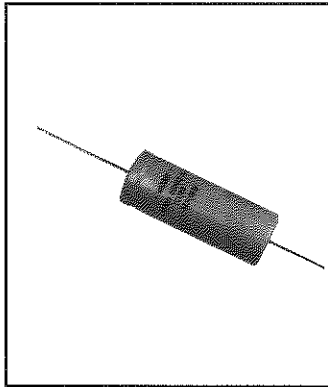


# Type TC Axial Leaded Capacitors



- 85°C Industrial Grade
- Axial Leads for Low Profile Mounting
- Long Life
- High Reliability

## GENERAL SPECIFICATIONS

Operating Temperature:  
-40°C to +85°C  
Voltage Range:  
16 WVDC to 450 WVDC  
Capacitance Range:  
1  $\mu$ F to 5,000  $\mu$ F  
Capacitance Tolerance:  
.625 diameter & larger:  
6 to 150 WVDC -10% +75%  
Over 150 WVDC -10% +50%  
Under .625 Dia.  $\pm$ 20%

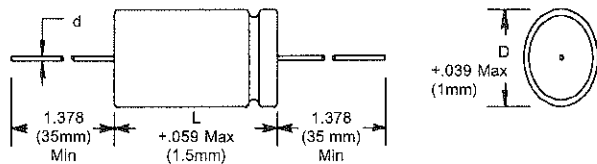
DC Leakage Current:  
 $I = 6 \sqrt{CV}$  after 5 minutes  
Not to exceed 6 mA  
C = Capacitance in  $\mu$ F  
V = Rated Voltage  
I = Leakage Current in mA  
QA Stability Test:  
Apply WVDC for 1,000 hrs at 85°C  
•Capacitance change  $\leq$  15%  
from initial limits  
•DC leakage current meets  
initial limits  
•ESR  $\leq$  150% of initial  
measured value

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

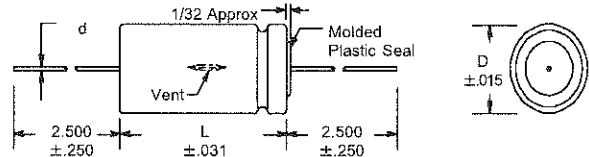
Rated WVDC	Ripple Multipliers			
	60 Hz	400 Hz	1000 Hz	2400 Hz
0 to 50	0.8	1.05	1.10	1.14
51 to 150	0.8	1.08	1.13	1.16
151 & up	0.8	1.15	1.21	1.25

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

### .512 Diameter and Smaller



### .625 Diameter and Greater



Cap $\mu$ F	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches) D x L d	Catalog Number
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Cap $\mu$ F	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches) D x L d	Catalog Number
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### 16 WVDC; 20 VDC Surge

500	.56	.450	.394 x .826	.024	TC1505A
1,000	.28	.701	.394 x 1.181	.024	TC1501A
2,000	.16	.900	.512 x 1.259	.032	TC1520A
3,000	.11	2.066	.875 x 1.625	.040	TC1530
4,000	.08	2.518	.875 x 1.875	.040	TC1540
5,000	.07	3.217	.875 x 2.625	.040	TC1550

### 50 WVDC; 65 VDC Surge

100	1.66	.212	.315 x .787	.024	TC3501A
150	1.11	.320	.394 x .945	.024	TC50015A
250	.66	.400	.394 x .945	.024	TC50025A
500	.33	.680	.512 x .945	.032	TC50050A
1,000	.08	2.949	.875 x 2.625	.040	TC50100
1,500	.07	3.423	1.000 x 2.625	.040	TC50150
2,000	.07	3.448	1.000 x 2.625	.040	TC50200
3,000	.05	4.766	1.000 x 3.625	.040	TC50300
5,000	.03	5.820	1.000 x 3.625	.040	TC50500

### 25 WVDC; 30 VDC Surge

10	24.86	.040	.197 x .472	.024	TC22A
25	9.95	.060	.236 x .472	.024	TC26A
50	4.97	.100	.197 x .630	.024	TC29A
100	2.49	.158	.315 x .630	.024	TC2501A
150	1.66	.230	.315 x .630	.024	TC25015A
250	1.00	.320	.315 x .787	.024	TC25025A
500	.50	.550	.394 x .945	.024	TC2505A
1,000	.25	.796	.512 x .945	.032	TC2510A
1,500	.14	1.881	.750 x 2.125	.040	TC2515
2,000	.11	2.204	.875 x 1.875	.040	TC2520
3,000	.07	3.108	.875 x 2.625	.040	TC2530
4,000	.06	3.779	1.000 x 2.625	.040	TC2540
5,000	.05	4.136	1.000 x 2.625	.040	TC2550

