dc voltage rating of the capacitors.

3/ The ripple current listed in the parametric tables represents a rating calculated by using a maximum internal temperature rise (ΔT) at 50°C at 40 kHz at 85°C ambient temperature, with a maximum peak rated voltage of 66.67 percent of the 85°C peak voltage rating.

MIL-PRF-39006 Series



Military Conventional Wet Tantalum

M39006 /22 RATINGS AND DASH NUMBER REFERENCE

M39006/22 "M" Level Reliability Dash Numbers	Tolerance ± (%)	Cap (µF) 25°C at 120Hz	DC Rated Voltage (V) at 85°C	DC Leakage (µA)		DF max (%)	ESR max (Ohms) at 120Hz	Impedance max (Ohms) -55°C at 120Hz	Maximum Capacitance Change (%)			AC Ripple (mA rms) 85°C at 40kHz	Case Size Standard
				+25°C	+85°C & 125°C				-55°C	+85°C	+125°C		
				-0001	20				30	6	1		
-0002	10												
-0003	5												
-0004	20	68	6	1	2	15	3.16	60	-40	14	16	960	T1
-0005	10												
-0006	5												
-0007	20	140	6	1	3	21	1.99	40	-40	14	16	1200	T2
-0008	10												
-0009	5												
-0010	20	270	6	1	6.5	45	2.21	25	-44	17.5	20	1375	T2
-0011	10												
-0012	5												
-0013	20	330	6	2	7.9	36	1.45	20	-44	14	16	1800	T3
-0014	10												
-0015	5												
-0016	20	560	6	2	13	55	1.3	25	-64	17.5	20	1900	T3
-0017	10												
-0018	5												
-0019	20	1200	6	3	14	90	1	20	-80	25	25	2265	T4
-0020	10												
-0021	20												
-0022	10	25	8	1	2	7.5	3.98	100	-40	10.5	12	820	T1
-0023	5												
-0024	20												
-0025	10	56	8	1	2	14	3.32	59	-40	14	16	900	T1
-0026	5												
-0027	20												
-0028	10	120	8	1	2	20	2.21	50	-44	17.5	20	1220	T2
-0029	5												
-0030	20												
-0031	10	220	8	1	7	37	2.23	30	-44	17.5	20	1370	T2
-0032	5												
-0033	20												
-0034	10	290	8	2	6	34	1.56	25	-64	17.5	20	1770	T3
-0035	5												
-0036	20												
-0037	10	430	8	2	14	46	1.42	25	-64	17.5	20	1825	T3
-0038	5												
-0039	20												
-0040	10	850	8	4	16	60	0.94	22	-80	25	25	2330	T4
-0041	20												
-0042	10												
-0043	5	20	10	1	2	6	3.98	175	-32	10.5	12	820	T1
-0044	20												
-0045	10												
-0046	5	47	10	1	2	13	3.67	100	-36	14	16	855	T1
-0047	20												
-0048	10												
-0049	5	100	10	1	4	15	1.99	60	-36	14	16	1200	T2
-0050	20												
-0051	10												
-0052	5	180	10	1	7	30	2.21	40	-36	14	16	1.365	T2
-0053	20												
-0054	10												
-0055	5	250	10	2	10	30	1.59	30	-40	14	16	1720	T3
-0056	20												
-0057	10												
-0058	5	390	10	2	16	44	1.5	25	-64	17.5	20	1800	T3
-0059	20												
-0060	10												
-0061	20	750	10	4	16	50	0.88	23	-80	25	25	2360	T4
-0062	10												
-0063	5												
-0064	20	15	15	1	2	5	4.42	155	-24	10.5	12	780	T1
-0065	10												
-0066	5												
-0066	5	33	15	1	2	10	4.02	90	-28	14	16	820	T1

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes.



