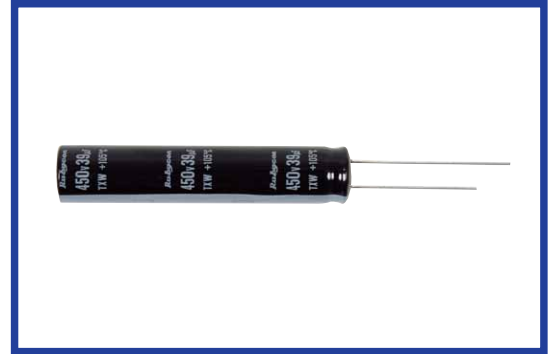


TXW SERIES

105°C Long Life(7000~12000 hours), Miniaturized

◆FEATURES

- Load Life : 105°C 7000~12000 hours. (Temperature Range:-40°C~+105°C)
- Body diameter of φ6.3 to φ18mm with high ripple current capability.
- RoHS compliance.



◆SPECIFICATIONS

Items	Characteristics																																					
Category Temperature Range	-40~+105°C																																					
Rated Voltage Range	35~100Vdc	160~450Vdc																																				
Capacitance Tolerance	±20% (20°C, 120Hz)																																					
Leakage Current(MAX)	I=0.01CV or 3μA whichever is greater. (After 2 minutes)																																					
	I=3√CV (After 5 minutes application of rated voltage)																																					
	I=Leakage Current(μA)	C=Capacitance(μF) V=Rated Voltage(Vdc)																																				
(tanδ) Dissipation Factor(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> <th>160~400</th> <th>420, 450</th> <th>(20°C, 120Hz)</th> </tr> </thead> <tbody> <tr> <td>tanδ</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> <td>0.08</td> <td>0.20</td> <td>0.25</td> <td></td> </tr> </tbody> </table>								Rated Voltage (V)	35	50	63	80	100	160~400	420, 450	(20°C, 120Hz)	tanδ	0.12	0.10	0.09	0.08	0.08	0.20	0.25													
	Rated Voltage (V)	35	50	63	80	100	160~400	420, 450	(20°C, 120Hz)																													
tanδ	0.12	0.10	0.09	0.08	0.08	0.20	0.25																															
Endurance	After applying rated voltage with rated ripple current for specified time at 105°C, the capacitors shall meet the following requirements.																																					
		35~100Vdc			160~450Vdc			<table border="1"> <thead> <tr> <th rowspan="2">Case Size</th> <th colspan="2">Life Time (hrs)</th> </tr> <tr> <th>35~100Vdc</th> <th>160~450Vdc</th> </tr> </thead> <tbody> <tr> <td>φ6.3</td> <td>7000</td> <td>—</td> </tr> <tr> <td rowspan="2">φD≥8</td> <td>L≤20</td> <td>10000</td> <td>10000</td> </tr> <tr> <td>L≥25</td> <td>10000</td> <td>12000</td> </tr> </tbody> </table>		Case Size	Life Time (hrs)		35~100Vdc	160~450Vdc	φ6.3	7000	—	φD≥8	L≤20	10000	10000	L≥25	10000	12000														
	Case Size	Life Time (hrs)																																				
		35~100Vdc	160~450Vdc																																			
φ6.3	7000	—																																				
φD≥8	L≤20	10000	10000																																			
	L≥25	10000	12000																																			
Capacitance Change	Within ±25% of the initial value.			Within ±20% of the initial value.																																		
Dissipation Factor	Not more than 200% of the specified value.																																					
Leakage Current	Not more than the specified value.																																					
Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage(Vdc)</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> <th>160~250</th> <th>350, 400</th> <th>420, 450</th> <th>(120Hz)</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>5</td> <td>6</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>—</td> <td>—</td> <td>—</td> <td></td> </tr> </tbody> </table>								Rated Voltage(Vdc)	35	50	63	80	100	160~250	350, 400	420, 450	(120Hz)	Z(-25°C)/Z(20°C)	2	2	2	2	2	3	5	6		Z(-40°C)/Z(20°C)	3	3	3	3	3	—	—	—	
	Rated Voltage(Vdc)	35	50	63	80	100	160~250	350, 400	420, 450	(120Hz)																												
	Z(-25°C)/Z(20°C)	2	2	2	2	2	3	5	6																													
Z(-40°C)/Z(20°C)	3	3	3	3	3	—	—	—																														

◆MULTIPLIER FOR RIPPLE CURRENT

35~100Vdc

Frequency (Hz)		120	1k	10k	100k≤
Coefficient	33μF	0.42	0.70	0.90	1.00
	39~270μF	0.50	0.73	0.92	1.00
	330~680μF	0.55	0.77	0.94	1.00
	820~1800μF	0.60	0.80	0.96	1.00

160~450Vdc

Frequency (Hz)		60 (50)	120	500	1k	10k≤
Coefficient	160~250Vdc	0.80	1.00	1.20	1.30	1.40
	350~450Vdc	0.80	1.00	1.25	1.40	1.50

◆OPTION

		Code
PET Sleeve	35~100Vdc	EFC
	160~450Vdc	EFR ※

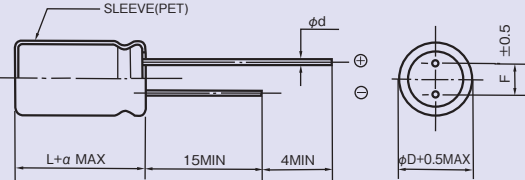
※PET Sleeve -25~+105°C (EFC) is also available, please consult our sales offices.