### 75 WVDC; 95 VDC Surge

100	.77	.597	.625 x 1.375	.032	TC75101
250	.37	1.024	.750 x 1.625	.040	TC75251
500	.19	1.765	.875 x 2.125	.040	TC75501
1,000	.10	2.344	1.000 x 1.625	.040	TC75102
2,000	.05	3.991	1.000 x 2.625	.040	TC75202

### 100 WVDC; 125 VDC Surge

1	132.60	.012	.197 x .472	.024	TC10010A
10	13.26	.068	.394 x .630	.024	TC10100A
100	.36	.974	.750 x 1.375	.040	TC10101
150	.24	1.276	.750 x 1.625	.040	TC10151
250	.15	1.885	.875 x 1.875	.040	TC10251
500	.08	3.251	1.000 x 2.625	.040	TC10501
1,000	.08	3.918	1.000 x 3.875	.040	TC10102
1,500	.06	4.495	1.000 x 3.625	.040	TC10152

### 50 WVDC; 65 VDC Surge

1	165.80	.012	.197 x .472	.024	TC31A
10	16.58	.035	.236 x .472	.024	TC32A
25	6.63	.080	.236 x .630	.024	TC36A
50	3.32	.140	.315 x .630	.024	TC39A

# Type TC Axial Leaded Capacitors

**MALLORY**

Cap μF	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches) D x L d	Catalog Number
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Cap μF	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches) D x L d	Catalog Number
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150 WVDC; 175 VDC Surge				
1	133.00	.024	.500 x 1.125 .032	TC56
5	26.52	.040	.315 x .787 .024	TC40A
10	13.26	.067	.315 x .787 .024	TC42A
12	13.82	.070	.315 x .787 .024	TC43A
20	8.29	.115	.394 x .945 .024	TC45A
50	3.32	.235	.512 x 1.259 .032	TC49A
80	1.96	.670	.750 x 1.625 .040	TC492
100	.70	.748	.750 x 1.625 .040	TC493
150	.47	.993	.875 x 1.625 .040	TC495
200	.35	1.293	.875 x 2.125 .040	TC496
300	.24	1.687	1.000 x 2.125 .040	TC499
500	.15	2.362	1.000 x 2.625 .040	TC4990

350 WVDC; 400 VDC Surge				
2	62.02	.086	.500 x 1.125 .032	TC595
5	30.48	.139	.625 x 1.125 .032	TC60
8	19.05	.193	.625 x 1.375 .032	TC61
10	15.25	.215	.625 x 1.375 .032	TC62
12	12.71	.239	.750 x 1.125 .040	TC63
16	9.54	.302	.750 x 1.375 .040	TC64
20	7.63	.337	.750 x 1.375 .040	TC65
40	3.96	.514	.875 x 1.625 .040	TC67
60	2.78	.691	.875 x 2.125 .040	TC68
100	1.35	1.093	.875 x 2.625 .040	TC69
150	.96	1.495	1.000 x 3.625 .040	TC692

250 WVDC; 300 VDC Surge				
5	66.30	.045	.315 x .787 .024	TC50X
8	15.27	.197	.625 x 1.125 .032	TC51
10	12.22	.220	.625 x 1.125 .032	TC52
12	8.65	.262	.625 x 1.125 .032	TC53
16	7.64	.304	.625 x 1.375 .032	TC54
20	6.13	.345	.750 x 1.125 .040	TC55
30	4.09	.461	.750 x 1.375 .040	TC57
40	2.69	.573	.750 x 1.625 .040	TC58
50	2.15	.640	.750 x 1.625 .040	TC59
100	1.08	1.220	.875 x 2.625 .040	TC1265
160	.30	1.649	1.000 x 2.625 .040	TC1266
225	.22	2.105	1.000 x 3.125 .040	TC1267

450 WVDC; 525 VDC Surge				
1	170.09	.048	.500 x 1.125 .032	TC6942
2	86.91	.082	.625 x 1.125 .032	TC695
4	43.47	.116	.625 x 1.125 .032	TC697
5	35.86	.144	.750 x 1.125 .040	TC70
8	21.74	.183	.750 x 1.125 .040	TC71
10	17.39	.243	.875 x 1.375 .040	TC72
12	14.50	.267	.875 x 1.375 .040	TC73
16	10.88	.304	.750 x 1.625 .040	TC74
20	8.71	.371	.875 x 1.625 .040	TC75
30	5.82	.488	1.000 x 1.625 .040	TC77
40	4.36	.653	1.000 x 2.125 .040	TC78
50	3.06	.709	1.000 x 2.125 .040	TC79
60	2.55	.855	1.000 x 2.625 .040	TC795
80	2.19	1.068	1.000 x 3.125 .040	TC80
100	1.97	1.178	1.000 x 3.125 .040	TC807

300 WVDC; 350 VDC Surge				
150	.36	1.624	1.000 x 3.125 .040	TC593
200	.28	1.865	1.000 x 3.125 .040	TC594

Aluminum Capacitors