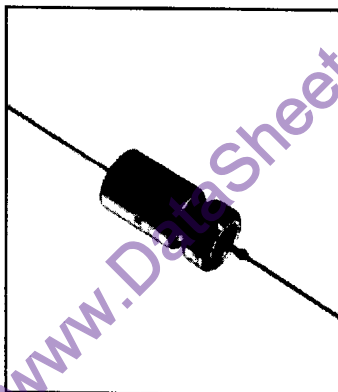


CLR65 (MIL-C-39006/09) Wet Tantalum Capacitors

MALLORY



- Silver Case Technology
- Hermetically Sealed
- Rugged Construction
- High Shock and Vibration Capability
- High Capacitance per Case Size
- Low DCL and ESR
- Long Shelf Life
- Failure Rate Levels M, P and R

GENERAL SPECIFICATIONS

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

Voltage Range:
6 to 125 VDC

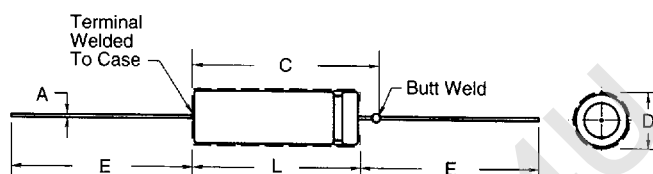
Capacitance Range:
1.7 μ F to 1200 μ F

Tolerance Range:
 $\pm 10\%$, $\pm 20\%$
($\pm 5\%$ by special order)

Case Sizes: (Four)
.188 x .453 to .375 x 1.062

Maximum rms Ripple Current @ 85°C

Case Code	mA
A	50
B	250
C	500
F	750



INCHES

(DIMENSIONS)

MILLIMETERS

Case Code	Uninsulated D $\pm .016$	Insulated L +.031, -.016	Insulated D Max	Insulated L Max	C Max	A Lead Dia Nom	A Lead Dia AWG	E Lead Lgth $\pm .250$	Approximate Weight (Grams) (1 gram = .035 Oz.)	Case Code	Uninsulated D $\pm .41$	Insulated L +.79, -.41	Insulated D Max	Insulated L Max	C Max	A Lead Dia Nom	A Lead Dia AWG	E Lead Lgth ± 6.35
T1	.188	.453	.219	.608	.734	.025	#22	1.500	1.2	T1	4.78	11.51	5.56	15.45	18.64	.64	#22	38.10
T2	.281	.641	.312	.796	.922	.025	#22	2.250	3.1	T2	7.14	16.28	7.92	20.22	23.41	.64	#22	57.15
T3	.375	.766	.406	.921	1.047	.025	#22	2.250	5.8	T3	9.53	19.46	10.31	23.40	26.59	.64	#22	57.15
T4	.375	1.062	.406	1.217	1.343	.025	#22	2.250	9.0	T4	9.53	26.97	10.31	30.91	34.11	.64	#22	57.15