MIL-PRF-39006 Series



Military Conventional Wet Tantalum

M39006/22 "M" Level Reliability Dash Numbers	Tolerance ± (%)	Cap (µF) 25°C at 120Hz	DC Rated Voltage (V) at 85C	DC Leakage (µA)		DF max (%)	ESR max (Ohms) at 120Hz	Impedance max (Ohms) -55°C at 120Hz	Maximum Capacitance Change (%)			AC Ripple (mA rms) 85°C at 40kHz	Case Size Standard
				+25°C	+85°C & 125°C				-55°C	+85°C	+125°C		
				-0067	20				70	15	1		
-0068	10												
-0069	5	120	15	1	7	18	1.99	50	-28	17.5	20	1450	T2
-0070	20												
-0071	10												
-0072	5	170	15	2	10	25	1.95	35	-32	14	16	1480	T3
-0073	20												
-0074	10												
-0075	5	270	15	2	16	32	1.57	30	-56	17.5	20	1740	T3
-0076	20												
-0077	10												
-0078	5	540	15	6	24	40	0.98	23	-80	25	25	2330	T4
-0079	20												
-0080	10												
-0081	20	10	25	1	2	4	5.31	220	-16	8	9	715	T1
-0082	10												
-0083	5												
-0084	20	22	25	1	2	6.6	3.98	140	-20	10.5	12	825	T1
-0085	10												
-0086	5												
-0087	20	50	25	1	2	11	2.92	70	-28	13	15	1130	T2
-0088	10												
-0089	5												
-0090	20	100	25	1	10	15	1.99	50	-28	13	15	1435	T2
-0091	10												
-0092	5												
-0093	20	120	25	2	6	21	2.32	38	-32	13	15	1450	T3
-0094	10												
-0095	5												
-0096	20	180	25	2	18	26	1.92	32	-48	13	15	1525	T3
-0097	10												
-0098	5												
-0099	20	350	25	7	28	35	1.33	24	-70	25	25	1970	T4
-0100	10												
-0101	20												
-0102	10	8	30	1	2	4	6.64	275	-16	8	12	640	T1
-0103	5												
-0104	20												
-0105	10	15	30	1	2	5	4.42	175	-20	10.5	12	780	T1
-0106	5												
-0107	20												
-0108	10	40	30	1	5	10	3.32	65	-24	10.5	12	1120	T2
-0109	5												
-0110	20												
-0111	10	68	30	1	8	13	2.54	60	-24	13	15	1285	T2
-0112	5												
-0113	20												
-0114	10	100	30	2	12	17	2.26	40	-28	10.5	12	1450	T3
-0115	5												
-0116	20												
-0117	10	150	30	2	18	23	2.03	35	-48	13	15	1525	T3
-0118	5												
-0119	20												
-0120	10	300	30	8	32	31	1.37	25	-60	25	25	1950	T4
-0121	20												
-0122	10												
-0123	5	5	50	1	2	3	7.96	400	-16	5	6	580	T1
-0124	20												
-0125	10												
-0126	5	10	50	1	2	4	5.31	250	-24	8	9	715	T1
-0127	20												
-0128	10												
-0129	5	25	50	1	5	8	4.25	95	-20	10.5	12	1005	T2
-0130	20												
-0131	10												
-0132	5	47	50	1	9	11	3.11	70	-28	13	15	1155	T2
-0133	20												
-0134	10												
-0135	5	60	50	2	12	12	2.65	45	-16	10.5	12	1335	T3

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes.



