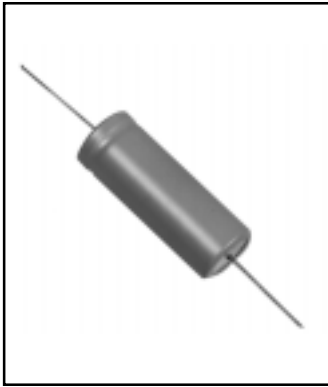


Type TCG Axial Leaded Capacitors

MALLORY



- 85°C Industrial Grade
- Computer Grade Quality
- 1000 Hours Load Life at Rated Temperature
- Axial Leads for Low Profile Mounting
- Ideal for Computers, Communication Equipment, and Power Supplies

GENERAL SPECIFICATIONS

Operating Temperature:
-40°C to +85°C

Voltage Range:
10 WVDC to 450 WVDC

Capacitance Range:
10 μ F to 10,000 μ F

Capacitance Tolerance:
6 to 150 WVDC - 10% +75%
Over 150 WVDC - 10% +50%

DC Leakage Current:

$I = 6 \sqrt{CV}$ after 5 minutes
Not to exceed 3 mA @ 25°C
C = Capacitance in μ F
V = Rated Voltage
I = Leakage Current in μ A

QA Stability Test:

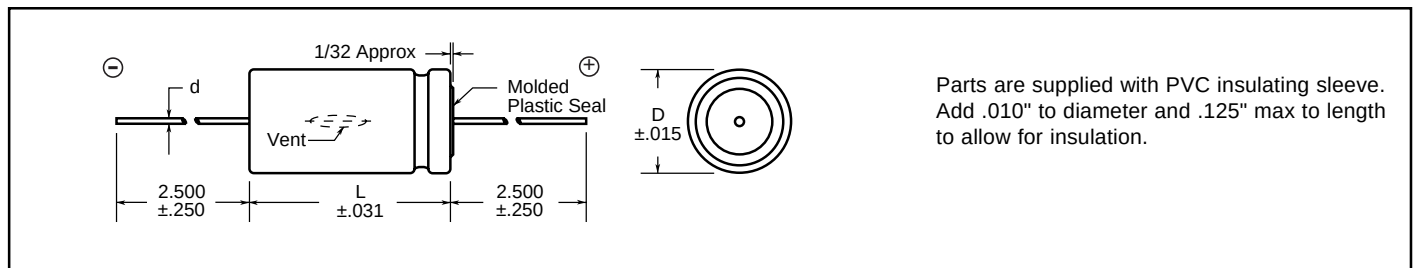
- Apply WVDC for 1,000 hrs at 85°C
- Capacitance change $\pm 15\%$ from initial limits
 - DC leakage current meets initial limits
 - ESR $\leq 150\%$ of initial measured value

The maximum ripple current at 85°C and 120 Hz for TCG capacitors is shown in the Standard Rating Table. Maximum ripple current may be adjusted by the multipliers in the following tables:

Rated WVDC	Ripple Multipliers			
	60 Hz	400 Hz	1000 Hz	2400 Hz
0 to 50	0.8	1.05	1.10	1.14
51 to 150	0.8	1.08	1.13	1.16
151 & up	0.8	1.15	1.21	1.25

Ambient Temperature	Ripple Multiplier
+85°C	1.0
+75°C	1.4
+65°C	1.7
+55°C	2.0
+45°C	2.2