Cap (μF)	Cap Tol (±)	Maximum Working Voltage		Surge Voltage @ +85°C	Part Number MIL-C-39006/09 Failure Rate Level (% / 1000 Hrs.)			Max DF	Max Z -55°C	Maximum DC Leakage (μA)		Maximum % Capacitance Change from Room Temperature			Case Code
		+85°C	+125°C		M (1.0)	P (0.1)	R (0.01)			+25°C	+85°C & +125°C	-55°C	+85°C	+125°C	
30	20	6	4	6.9	8206	8411	8616	9.1	100	1	2	-40	+10.5	+12	T1
30	10	6	4	6.9	8207	8412	8617	9.1	100	1	2	-40	+10.5	+12	T1
68	20	6	4	6.9	8209	8414	8619	20.4	60	1	2	-40	+14	+16	T1
68	10	6	4	6.9	8210	8415	8620	20.4	60	1	2	-40	+14	+16	T1
140	20	6	4	6.9	8212	8417	8622	21.3	40	1	3	-40	+14	+16	T2
140	10	6	4	6.9	8213	8418	8623	21.3	40	1	3	-40	+14	+16	T2
270	20	6	4	6.9	8215	8420	8625	81.8	25	1	6.5	-40	+17.5	+20	T2
270	10	6	4	6.9	8216	8421	8626	81.8	25	1	6.5	-44	+17.5	+20	T2
330	20	6	4	6.9	8218	8423	8628	49.6	20	2	7.9	-44	+14	+16	T3
330	10	6	4	6.9	8219	8424	8629	49.6	20	2	7.9	-44	+14	+16	T3
560	20	6	4	6.9	8221	8426	8631	128	25	2	13	-64	+17.5	+20	T3
560	10	6	4	6.9	8222	8427	8632	128	25	2	13	-64	+17.5	+20	T3
1200	20	6	4	6.9	8224	8429	8634	144.4	20	3	14	-80	+25	+25	T4
1200	10	6	4	6.9	8225	8430	8635	144.4	20	3	14	-80	+25	+25	T4
25	20	8	5	9.2	8226	8431	8636	7.6	100	1	2	-40	+10.5	+12	T1
25	10	8	5	9.2	8227	8432	8637	7.6	100	1	2	-40	+10.5	+12	T1
56	20	8	5	9.2	8229	8434	8639	17	59	1	2	-40	+14	+16	T1
56	10	8	5	9.2	8230	8435	8640	17	59	1	2	-40	+14	+16	T1
220	20	8	5	9.2	8232	8437	8642	66.4	30	1	7	-44	+17.5	+20	T2
220	10	8	5	9.2	8233	8438	8643	66.4	30	1	7	-44	+17.5	+20	T2
430	20	8	5	9.2	8235	8440	8645	91.5	25	2	14	-64	+17.5	+20	T3
430	10	8	5	9.2	8236	8441	8646	91.5	25	2	14	-64	+17.5	+20	T3
850	20	8	5	9.2	8238	8443	8648	65.8	22	4	16	-80	+25	+25	T4
850	10	8	5	9.2	8239	8444	8649	65.8	22	4	16	-80	+25	+25	T4

TO ORDER: Indicate the prefix M39006/09 followed by the applicable MIL dash number
Example: For M39006/09-8210 order M39006/098210