MIL-PRF-39006 Series



Military Conventional Wet Tantalum

M39006/22 "M" Level Reliability Dash Numbers	Tolerance ± (%)	Cap (µF) 25°C at 120Hz	DC Rated Voltage (V) at 85C	DC Leakage (µA)		DF max (%)	ESR max (Ohms) at 120Hz	Impedance max (Ohms) -55°C at 120Hz	Maximum Capacitance Change (%)			AC Ripple (mA rms) 85°C at 40kHz	Case Size Standard
				+25°C	+85°C & 125°C				-55°C	+85°C	+125°C		
				-0136	20				82	50	2		
-0137	10												
-0138	5												
-0139	20	160	50	8	32	17	1.41	27	-50	25	25	1900	T4
-0140	10												
-0141	20												
-0142	10	4	60	1	2	2.8	9.29	550	-16	5	6	525	T1
-0143	5												
-0144	20												
-0145	10	8.2	60	1	2	4	6.47	275	-24	8	9	625	T1
-0146	5												
-0147	20												
-0148	10	20	60	1	5	7	4.64	105	-16	10.5	12	930	T2
-0149	5												
-0150	20												
-0151	10	39	60	1	9	10	3.4	90	-28	10.5	12	1110	T2
-0152	5												
-0153	20												
-0154	10	50	60	2	12	10	2.65	50	-16	10.5	12	1330	T3
-0155	5												
-0156	20												
-0157	10	68	60	2	16	13	2.54	50	-32	10.5	12	1365	T3
-0158	5												
-0159	20												
-0160	10	140	60	8	32	16	1.52	28	-40	20	20	1850	T4
-0161	20												
-0162	10												
-0163	5	3.5	75	1	2	2.5	9.48	650	-16	5	6	525	T
-0164	20												
-0165	10												
-0166	5	6.8	75	1	2	3.5	6.83	300	-20	8	9	610	T1
-0167	20												
-0168	10												
-0169	5	15	75	1	5	6	5.31	150	-16	8	9	890	T2
-0170	20												
-0171	10												
-0172	5	33	75	1	10	10	4.02	90	-24	10.5	15	1000	T2
-0173	20												
-0174	10												
-0175	5	40	75	2	12	9	2.99	60	-16	10.5	12	1250	T3
-0176	20												
-0177	10												
-0178	5	56	75	2	17	11	2.61	60	-28	10.5	15	1335	T3
-0179	20												
-0180	10												
-0181	20	110	75	9	36	12	1.45	29	-35	20	20	1850	T4
-0182	10												
-0183	5												
-0184	20	2.5	100	1	2	2	10.62	950	-16	7	8	505	T1
-0185	10												
-0186	5												
-0187	20	4.7	100	1	2	3	8.47	500	-16	7	8	565	T1
-0188	10												
-0189	5												
-0190	20	11	100	1	4	5	6.03	200	-16	8	8	835	T2
-0191	10												
-0192	5												
-0193	20	22	100	1	9	7.5	4.52	100	-16	8	8	965	T2
-0194	10												
-0195	5												
-0196	20	30	100	2	12	7	3.1	80	-16	8	8	1240	T3
-0197	10												
-0198	5												
-0199	20	43	100	2	17	8.5	2.62	70	-20	8	8	1335	T3
-0200	10												

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes.



