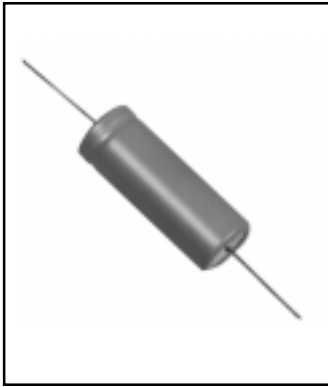


Type TCX Axial Leaded Capacitors



- 105°C High Performance
- Computer Grade Quality
- 2000 Hours Load Life at Rated Temperature
- Low DCL, Low ESR
- Axial Leads

GENERAL SPECIFICATIONS

Operating Temperature:
-55°C to +105°C

Voltage Range:
10 WVDC to 150 WVDC

Capacitance Range:
27 μ F to 12,000 μ F

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

DC Leakage Current:
 $I = 2 \sqrt{CV}$ after 5 minutes
Not to exceed 2mA @ 25°C
C = Capacitance in μ F
V = Rated Voltage
I = Leakage Current in μ A

QA Stability Test:
Apply WVDC for 2,000 hrs at 105°C

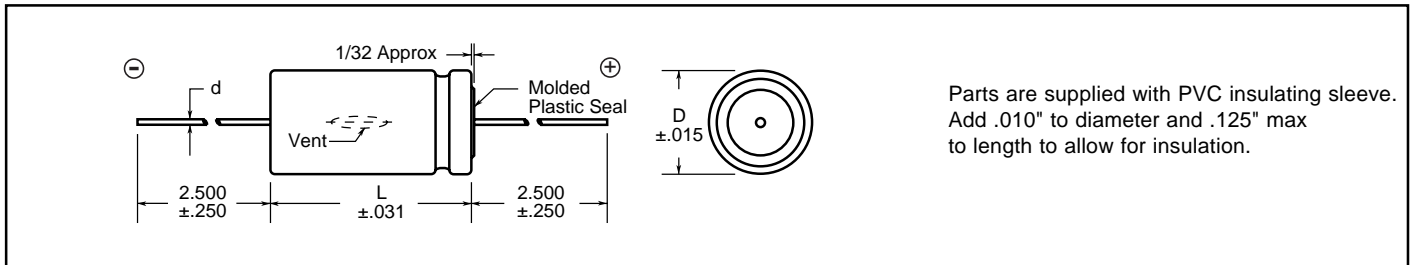
- Capacitance change $\pm 15\%$ from initial limits
- DC leakage current meets initial limits
- ESR $\leq 150\%$ of initial measured value

The maximum ripple current at 85°C and 120 Hz for TCX 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 150	0.8	1.05	1.10	1.14

Ambient Temperature	Ripple Multiplier
+95°C	0.7
+85°C	1.0
+75°C	1.2
+65°C	1.4
+55°C	1.58
+45°C	1.7

Outline Dimensions



Aluminum Capacitors

Cap μ F	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						
4,800	0.063	1.550	0.866	1.575	0.040	TCX482U006A
10 WVDC; 12 VDC Surge						
10,000	0.050	1.800	0.866	1.575	0.040	TCX103U010A
10,000	0.024	5.952	0.875	3.125	0.040	TCX103U010L3C
15 WVDC; 20 VDC Surge						
1,000	0.145	1.394	0.750	1.125	0.040	TCX102U015J1C
2,100	0.071	2.337	0.750	1.625	0.040	TCX212U015J1L
3,100	0.625	1.430	0.866	1.575	0.040	TCX312U015A
4,600	0.063	1.550	0.866	1.575	0.040	TCX462U015A
6,200	0.066	1.572	0.866	1.575	0.040	TCX622U015A
8,200	0.060	1.628	0.866	1.575	0.040	TCX822U015A
8,200	0.025	5.796	1.000	2.625	0.040	TCX822U015N2L
12,000	0.050	1.800	0.866	1.575	0.040	TCX123U015A
12,000	0.019	7.589	1.000	3.625	0.040	TCX123U015N3L
20 WVDC; 25 VDC Surge						
640	0.248	0.735	0.512	1.181	0.032	TCX641U025A
25 WVDC; 30 VDC Surge						
640	0.248	0.735	0.512	1.181	0.032	TCX641U025A
1,200	0.118	1.447	0.866	1.575	0.040	TCX122U025A
1,200	0.109	1.899	1.000	1.125	0.040	TCX122U025N1C
1,500	0.140	0.850	0.512	1.181	0.032	TCX152U025A
1,800	0.102	1.268	0.866	1.575	0.040	TCX182U025A
1,800	0.071	2.557	0.875	1.625	0.040	TCX182U025L1L
2,400	0.080	1.320	0.866	1.575	0.040	TCX242U025A