CLR65 (MIL-C-39006/09) Wet Tantalum Capacitors

MALLORY

Wet Tantalum Capacitors

Cap (μ F)	Cap Tol ($\pm$)	Maximum Working Voltage		Surge Voltage @ +85°C	Part Number MIL-C-39006/09 Failure Rate Level (% / 1000 Hrs.)			Max DF (%)	Max Z -55°C (Ohms)	Maximum DC Leakage (μ A)		Maximum % Capacitance Change from Room Temperature			Case Code
		+85°C	+125°C		M (1.0)	P (0.1)	R (0.01)			+25°C	+85°C & +125°C	-55°C	+85°C	+125°C	
20	20	10	7	11.5	8240	8445	8650	6.1	175	1	2	-32	+10.5	+12	T1
20	10	10	7	11.5	8241	8446	8651	6.1	175	1	2	-32	+10.5	+12	T1
47	20	10	7	11.5	8243	8448	8653	18.1	100	1	2	-36	+14	+16	T1
47	10	10	7	11.5	8244	8449	8654	18.1	100	1	2	-36	+14	+16	T1
100	20	10	7	11.5	8246	8451	8656	15.2	60	1	4	-36	+14	+16	T2
100	10	10	7	11.5	8247	8452	8657	15.2	60	1	4	-36	+14	+16	T2
180	20	10	7	11.5	8249	8454	8659	54.4	40	1	7	-36	+14	+16	T2
180	10	10	7	11.5	8250	8455	8660	54.4	40	1	7	-36	+14	+16	T2
250	20	10	7	11.5	8252	8457	8662	37.8	30	2	10	-40	+14	+16	T3
250	10	10	7	11.5	8253	8458	8663	37.8	30	2	10	-40	+14	+16	T3
390	20	10	7	11.5	8255	8460	8665	87.6	25	2	16	-64	+20	+20	T3
390	10	10	7	11.5	8256	8461	8666	87.6	25	2	16	-64	+20	+20	T3
750	20	10	7	11.5	8258	8463	8668	56.5	23	4	16	-80	+25	+25	T4
750	10	10	7	11.5	8259	8464	8669	56.5	23	4	16	-80	+25	+25	T4
15	20	15	10	17.2	8260	8465	8670	5.7	155	1	2	-24	+10.5	+12	T1
15	10	15	10	17.2	8261	8466	8671	5.7	155	1	2	-24	+10.5	+12	T1
33	20	15	10	17.2	8263	8468	8673	12.5	90	1	2	-28	+14	+16	T1
33	10	15	10	17.2	8264	8469	8674	12.5	90	1	2	-28	+14	+16	T1
70	20	15	10	17.2	8266	8471	8676	13.1	75	1	4	-28	+14	+16	T2
70	10	15	10	17.2	8267	8472	8677	13.1	75	1	4	-28	+14	+16	T2
120	20	15	10	17.2	8269	8474	8679	36.8	50	1	7	-28	+17.5	+20	T2
120	10	15	10	17.2	8270	8475	8680	36.8	50	1	7	-28	+17.5	+20	T2
170	20	15	10	17.2	8272	8477	8682	25.4	35	2	10	-32	+14	+16	T3
170	10	15	10	17.2	8273	8478	8683	25.4	35	2	10	-32	+14	+16	T3
270	20	15	10	17.2	8275	8480	8685	60.9	30	2	16	-56	+17.5	+20	T3
270	10	15	10	17.2	8276	8481	8686	60.9	30	2	16	-56	+17.5	+20	T3
540	20	15	10	17.2	8278	8483	8688	49	23	6	24	-80	+25	+25	T4
540	10	15	10	17.2	8279	8484	8689	49	23	6	24	-80	+25	+25	T4
10	20	25	15	28.8	8280	8485	8690	4.6	220	1	2	-16	+8	+9	T1