Outline Dimensions



Cap μF	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches)			Catalog Number
			D Diameter	L Length	d	
6 WVDC; 8 VDC Surge						
9,400	0.050	1.800	0.866	1.575	0.040	TCG942U006A
10 WVDC; 12 VDC Surge						
1,000	3.260	0.180	0.394	0.787	0.032	TCG102M010A
2,500	0.136	1.144	0.512	0.984	0.032	TCG252U010A
2,500	0.170	1.407	0.875	1.125	0.040	TCG252U010L1C
2,500	0.171	1.521	1.000	1.125	0.040	TCG252U010N1C
2,900	0.080	1.345	0.709	1.575	0.040	TCG292U010A
3,500	0.092	2.424	1.000	1.625	0.040	TCG352U010N1L
5,000	0.082	2.488	1.000	1.375	0.040	TCG502U010N1G
5,500	0.081	2.584	1.000	1.625	0.040	TCG552U010N1L
10,000	0.050	1.800	0.866	1.575	0.040	TCG103U010A
10,000	0.046	4.274	0.875	3.125	0.040	TCG103U010L3C
10,000	0.048	3.772	1.000	2.125	0.040	TCG103U010N2C
15 WVDC; 20 VDC Surge						
2,500	0.108	1.055	0.512	1.181	0.032	TCG252U015A
2,500	0.126	1.989	0.625	2.625	0.032	TCG252U015G2L
2,900	0.110	2.134	0.625	2.625	0.032	TCG292U015G2L
4,000	0.068	1.500	0.866	1.575	0.040	TCG402U015A
4,000	0.085	2.518	1.000	1.625	0.040	TCG402U015N1L
4,100	0.068	1.500	0.866	1.575	0.040	TCG412U015A
4,100	0.083	2.544	1.000	1.625	0.040	TCG412U015N1L
5,000	0.067	3.015	0.750	2.625	0.040	TCG502U015J2L
6,300	0.055	3.612	0.875	2.625	0.040	TCG632U015L2L
8,000	0.058	1.617	0.866	1.575	0.040	TCG802U015A
8,000	0.045	4.269	1.000	2.625	0.040	TCG802U015N2L

Cap μF	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches)			Catalog Number
			D Diameter	L Length	d	
15 WVDC; 20 VDC Surge						
8,200	0.057	1.650	0.866	1.575	0.040	TCG822U015A
8,200	0.044	4.310	1.000	2.625	0.040	TCG822U015N2L
10,000	0.050	1.800	0.866	1.575	0.040	TCG103U015A
10,000	0.038	4.634	1.000	2.625	0.040	TCG103U015N2L
25 WVDC; 30 VDC Surge						
1,000	0.118	1.447	0.866	1.575	0.040	TCG102U025A
1,000	0.216	1.352	1.000	1.125	0.040	TCG102U025N1C
1,100	0.118	1.447	0.866	1.575	0.040	TCG112U025A
1,100	0.190	1.431	0.750	1.625	0.040	TCG112U025J1L
2,000	0.154	2.137	1.000	1.625	0.040	TCG202U025N1L
2,200	0.080	1.300	0.709	1.575	0.040	TCG222U025A
2,200	0.098	2.487	0.750	2.625	0.040	TCG222U025J2L
4,000	0.595	2.402	0.866	1.575	0.040	TCG402U025A
4,000	0.057	3.827	0.875	3.125	0.040	TCG402U025L3C
4,100	0.595	2.402	0.866	1.575	0.040	TCG412U025A
30 WVDC; 40 VDC Surge						
500	0.369	0.874	0.750	1.125	0.040	TCG501U030J1C
1,100	0.147	1.050	0.630	1.181	0.032	TCG112U030A
1,100	0.169	1.721	0.625	2.625	0.032	TCG112U030G2L
2,100	0.080	1.400	0.866	1.575	0.040	TCG212U030A
2,100	0.072	3.159	0.875	2.625	0.040	TCG212U030L2L
2,400	0.130	1.318	0.866	1.575	0.040	TCG242U030A
2,400	0.082	2.961	0.875	2.625	0.040	TCG242U030L2L
2,500	0.078	3.005	1.000	2.625	0.040	TCG252U030N2L
3,000	0.065	3.004	0.875	2.125	0.040	TCG302U030L2C