MIL-PRF-39006 Series



Military Conventional Wet Tantalum

M39006 /25 RATINGS AND DASH NUMBER REFERENCE

M39006/25 "M" Level Reliability Dash Numbers	Tolerance ± (%)	Cap (µF) 25°C at 120Hz	DC Rated Voltage (V) at 85°C	DC Leakage (µA)		DF max (%)	ESR max (Ohms) at 120Hz	Impedance max (Ohms) -55°C at 120Hz	Maximum Capacitance Change (%)			AC Ripple (mA rms) 85°C at 40kHz	Case Size Standard
				+25°C	+85°C & 125°C				-55°C	+85°C	+125°C		
-0033	20	68	25	2	9	22	4.29	90	-40	12	15	850	T1
-0034	10												
-0035	20	270	25	3	16	55	2.7	33	-62	13	16	1400	T2
-0036	10												
-0037	20	560	25	7	28	76	1.8	24	-72	20	25	1750	T3
-0038	10												
-0039	20	680	25	8	32	63	1.23	19	-72	25	30	2100	T4
-0040	10												
-0041	20	56	30	2	9	22	5.21	100	-38	12	15	800	T1
-0042	10												
-0043	20	220	30	3	16	42	2.53	36	-60	13	16	1200	T2
-0044	10												
-0045	20	470	30	8	32	64	1.81	25	-65	20	25	1500	T3
-0046	10												
-0047	20	560	30	9	36	55	1.3	20	-65	25	30	2000	T4
-0048	10												
-0049	20	33	50	2	9	12.3	4.95	135	-29	10	12	700	T1
-0050	10												
-0051	20	120	50	4	24	22.5	2.49	49	-42	12	15	1200	T2
-0052	10												
-0053	20	270	50	8	32	37	1.82	29	-46	20	25	1450	T3
-0054	10												
-0055	20	330	50	9	36	38	1.53	22	-46	25	30	1900	T4
-0056	10												
-0057	20	27	60	3	12	10.2	5.01	144	-24	10	12	700	T1
-0058	10												
-0059	20	100	60	4	20	19	2.52	54	-36	12	15	1100	T2
-0060	10												
-0061	20	220	60	8	32	30	1.81	29	-40	16	20	1400	T3
-0062	10												
-0063	20	270	60	9	36	27	1.33	23	-45	20	25	1850	T4
-0064	10												
-0065	20	22	75	3	12	8.5	5.13	157	-19	10	12	600	T1
-0066	10												
-0067	20	82	75	4	24	15.2	2.46	63	-30	12	15	1000	T2
-0068	10												
-0069	20	180	75	9	36	24.4	2.23	30	-35	16	20	1300	T3
-0070	10												
-0071	20	220	75	10	40	37	1.8	24	-40	20	25	1800	T4
-0072	10												
-0073	20	10	100	3	12	4.5	5.97	200	-17	10	12	800	T1
-0074	10												
-0075	20	39	100	5	24	10.4	3.54	80	-20	12	15	1300	T2
-0076	10												
-0077	20	68	100	10	40	11.3	2.21	40	-30	14	16	1600	T3
-0078	10												
-0079	20	120	100	12	48	25	2.76	30	-35	15	17	2000	T4
-0080	10												

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes.



MIL-PRF-39006 Series



Military Conventional Wet Tantalum

M39006 /30 RATINGS AND DASH NUMBER REFERENCE

M39006/30 "M" Level Reliability Dash Numbers	Tolerance ± (%)	Cap (µF) 25°C at 120Hz	DC Rated Voltage (V) at 85°C	DC Leakage (µA)		DF max (%)	ESR max (Ohms) at 120Hz	Impedance max (Ohms) -55°C at 120Hz	Maximum Capacitance Change (%)			AC Ripple (mA rms) 85°C at 40kHz	Case Size Standard
				+25°C	+85°C & 125°C				-55°C	+85°C	+125°C		
				-0001	20				30	6	1		
-0002	10												
-0003	5												
-0004	20	68	6	1	2	7.5	1.58	60	-40	14	16	960	T1
-0005	10												
-0006	5												
-0007	20	140	6	1	3	10.5	0.99	40	-40	14	16	1200	T2
-0008	10												
-0009	5												
-0010	20	270	6	1	6.5	22.5	1.11	25	-44	17.5	20	1375	T2
-0011	10												
-0012	5												
-0013	20	330	6	2	7.9	18	0.73	20	-44	14	16	1800	T3
-0014	10												
-0015	5												
-0016	20	560	6	2	13	27.5	0.65	25	-64	17.5	20	1900	T3
-0017	10												
-0018	5												
-0019	20	1200	6	3	14	45	0.5	20	-80	25	25	2265	T4
-0020	10												
-0021	20												
-0022	10	25	8	1	2	3.75	1.99	100	-40	10.5	12	820	T1
-0023	5												
-0024	20												
-0025	10	56	8	1	2	7	1.66	59	-40	14	16	900	T1
-0026	5												
-0027	20												
-0028	10	120	8	1	2	10	1.11	50	-44	17.5	20	1220	T2
-0029	5												
-0030	20												
-0031	10	220	8	1	7	18.5	1.12	30	-44	17.5	20	1370	T2
-0032	5												
-0033	20												
-0034	10	290	8	2	6	17	0.78	25	-64	17.5	20	1770	T3
-0035	5												
-0036	20												
-0037	10	430	8	2	14	23	0.71	25	-64	17.5	20	1825	T3
-0038	5												
-0039	20												
-0040	10	850	8	4	16	30	0.47	22	-80	25	25	2330	T4
-0041	20												
-0042	10												
-0043	5	20	10	1	2	3	1.99	175	-32	10.5	12	820	T1
-0044	20												
-0045	10												
-0046	5	47	10	1	2	6.5	1.84	100	-36	14	16	855	T1
-0047	20												
-0048	10												
-0049	5	100	10	1	4	7.5	0.99	60	-36	14	16	1200	T2
-0050	20												
-0051	10												
-0052	5	180	10	1	7	15	1.11	40	-36	14	16	1.365	T2
-0053	20												
-0054	10												
-0055	5	250	10	2	10	15	0.8	30	-40	14	16	1720	T3
-0056	20												
-0057	10												
-0058	5	390	10	2	16	22	0.75	25	-64	17.5	20	1800	T3
-0059	20												
-0060	10												
-0061	20	15	15	1	2	2.5	2.21	155	-24	10.5	12	780	T1
-0062	10												
-0063	5												
-0064	20	33	15	1	2	5	2.01	90	-28	14	16	820	T1
-0065	10												
-0066	5												