Cap μ F	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches)			Catalog Number
			D Diameter	L Length	d	
25 WVDC; 30 VDC Surge						
2,400	0.057	3.081	1.000	1.625	0.040	TCX242U025N1L
3,700	0.037	4.370	0.875	2.625	0.040	TCX372U025L2L
7,200	0.023	6.882	1.000	3.625	0.040	TCX722U025N3L
30 WVDC; 40 VDC Surge						
310	0.447	0.463	0.512	0.984	0.032	TCX311U030A
310	0.316	0.852	0.625	1.125	0.032	TCX311U030G1C
470	0.314	0.554	0.512	0.984	0.032	TCX471U030A
470	0.214	1.149	0.750	1.125	0.040	TCX471U030J1C
970	0.147	1.163	0.630	1.575	0.032	TCX971U030A
1,400	0.120	1.200	0.709	1.575	0.040	TCX142U030A
1,400	0.075	2.583	0.750	2.125	0.040	TCX142U030J2C
2,700	0.328	1.343	0.866	1.575	0.040	TCX272U030A
2,700	0.043	4.091	0.875	2.625	0.040	TCX272U030L2L
3,000	0.039	4.643	0.875	3.125	0.040	TCX302U030L3C
40 WVDC; 50 VDC Surge						
360	0.419	0.492	0.512	0.984	0.032	TCX361U040A
360	0.230	1.107	0.750	1.125	0.040	TCX361U040J1C
1,000	0.118	1.447	0.866	1.575	0.040	TCX102U040A
1,000	0.088	2.290	0.875	1.625	0.040	TCX102U040L1L
1,400	0.120	1.200	0.709	1.575	0.040	TCX142U040A
1,400	0.063	3.107	0.750	2.625	0.040	TCX142U040J2L
2,100	0.045	3.975	0.875	2.625	0.040	TCX212U040L2L
4,200	0.586	2.587	0.866	1.575	0.040	TCX422U040A
4,200	0.028	6.361	1.000	3.625	0.040	TCX422U040N3L

Type TCX Axial Leaded Capacitors



Cap μF	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches)			Catalog Number
			D Diameter	L Length	d	
50 WVDC; 65 VDC Surge						
170	0.804	0.362	0.512	0.984	0.032	TCX171U050A
250	0.486	0.488	0.512	1.181	0.032	TCX251U050A
250	0.306	0.947	0.625	1.375	0.032	TCX251U050G1G
370	0.216	1.250	0.875	1.125	0.040	TCX371U050L1C
500	0.313	0.597	0.512	1.181	0.032	TCX501U050A
500	0.155	1.624	0.625	2.125	0.032	TCX501U050G2C
710	0.191	1.055	0.709	1.575	0.040	TCX711U050A
710	0.118	1.989	1.000	1.375	0.040	TCX711U050N1G
950	0.089	2.456	1.000	1.625	0.040	TCX951U050N1L
1,400	0.120	1.200	0.709	1.575	0.040	TCX142U050A
1,400	0.061	3.436	0.875	2.625	0.040	TCX142U050L2L
1,800	0.102	1.268	0.866	1.575	0.040	TCX182U050A
1,900	0.097	1.281	0.866	1.575	0.040	TCX192U050A
1,900	0.047	4.170	1.000	2.625	0.040	TCX192U050N2L
2,800	0.377	1.357	0.866	1.575	0.040	TCX282U050A
2,800	0.035	5.655	1.000	3.625	0.040	TCX282U050N3L

Cap μF	Max ESR Ohms 120Hz 25°C	Max Ripple Amps 120Hz 85°C	Size (Inches)			Catalog Number
			D Diameter	L Length	d	
75 WVDC; 95 VDC Surge						
65	2.961	0.419	0.625	1.125	0.032	TCX650U075G1C
100	3.320	0.410	0.630	1.181	0.032	TCX101U075A
100	1.932	0.574	0.750	1.125	0.040	TCX101U075J1C
560	0.229	0.887	0.709	1.575	0.040	TCX561U075A
560	0.115	2.491	0.875	2.625	0.040	TCX561U075L2L
740	0.183	1.076	0.709	1.575	0.040	TCX741U075A
740	0.090	3.033	1.000	2.625	0.040	TCX741U075N2L
1,100	0.084	3.633	1.000	3.625	0.040	TCX112U075N3L
100 WVDC; 125 VDC Surge						
110	.404	.996	.875	1.375	.040	TCX111T100L1G
150	.297	1.248	.875	1.625	.040	TCX151T100L1L
150 WVDC; 175 VDC Surge						
27	5.720	.322	.625	1.125	.032	TCX270T150G1C
150	.404	1.224	.750	2.625	.040	TCX151T150J2L

Case Code Format Types TCG and TCX

Case Code Chart

Case Code	Inches		Millimeters		d	
	D	L	D	L	Inches	AWG
E1G	.500	1.375	12.7	34.9	.032	#20
E2C	.500	2.125	12.7	53.9	.032	#20
G1C	.625	1.125	15.9	28.6	.032	#20
G1G	.625	1.375	15.9	34.9	.032	#20
G1L	.625	1.625	15.9	41.3	.032	#20
G2C	.625	2.125	15.9	53.9	.032	#20
G2L	.625	2.625	15.9	66.7	.032	#20
G3C	.625	3.125	15.9	79.4	.032	#20
G3L	.625	3.625	15.9	92.1	.032	#20
J1C	.750	1.125	19.1	28.6	.040	#18
J1G	.750	1.375	19.1	34.9	.040	#18
J1L	.750	1.625	19.1	41.3	.040	#18
J2C	.750	2.125	19.1	53.9	.040	#18
J2L	.750	2.625	19.1	66.7	.040	#18
J3C	.750	3.125	19.1	79.4	.040	#18
J3L	.750	3.625	19.1	92.1	.040	#18
L1C	.875	1.125	22.2	28.6	.040	#18
L1G	.875	1.375	22.2	34.9	.040	#18
L1L	.875	1.625	22.2	41.3	.040	#18
L2C	.875	2.125	22.2	53.9	.040	#18
L2L	.875	2.625	22.2	66.7	.040	#18
L3C	.875	3.125	22.2	79.4	.040	#18
L3L	.875	3.625	22.2	92.1	.040	#18
N1C	1.000	1.125	25.4	28.6	.040	#18
NiG	1.000	1.375	25.4	34.9	.040	#18
N1L	1.000	1.625	25.4	41.3	.040	#18
N2C	1.000	2.125	25.4	53.9	.040	#18
N2L	1.000	2.625	25.4	66.7	.040	#18
N3C	1.000	3.125	25.4	79.4	.040	#18
N3L	1.000	3.625	25.4	92.1	.040	#18