10	10	25	15	28.8	8281	8486	8691	4.6	220	1	2	-16	+8	+9	T1
22	20	25	15	28.8	8283	8488	8693	8.3	140	1	2	-20	+10.5	+15	T1
22	10	25	15	28.8	8284	8489	8694	8.3	140	1	2	-20	+10.5	+15	T1
100	20	25	15	28.8	8286	8491	8696	31.4	50	1	10	-28	+13	+15	T2
100	10	25	15	28.8	8287	8492	8697	31.4	50	1	10	-28	+13	+15	T2
180	20	25	15	28.8	8289	8494	8699	54.3	32	2	18	-48	+13	+15	T3
180	10	25	15	28.8	8290	8495	8700	54.3	32	2	18	-48	+13	+15	T3
350	20	25	15	28.8	8292	8497	8702	35	24	7	28	-70	+25	+25	T4
350	10	25	15	28.8	8293	8498	8703	35	24	7	28	-70	+25	+25	T4
8	20	30	20	34.5	8294	8499	8704	4.5	275	1	2	-16	+8	+12	T1
8	10	30	20	34.5	8295	8500	8705	4.5	275	1	2	-16	+8	+12	T1
15	20	30	20	34.5	8297	8502	8707	9.1	175	1	2	-20	+10.5	+12	T1
15	10	30	20	34.5	8298	8503	8708	9.1	175	1	2	-20	+10.5	+12	T1
40	20	30	20	34.5	8300	8505	8710	12.2	65	1	5	-24	+10.5	+12	T2
40	10	30	20	34.5	8301	8506	8711	12.2	65	1	5	-24	+10.5	+12	T2
68	20	30	20	34.5	8303	8508	8713	31	60	1	8	-24	+13	+15	T2
68	10	30	20	34.5	8304	8509	8714	31	60	1	8	-24	+13	+15	T2
100	20	30	20	34.5	8306	8511	8716	19	40	2	12	-28	+10.5	+12	T3
100	10	30	20	34.5	8307	8512	8717	19	40	2	12	-28	+10.5	+12	T3
150	20	30	20	34.5	8309	8514	8719	46	35	2	18	-48	+13	+15	T3
150	10	30	20	34.5	8310	8515	8720	46	35	2	18	-48	+13	+15	T3
300	20	30	20	34.5	8312	8517	8722	35	25	8	32	-60	+25	+25	T4
300	10	30	20	34.5	8313	8518	8723	35	25	8	32	-60	+25	+25	T4
5	20	50	30	57.5	8314	8519	8724	3.4	400	1	2	-16	+5	+6	T1
5	10	50	30	57.5	8315	8520	8725	3.4	400	1	2	-16	+5	+6	T1
10	20	50	30	57.5	8317	8522	8727	6	250	1	2	-24	+8	+9	T1
10	10	50	30	57.5	8318	8523	8728	6	250	1	2	-24	+8	+9	T1
25	20	50	30	57.5	8320	8525	8730	11.2	95	1	5	-20	+10.5	+12	T2
25	10	50	30	57.5	8321	8526	8731	11.2	95	1	5	-20	+10.5	+12	T2
47	20	50	30	57.5	8323	8528	8733	21.4	70	1	9	-28	+13	+15	T2
47	10	50	30	57.5	8324	8529	8734	21.4	70	1	9	-28	+13	+15	T2
60	20	50	30	57.5	8326	8531	8736	13.6	45	2	12	-16	+10.5	+12	T3
60	10	50	30	57.5	8327	8532	8737	13.6	45	2	12	-16	+10.5	+12	T3
82	20	50	30	57.5	8329	8534	8739	24.9	45	2	16	-32	+13	+15	T3
82	10	50	30	57.5	8330	8535	8740	24.9	45	2	16	-32	+13	+15	T3
160	20	50	30	57.5	8332	8537	8742	25.7	27	8	32	-50	+25	+25	T4
160	10	50	30	57.5	8333	8538	8743	25.7	27	8	32	-50	+25	+25	T4