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes.



MIL-PRF-39006 Series



Military Conventional Wet Tantalum

M39006/30 "M" Level Reliability Dash Numbers	Tolerance ± (%)	Cap (μ F) 25°C at 120Hz	DC Rated Voltage (V) at 85°C	DC Leakage (μ A)		DF max (%)	ESR max (Ohms) at 120Hz	Impedance max (Ohms) -55°C at 120Hz	Maximum Capacitance Change (%)			AC Ripple (mA rms) 85°C at 40kHz	Case Size Standard
				+25°C	+85°C & 125°C				-55°C	+85°C	+125°C		
				-0067	20				70	15	1		
-0068	10												
-0069	5												
-0070	20	120	15	1	7	9	0.99	50	-28	17.5	20	1450	T2
-0071	10												
-0072	5												
-0073	20	170	15	2	10	12.5	0.98	35	-32	14	16	1480	T3
-0074	10												
-0075	5												
-0076	20	270	15	2	16	16	0.79	30	-56	17.5	20	1740	T3
-0077	10												
-0078	5												
-0079	20	540	15	6	24	20	0.49	23	-80	25	25	2330	T4
-0080	10												
-0081	20												
-0082	10	10	25	1	2	2	2.66	220	-16	8	9	715	T1
-0083	5												
-0084	20												
-0085	10	22	25	1	2	3.3	1.99	140	-20	10.5	12	825	T1
-0086	5												
-0087	20												
-0088	10	50	25	1	2	5.5	1.46	70	-28	13	15	1130	T2
-0089	5												
-0090	20												
-0091	10	100	25	1	10	7.5	0.99	50	-28	13	15	1435	T2
-0092	5												
-0093	20												
-0094	10	120	25	2	6	10.5	1.16	38	-32	13	15	1450	T3
-0095	5												
-0096	20												
-0097	10	180	25	2	18	13	0.96	32	-48	13	15	1525	T3
-0098	5												
-0099	20												
-0100	10	350	25	7	28	17.5	0.67	24	-70	25	25	1970	T4
-0101	20												
-0102	10												
-0103	5	8	30	1	2	2	3.32	275	-16	8	12	640	T1
-0104	20												
-0105	10												
-0106	5	15	30	1	2	2.5	2.21	175	-20	10.5	12	780	T1
-0107	20												
-0108	10												
-0109	5	40	30	1	5	5	1.66	65	-24	10.5	12	1120	T2
-0110	20												
-0111	10												
-0112	5	68	30	1	8	6.5	1.27	60	-24	13	15	1285	T2
-0113	20												
-0114	10												
-0115	5	100	30	2	12	8.5	1.13	40	-28	10.5	12	1450	T3
-0116	20												
-0117	10												
-0118	5	150	30	2	18	11.5	1.02	35	-48	13	15	1525	T3
-0119	20												
-0120	10												
-0121	20	5	50	1	2	1.5	3.98	400	-16	5	6	580	T1
-0122	10												
-0123	5												
-0124	20	10	50	1	2	2	2.66	250	-24	8	9	715	T1
-0125	10												
-0126	5												
-0127	20	25	50	1	5	4	2.13	95	-20	10.5	12	1005	T2
-0128	10												
-0129	5												
-0130	20	47	50	1	9	5.5	1.56	70	-28	13	15	1155	T2
-0131	10												
-0132	5												
-0133	20	60	50	2	12	6	1.33	45	-16	10.5	12	1335	T3
-0134	10												
-0135	5												