◆PART NUMBER

□□□ TXW □□□□ M □□□ □□ D×L
 Rated Voltage Series Capacitance Capacitance Tolerance Option Lead Forming Case Size

◆ DIMENSIONS

(mm)



ϕD	6.3	8	10	12.5	16	18
ϕd	0.5	0.6			0.8	
F	2.5	3.5	5.0		7.5	
α	35~100Vdc	2.0		-		
	160~450Vdc	-	2.5			

◆ STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size $\phi D \times L$ (mm)	Rated Ripple Current (A r.m.s./105°C)	
			120Hz	100kHz
35	180	6.3×25	0.605	1.21
	220	6.3×30	0.685	1.37
	330	6.3×40	0.924	1.68
	390	6.3×50	1.11	2.02
	390	8×25	0.951	1.73
	470	8×30	1.11	2.03
	680	8×40	1.41	2.57
	820	8×50	1.82	3.04
	820	10×30	1.48	2.47
	1000	8×60	2.08	3.48
	1200	10×40	1.87	3.12
	1500	10×50	2.21	3.69
1800	10×60	2.50	4.17	
50	100	6.3×25	0.510	1.02
	120	6.3×30	0.580	1.16
	180	6.3×40	0.710	1.42
	220	6.3×50	0.860	1.72
	220	8×25	0.740	1.48
	270	8×30	0.870	1.74
	390	8×40	1.22	2.23
	470	8×50	1.45	2.65
	470	10×30	1.22	2.22
	560	8×60	1.68	3.07
	680	10×40	1.55	2.82
	820	10×50	2.02	3.37
	1000	10×60	2.31	3.86
63	82	6.3×25	0.455	0.910
	100	6.3×30	0.515	1.03
	150	6.3×40	0.635	1.27
	180	6.3×50	0.775	1.55
	180	8×25	0.665	1.33
	220	8×30	0.785	1.57
	330	8×40	1.11	2.02
	390	8×50	1.32	2.41
	390	10×30	1.16	2.10
	470	8×60	1.54	2.80
	560	10×40	1.43	2.60
	680	10×50	1.71	3.12
	820	10×60	2.15	3.59

Rated Voltage (Vdc)	Capacitance (μF)	Size $\phi D \times L$ (mm)	Rated Ripple Current (A r.m.s./105°C)	
			120Hz	100kHz
80	47	6.3×25	0.455	0.910
	56	6.3×30	0.515	1.03
	82	6.3×40	0.635	1.27
	100	6.3×50	0.775	1.55
	100	8×25	0.665	1.33
	120	8×30	0.785	1.57
	180	8×40	1.01	2.02
	220	8×50	1.20	2.41
	220	10×30	1.05	2.10
	270	8×60	1.40	2.80
	270	10×40	1.30	2.60
	390	10×50	1.71	3.12
	470	10×60	1.97	3.59
100	33	6.3×25	0.382	0.910
	39	6.3×30	0.515	1.03
	56	6.3×40	0.635	1.27
	68	6.3×50	0.775	1.55
	82	8×25	0.665	1.33
	100	8×30	0.785	1.57
	120	8×40	1.01	2.02
	150	8×50	1.20	2.41
	150	10×30	1.05	2.10
	220	8×60	1.40	2.80
	220	10×40	1.30	2.60
	270	10×50	1.56	3.12
	330	10×60	1.97	3.59

