

# CLR17 (MIL-C-39006/20) Wet Tantalum Capacitors

**MALLORY**



- High Temperature
- High Voltage
- High Capacitance
- Withstands High Frequency Vibration to 2000 Hz
- Hermetically Sealed
- Long Shelf Life
- Failure Rate Levels L, M and P

## GENERAL SPECIFICATIONS

Operating Temperature:  
-55°C to +125°C  
with voltage derating

Voltage Range:  
30 to 630 VDC @ 85°C

Reverse Voltage:  
None

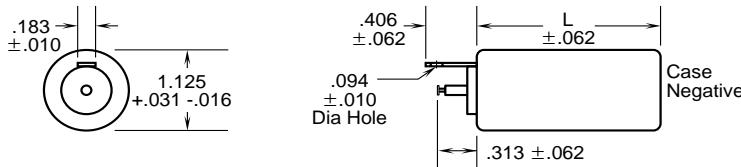
Capacitance Range:  
12 µF to 1300 µF

Tolerance Ranges:  
±20%  
-15 +50%

$$\text{ESR} = \frac{10,000 \times \text{DF}}{6.28 \times f \times \mu\text{F}}$$

DF = Dissipation Factor %  
f = Frequency in Hz

Case Sizes:  
Diam      Lgth  
1.125    .600 to 2.812



Cap (µF)	Cap Tol	Maximum Working Voltage		Surge Voltage @ +85°C	Part Number MIL-C-39006/20			Max DF (%)	Max Z -55°C (Ohms)	Maximum DC Leakage (µA)			Maximum % Capacitance Change from Room Temperature	Dimension L ±.062
		+85°C	+125°C		L (2.0)	M (1.0)	P (0.1)			+25°C	+85°C	+125°C		
370	±20	30	26	34.5	1000	1050	1100	39	15	18	125	180	-65	.600
370	-15+50	30	26	34.5	1001	1051	1101	39	15	18	125	180	-65	.600
650	±20	30	26	34.5	1002	1052	1102	60	15	21	145	210	-85	1.100
650	-15+50	30	26	34.5	1003	1053	1103	60	15	21	145	210	-85	1.100
1300	±20	30	26	34.5	1004	1054	1104	83	10	27	190	270	-85	1.100
1300	-15+50	30	26	34.5	1005	1055	1105	83	10	27	190	270	-85	1.100
200	±20	60	52	69	1006	1056	1106	22	30	19	135	190	-50	.600
200	-15+50	60	52	69	1007	1057	1107	22	30	19	135	190	-50	.600
350	±20	60	52	69	1008	1058	1108	37	25	22	155	220	-70	1.100
350	-15+50	60	52	69	1009	1059	1109	37	25	22	155	220	-70	1.100
700	±20	60	52	69	1010	1060	1110	62	15	29	200	290	-70	1.100
700	-15+50	60	52	69	1011	1061	1111	62	15	29	200	290	-70	1.100
120	±20	90	78	103	1012	1062	1112	13	40	19	135	190	-40	.600
120	-15+50	90	78	103	1013	1063	1113	13	40	19	135	190	-40	.600
220	±20	90	78	103	1014	1064	1114	24	30	21	145	210	-60	1.100
220	-15+50	90	78	103	1015	1065	1115	24	30	21	145	210	-60	1.100
450	±20	90	78	103	1016	1066	1116	45	25	29	195	290	-60	1.100
450	-15+50	90	78	103	1017	1067	1117	45	25	29	195	290	-60	1.100
42	±20	180	155	207	1018	1068	1118	16	75	17	120	170	-40	.976
42	-15+50	180	155	207	1019	1069	1119	16	75	17	120	170	-40	.976
60	±20	180	155	207	1020	1070	1120	13	60	19	135	190	-40	.976
60	-15+50	180	155	207	1021	1071	1121	13	60	19	135	190	-40	.976
110	±20	180	155	207	1022	1072	1122	24	60	21	145	210	-60	1.938
110	-15+50	180	155	207	1023	1073	1123	24	60	21	145	210	-60	1.938
230	±20	180	155	207	1024	1074	1124	46	50	29	200	290	-60	1.938
230	-15+50	180	155	207	1025	1075	1125	46	50	29	200	290	-60	1.938
28	±20	270	235	310	1026	1076	1126	16	80	19	120	190	-40	1.350
28	-15+50	270	235	310	1027	1077	1127	16	80	19	120	190	-40	1.350
40	±20	270	235	310	1028	1078	1128	22	100	19	135	190	-40	1.350
40	-15+50	270	235	310	1029	1079	1129	22	100	19	135	190	-40	1.350
75	±20	270	235	310	1030	1080	1130	24	90	21	145	210	-60	2.812
75	-15+50	270	235	310	1031	1081	1131	24	90	21	145	210	-60	2.812
150	±20	270	235	310	1032	1082	1132	45	75	28	195	280	-60	2.812
150	-15+50	270	235	310	1033	1083	1133	45	75	28	195	280	-60	2.812
22	±20	360	310	414	1034	1084	1134	16	100	18	125	180	-40	1.705
22	-15+50	360	310	414	1035	1085	1135	16	100	18	125	180	-40	1.705

**TO ORDER:** Indicate the prefix M39006/20 followed by the applicable MIL dash number  
Example: For M39006/20-1076 order M39006/201076

# CLR17 (MIL-C-39006/20) Wet Tantalum Capacitors

**MALLORY**

Cap ( $\mu\text{F}$ )	Cap Tol	Maximum Working Voltage		Surge Voltage @ +85°C	Part Number MIL-C-39006/20 Failure Rate Level (% / 1000 Hrs)			Max DF (%)	Max Z -55°C (Ohms)	Maximum DC Leakage ( $\mu\text{A}$ )			Maximum % Capacitance Change from Room Temperature -55°C	Dimension L ±.062
		+85°C	+125°C		L (2.0)	M (1.0)	P (0.1)			+25°C	+85°C	+125°C		
30	±20	360	310	414	1036	1086	1136	22	120	19	135	190	-40	1.705
30	-15+50	360	310	414	1037	1087	1137	22	120	19	135	190	-40	1.705
17	±20	450	390	518	1038	1088	1138	16	130	18	125	180	-40	2.080
17	-15+50	450	390	518	1039	1089	1139	16	130	18	125	180	-40	2.080
25	±20	450	390	518	1040	1090	1140	23	150	19	135	190	-40	2.080
25	-15+50	450	390	518	1041	1091	1141	23	150	19	135	190	-40	2.080
14	±20	540	470	621	1042	1092	1142	16	160	17	120	170	-40	2.435
14	-15+50	540	470	621	1043	1093	1143	16	160	17	120	170	-40	2.435
20	±20	540	470	621	1044	1094	1144	22	170	19	135	190	-40	2.435
20	-15+50	540	470	621	1045	1095	1145	22	170	19	135	190	-40	2.435
12	±20	630	545	724	1046	1096	1146	16	180	17	120	170	-40	2.810
12	-15+50	630	545	724	1047	1097	1147	16	180	17	120	170	-40	2.810
18	±20	630	545	724	1048	1098	1148	23	200	19	135	190	-40	2.810
18	-15+50	630	545	724	1049	1099	1149	23	200	19	135	190	-40	2.810

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Example: For M39006/20-1076 order M39006/201076