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes.



MIL-PRF-39006 Series



Military Conventional Wet Tantalum

M39006/30 "M" Level Reliability Dash Numbers	Tolerance ± (%)	Cap (µF) 25°C at 120Hz	DC Rated Voltage (V) at 85°C	DC Leakage (µA)		DF max (%)	ESR max (Ohms) at 120Hz	Impedance max (Ohms) -55°C at 120Hz	Maximum Capacitance Change (%)			AC Ripple (mA rms) 85°C at 40kHz	Case Size Standard
				+25°C	+85°C & 125°C				-55°C	+85°C	+125°C		
				-0136	20				82	50	2		
-0137	10												
-0138	5												
-0139	20	160	50	8	32	8.5	0.71	27	-50	25	25	1900	T4
-0140	10												
-0141	20												
-0142	10	4	60	1	2	1.4	4.65	550	-16	5	6	525	T1
-0143	5												
-0144	20												
-0145	10	8.2	60	1	2	2	3.24	275	-24	8	9	625	T1
-0146	5												
-0147	20												
-0148	10	20	60	1	5	3.5	2.32	105	-16	10.5	12	930	T2
-0149	5												
-0150	20												
-0151	10	39	60	1	9	5	1.7	90	-28	10.5	12	1110	T2
-0152	5												
-0153	20												
-0154	10	50	60	2	12	5	1.33	50	-16	10.5	12	1330	T3
-0155	5												
-0156	20												
-0157	10	68	60	2	16	6.5	1.27	50	-32	10.5	12	1365	T3
-0158	5												
-0159	20												
-0160	10	140	60	8	32	8	0.76	28	-40	20	20	1850	T4
-0161	20												
-0162	10												
-0163	5	3.5	75	1	2	1.25	4.74	650	-16	5	6	525	T1
-0164	20												
-0165	10												
-0166	5	6.8	75	1	2	1.75	3.42	300	-20	8	9	610	T1
-0167	20												
-0168	10												
-0169	5	15	75	1	5	3	2.66	150	-16	8	9	890	T2
-0170	20												
-0171	10												
-0172	5	33	75	1	10	5	2.01	90	-24	10.5	15	1000	T2
-0173	20												
-0174	10												
-0175	5	40	75	2	12	4.5	1.5	60	-16	10.5	12	1250	T3
-0176	20												
-0177	10												
-0178	5	56	75	2	17	5.5	1.31	60	-28	10.5	15	1335	T3
-0179	20												
-0180	10												
-0181	20	110	75	9	36	6	0.73	29	-35	20	20	1850	T4
-0182	10												
-0183	5												
-0184	20	2.5	100	1	2	1	5.31	950	-16	7	8	505	T1
-0185	10												
-0186	5												
-0187	20	4.7	100	1	2	1.5	4.24	500	-16	7	8	565	T1
-0188	10												
-0189	5												
-0190	20	11	100	1	4	2.5	3.02	200	-16	8	8	835	T2
-0191	10												
-0192	5												
-0193	20	22	100	1	9	3.75	2.26	100	-16	8	8	965	T2
-0194	10												
-0195	5												
-0196	20	30	100	2	12	3.5	1.55	80	-16	8	8	1240	T3
-0197	10												
-0198	5												
-0199	20	43	100	2	17	4.25	1.31	70	-20	8	8	1335	T3
-0200	10												
-0200	10												