TO ORDER: Indicate the prefix M39006/09 followed by the applicable MIL dash number
Example: For M39006/09-8210 order M39006/098210

CLR65 (MIL-C-39006/09) Wet Tantalum Capacitors

MALLORY

Cap (μ F)	Cap Tol ($\pm$)	Maximum Working Voltage		Surge Voltage @ +85°C	Part Number MIL-C-39006/09 Failure Rate Level (% / 1000 Hrs.)			Max DF (%)	Max Z -55°C (Ohms)	Maximum DC Leakage (μ A)		Maximum % Capacitance Change from Room Temperature			Case Code
		+85°C	+125°C		M (1.0)	P (0.1)	R (0.01)			+25°C	+85°C & +125°C	-55°C	+85°C	+125°C	
4	20	60	40	69	8334	8539	8744	3	550	1	2	-16	+5	+6	T1
4	10	60	40	69	8335	8540	8745	3	550	1	2	-16	+5	+6	T1
8.2	20	60	40	69	8337	8542	8747	5	275	1	2	-24	+8	+9	T1
8.2	10	60	40	69	8338	8543	8748	5	275	1	2	-24	+8	+9	T1
20	20	60	40	69	8340	8544	8750	7.6	105	1	5	-16	+10.5	+12	T2
20	10	60	40	69	8341	8546	8751	7.6	105	1	5	-16	+10.5	+12	T2
39	20	60	40	69	8343	8548	8753	20.7	90	1	9	-28	+10.5	+12	T2
39	10	60	40	69	8344	8549	8754	20.7	90	1	9	-28	+10.5	+12	T2
50	20	60	40	69	8346	8551	8756	15.3	50	2	12	-16	+10.5	+12	T3
50	10	60	40	69	8347	8552	8757	15.3	50	2	12	-16	+10.5	+12	T3
68	20	60	40	69	8349	8554	8759	30.7	50	2	16	-32	+10.5	+12	T3
68	10	60	40	69	8350	8555	8760	30.7	50	2	16	-32	+10.5	+12	T3
140	20	60	40	69	8352	8557	8762	25.7	28	8	32	-40	+20	+20	T4
140	10	60	40	69	8353	8558	8763	25.7	28	8	32	-40	+20	+20	T4
3.5	20	75	50	86.2	8354	8559	8764	2.5	650	1	2	-16	+5	+6	T1
3.5	10	75	50	86.2	8355	8560	8765	2.5	650	1	2	-16	+5	+6	T1
6.8	20	75	50	86.2	8357	8562	8767	4.1	300	1	2	-20	+8	+9	T1
6.8	10	75	50	86.2	8358	8563	8768	4.1	300	1	2	-20	+8	+9	T1
15	20	75	50	86.2	8360	8565	8770	7.5	150	1	5	-16	+8	+9	T2
15	10	75	50	86.2	8361	8566	8771	7.5	150	1	5	-16	+8	+9	T2
33	20	75	50	86.2	8363	8568	8773	17.5	90	1	10	-24	+10.5	+15	T2
33	10	75	50	86.2	8364	8569	8774	17.5	90	1	10	-24	+10.5	+15	T2
40	20	75	50	86.2	8366	8571	8776	15.2	60	2	12	-16	+10.5	+12	T3
40	10	75	50	86.2	8367	8572	8777	15.2	60	2	12	-16	+10.5	+12	T3
56	20	75	50	86.2	8369	8574	8779	26	60	2	17	-28	+10.5	+15	T3
56	10	75	50	86.2	8370	8575	8780	26	60	2	17	-28	+10.5	+15	T3
110	20	75	50	86.2	8372	8577	8782	25.7	29	9	36	-35	+20	+20	T4
110	10	75	50	86.2	8373	8578	8783	25.7	29	9	36	-35	+20	+20	T4
2.5	20	100	65	115	8374	8579	8784	5	950	1	2	-16	+7	+8	T1
2.5	10	100	65	115	8375	8580	8785	5	950	1	2	-16	+7	+8	T1
4.7	20	100	65	115	8377	8582	8787	3.6	500	1	2	-16	+7	+8	T1
4.7	10	100	65	115	8378	8583	8788	3.6	500	1	2	-16	+7	+8	T1
11	20	100	65	115	8380	8585	8790	5	200	1	4	-16	+7	+8	T2
11	10	100	65	115	8381	8586	8791	5	200	1	4	-16	+7	+8	T2
22	20	100	65	115	8383	8588	8793	11.8	100	1	9	-16	+7	+8	T2
22	10	100	65	115	8384	8589	8794	11.8	100	1	9	-16	+7	+8	T2
30	20	100	65	115	8386	8591	8796	9.1	80	2	12	-16	+7	+8	T3
30	10	100	65	115	8387	8592	8797	9.1	80	2	12	-16	+7	+8	T3
43	20	100	65	115	8389	8594	8799	19.7	70	2	17	-20	+7	+8	T3
43	10	100	65	115	8390	8595	8800	19.7	70	2	17	-20	+7	+8	T3
86	20	100	65	115	8392	8597	8802	20.7	30	9	36	-25	+15	+15	T4
86	10	100	65	115	8393	8598	8803	20.7	30	9	36	-25	+15	+15	T4
1.7	20	125	85	144	8394	8599	8804	7	1250	1	2	-16	+7	+8	T1
1.7	10	125	85	144	8395	8600	8805	7	1250	1	2	-16	+7	+8	T1
3.6	20	125	85	144	8397	8602	8807	4.1	600	1	2	-16	+7	+8	T1
3.6	10	125	85	144	8398	8603	8808	4.1	600	1	2	-16	+7	+8	T1
9	20	125	85	144	8400	8605	8810	10.2	240	1	5	-16	+7	+8	T2
9	10	125	85	144	8401	8606	8811	10.2	240	1	5	-16	+7	+8	T2
14	20	125	85	144	8403	8608	8813	12.7	167	1	7	-16	+7	+8	T2
14	10	125	85	144	8404	8609	8814	12.7	167	1	7	-16	+7	+8	T2
18	20	125	85	144	8406	8611	8816	15	129	2	9	-16	+7	+8	T3
18	10	125	85	144	8407	8612	8817	15	129	2	9	-16	+7	+8	T3
25	20	125	85	144	8409	8614	8819	19	93	2	13	-16	+7	+8	T3
25	10	125	85	144	8410	8615	8820	19	93	2	13	-16	+7	+8	T3
56	20	125	85	144	9030	9033	9036	17.5	32	10	40	-25	+15	+15	T4
56	10	125	85	144	9031	9034	9037	17.5	32	10	40	-25	+15	+15	T4

TO ORDER: Indicate the prefix M39006/09 followed by the applicable MIL dash number
Example: For M39006/09-8210 order M39006/098210