Type TCG Axial Leaded Capacitors

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Cap μF	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches)			Catalog Number
			D Diameter	L Length	d	
40 WVDC; 50 VDC Surge						
1,200	0.136	1.150	0.709	1.575	0.040	TCG122U040A
2,100	0.080	1.400	0.866	1.575	0.040	TCG212U040A
50 WVDC; 65 VDC Surge						
100	1.179	0.350	0.394	0.984	0.032	TCG101U050A
250	0.610	0.477	0.512	0.984	0.032	TCG251U050A
250	0.499	0.742	0.625	1.375	0.032	TCG251U050G1G
500	0.304	0.770	0.512	1.181	0.032	TCG501U050A
500	0.156	1.788	0.625	2.625	0.032	TCG501U050G2L
500	0.262	1.227	1.000	1.125	0.040	TCG501U050N1C
600	0.243	1.133	0.709	1.575	0.040	TCG601U050A
600	0.211	1.539	0.625	2.625	0.032	TCG601U050G2L
600	0.215	1.363	0.875	1.375	0.040	TCG601U050L1G
880	0.148	1.353	0.866	1.575	0.040	TCG881T050A
1,100	1.050	2.480	1.000	1.375	0.040	TCG112U050N1G
1,100	0.118	1.447	0.866	1.575	0.040	TCG112U050A
1,100	0.094	2.698	1.000	2.125	0.040	TCG112U050N2C
1,200	0.136	1.150	0.709	1.575	0.040	TCG122U050A
1,200	0.110	2.313	0.875	2.125	0.040	TCG122U050L2C
2,300	0.130	1.318	0.866	1.575	0.040	TCG232U050A
2,300	0.062	3.653	1.000	2.625	0.040	TCG232U050N2L
2,500	0.058	3.777	1.000	2.625	0.040	TCG252U050N2L
75 WVDC; 100 VDC Surge						
340	0.357	0.700	0.630	1.181	0.032	TCG341U075A
150 WVDC; 175 VDC Surge						
100	0.696	0.748	0.750	1.625	0.040	TCG101T150J1L
110	0.634	0.784	0.750	1.625	0.040	TCG111T150J1L
250	0.284	1.439	0.875	2.125	0.040	TCG251T150L2C
530	0.139	2.639	1.000	3.125	0.040	TCG531T150N3C
560	0.133	2.705	1.000	3.125	0.040	TCG561T150N3C
200 WVDC; 250 VDC Surge						
30	7.060	0.240	0.512	0.984	0.032	TCG300T200A
210	0.646	1.780	1.000	2.125	0.040	TCG211T200N2C
300	0.517	1.977	1.000	2.125	0.040	TCG301T200N2C
430	0.411	2.116	1.000	3.625	0.040	TCG431U200N3L

Cap μF	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches)			Catalog Number
			D Diameter	L Length	d	
250 WVDC; 300 VDC Surge						
50	2.450	.607	.875	1.375	.040	TCG500T250L1G
100	1.230	1.039	.875	2.125	.040	TCG101T250L2C
200	.277	1.726	1.000	2.625	.040	TCG201T250N2L
350 WVDC; 400 VDC Surge						
20	15.100	0.175	0.512	1.181	0.032	TCG200T350A
20	9.500	0.294	0.625	1.625	0.032	TCG200T350G1L
20	9.520	0.276	0.750	1.125	0.040	TCG200T350J1C
30	7.060	0.240	0.512	0.984	0.032	TCG300T350A
30	6.336	0.408	0.625	2.125	0.032	TCG300T350G2C
30	6.368	0.369	0.875	1.125	0.040	TCG300T350L1C
40	8.580	0.220	0.512	1.181	0.032	TCG400T350A
40	4.200	0.460	1.000	1.125	0.040	TCG400T350N1C
50	6.850	0.331	0.630	1.299	0.032	TCG500T350A
50	3.353	0.560	1.000	1.375	0.040	TCG500T350N1G
100	3.320	0.555	0.866	1.575	0.040	TCG101T350A
100	1.680	0.957	1.000	2.125	0.040	TCG101T350N2C
160	0.469	1.327	1.000	2.625	0.040	TCG161T350N2L
180	0.417	1.524	1.000	3.125	0.040	TCG181T350N3C
450 WVDC; 525 VDC Surge						
10	33.200	0.089	0.512	0.827	0.032	TCG100T450A
10	17.392	0.217	0.625	1.625	0.032	TCG100T450G1L
10	17.404	0.204	0.750	1.125	0.040	TCG100T450J1C
12	14.500	0.244	0.750	1.375	0.040	TCG120T450J1G
20	15.100	0.175	0.512	1.181	0.032	TCG200T450A
20	8.704	0.384	0.625	2.625	0.032	TCG200T450G2L
20	8.732	0.341	1.000	1.125	0.040	TCG200T450N1C
40	8.580	0.280	0.630	1.299	0.032	TCG400M450A
40	8.580	0.280	0.630	1.299	0.032	TCG400T450A
40	6.850	0.331	0.630	1.299	0.032	TCG500M450A
50	6.850	0.331	0.630	1.299	0.032	TCG500T450A
50	4.742	0.709	1.000	1.625	0.040	TCG500T450N1L
50	4.049	0.548	1.000	2.125	0.040	TCG500T450N2C
60	6.140	0.376	0.709	1.575	0.040	TCG600M450A
60	3.950	0.890	1.000	2.625	0.040	TCG600T450N2L
75	5.080	0.443	0.709	1.575	0.040	TCG750T450A
75	1.980	0.944	1.000	2.125	0.040	TCG750T450N2C
85	1.869	0.998	1.000	2.625	0.040	TCG850T450N2L