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes.



MIL-PRF-39006 Series



Military Conventional Wet Tantalum

M39006 /31 RATINGS AND DASH NUMBER REFERENCE

M39006/31 "M" Level Reliability Dash Numbers	Tolerance ± (%)	Cap (µF) 25°C at 120Hz	DC Rated Voltage (V) at 85°C	DC Leakage (µA)		DF max (%)	ESR max (Ohms) at 120Hz	Impedance max (Ohms) -55°C at 120Hz	Maximum Capacitance Change (%)			AC Ripple (mA rms) 85°C at 40kHz	Case Size Standard
				+25°C	+85°C & 125°C				-55°C	+85°C	+125°C		
-0033	20	68	25	2	9	11	2.15	90	-40	12	15	850	T1
-0034	10												
-0035	20	270	25	3	16	27.5	1.35	33	-62	13	16	1400	T2
-0036	10												
-0037	20	560	25	7	28	38	0.9	24	-72	20	25	1750	T3
-0038	10												
-0039	20	680	25	8	32	31.5	0.62	19	-72	25	30	2100	T4
-0040	10												
-0041	20	56	30	2	9	11	2.61	100	-38	12	15	800	T1
-0042	10												
-0043	20	220	30	3	16	21	1.27	36	-60	13	16	1200	T2
-0044	10												
-0045	20	470	30	8	32	32	0.91	25	-65	20	25	1500	T3
-0046	10												
-0047	20	560	30	9	36	27.5	0.65	20	-65	25	30	2000	T4
-0048	10												
-0049	20	33	50	2	9	6.15	2.48	135	-29	10	12	700	T1
-0050	10												
-0051	20	120	50	4	24	11.3	1.25	49	-42	12	15	1200	T2
-0052	10												
-0053	20	270	50	8	32	18.5	0.91	29	-46	20	25	1450	T3
-0054	10												
-0055	20	330	50	9	36	19	0.77	22	-46	25	30	1900	T4
-0056	10												
-0057	20	27	60	3	12	5.1	2.51	144	-24	10	12	700	T1
-0058	10												
-0059	20	100	60	4	20	9.5	1.26	54	-36	12	15	1100	T2
-0060	10												
-0061	20	220	60	8	32	15	0.91	29	-40	16	20	1400	T3
-0062	10												
-0063	20	270	60	9	36	13.5	0.67	23	-45	20	25	1850	T4
-0064	10												
-0065	20	22	75	3	12	4.25	2.57	157	-19	10	12	600	T1
-0066	10												
-0067	20	82	75	4	24	7.6	1.23	63	-30	12	15	1000	T2
-0068	10												
-0069	20	180	75	9	36	12.2	0.9	30	-35	16	20	1300	T3
-0070	10												
-0071	20	220	75	10	40	18.5	1.12	24	-40	20	25	1800	T4
-0072	10												
-0073	20	10	100	3	12	2.25	2.99	200	-17	10	12	800	T1
-0074	10												
-0075	20	39	100	5	24	5.2	1.77	80	-20	12	15	1300	T2
-0076	10												
-0077	20	68	100	10	40	5.65	1.11	40	-30	14	16	1600	T3
-0078	10												
-0079	20	120	100	12	48	12.5	1.38	30	-35	15	17	2000	T4
-0080	10												

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes.