◆ STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L (mm)	Rated Ripple Current (A r.m.s./105°C)	
			120Hz	100kHz
160	56	8×25	0.32	0.448
	68	8×30	0.37	0.518
	82	8×35	0.43	0.602
	82	10×25	0.43	0.602
	100	8×40	0.49	0.686
	120	8×55	0.57	0.798
	120	10×30	0.54	0.756
	150	10×40	0.67	0.938
	150	12.5×25	0.66	0.924
	180	10×50	0.80	1.12
	180	12.5×30	0.77	1.07
	220	10×60	0.94	1.31
	220	12.5×35	0.89	1.24
	220	16×25	0.93	1.30
	270	12.5×40	1.01	1.41
	330	12.5×50	1.20	1.68
	330	16×30	1.20	1.68
	330	18×25	1.18	1.65
	390	12.5×55	1.35	1.89
	390	16×35	1.34	1.87
390	18×30	1.40	1.96	
470	16×40	1.52	2.12	
470	18×35	1.58	2.21	
560	16×50	1.79	2.50	
560	18×40	1.78	2.49	
680	18×45	2.00	2.80	
820	18×50	2.23	3.12	
200	39	8×25	0.30	0.420
	56	8×30	0.37	0.518
	68	8×40	0.45	0.630
	68	10×25	0.43	0.602
	82	8×45	0.51	0.714
	82	10×30	0.50	0.700
	100	8×55	0.60	0.840
	100	10×40	0.63	0.882
	120	10×45	0.75	1.05
	120	12.5×25	0.65	0.910
	150	10×50	0.83	1.16
	150	12.5×30	0.80	1.12
	180	10×60	0.91	1.27
	180	12.5×35	0.92	1.28
	180	16×25	0.85	1.19
	220	12.5×45	1.09	1.52
	220	16×30	1.01	1.41
	220	18×25	1.00	1.40
	270	12.5×50	1.26	1.76
	270	16×30	1.18	1.65
	270	18×30	1.16	1.62
	330	12.5×60	1.36	1.90
	330	16×40	1.31	1.83
	330	18×30	1.30	1.82
	390	16×45	1.43	2.00
	390	18×35	1.43	2.00
470	16×50	1.58	2.21	
470	18×40	1.58	2.21	
560	18×45	1.77	2.47	

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L (mm)	Rated Ripple Current (A r.m.s./105°C)	
			120Hz	100kHz
220	100	10×40	0.66	0.924
	120	10×45	0.75	1.05
	120	12.5×30	0.74	1.03
	150	12.5×35	0.86	1.20
	150	16×25	0.80	1.12
	180	12.5×40	0.99	1.38
	180	16×30	0.94	1.31
	220	12.5×50	1.08	1.51
	220	16×30	1.01	1.41
	220	18×25	0.94	1.31
	270	16×35	1.19	1.66
	270	18×30	1.13	1.58
	330	18×35	1.30	1.82
	390	18×40	1.49	2.08
	470	18×45	1.69	2.36
	250	27	8×25	0.30
39		8×30	0.37	0.518
47		8×35	0.45	0.630
47		10×25	0.37	0.518
56		8×40	0.51	0.714
56		10×30	0.42	0.588
68		8×50	0.59	0.826
68		10×35	0.49	0.686
82		10×40	0.61	0.854
82		12.5×25	0.54	0.756
100		10×45	0.68	0.952
100		12.5×30	0.69	0.966
120		10×55	0.73	1.02
120		12.5×35	0.79	1.10
120		16×25	0.74	1.03
150		12.5×40	0.92	1.28
150		16×30	0.89	1.24
180		12.5×50	0.97	1.35
180		16×30	0.95	1.33
180		18×25	0.88	1.23
220	12.5×55	1.13	1.58	
220	16×35	1.11	1.55	
220	18×30	1.10	1.54	
270	16×40	1.27	1.77	
270	18×35	1.23	1.72	
330	16×50	1.48	2.07	
330	18×40	1.42	1.98	
390	18×45	1.59	2.22	
470	18×50	1.83	2.56	

◆STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L (mm)	Rated Ripple Current (A r.m.s./105°C)	
			120Hz	100kHz
350	22	8×30	0.25	0.375
	27	8×35	0.29	0.435
	33	8×40	0.33	0.495
	33	10×25	0.31	0.465
	39	8×45	0.37	0.555
	39	10×30	0.36	0.540
	47	8×60	0.43	0.645
	47	10×35	0.41	0.615
	56	10×40	0.47	0.705
	68	10×55	0.55	0.825
400	12	8×25	0.17	0.255
	15	8×30	0.20	0.300
	18	8×35	0.23	0.345
	22	8×40	0.26	0.390
	22	10×25	0.24	0.360
	27	8×45	0.30	0.450
	27	10×30	0.29	0.435
	33	8×55	0.35	0.525
	33	10×35	0.33	0.495
	39	10×40	0.40	0.600
	39	12.5×25	0.36	0.540
	47	10×45	0.45	0.675
	47	12.5×30	0.44	0.660
	56	10×50	0.52	0.780
	56	12.5×35	0.50	0.750
	68	12.5×40	0.58	0.870
	68	16×25	0.51	0.765
	82	12.5×45	0.65	0.975
	82	16×30	0.61	0.915
	82	18×25	0.61	0.915
	100	12.5×60	0.75	1.12
	100	16×35	0.74	1.11
	100	18×30	0.74	1.11
	120	16×40	0.80	1.20
120	18×35	0.79	1.18	
150	16×50	0.95	1.42	
150	18×40	0.91	1.36	
180	18×45	1.04	1.56	

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L (mm)	Rated Ripple Current (A r.m.s./105°C)	
			120Hz	100kHz
420	12	8×30	0.13	0.195
	15	8×35	0.17	0.255
	18	8×40	0.20	0.300
	22	8×50	0.25	0.375
	33	10×40	0.37	0.555
	39	10×45	0.41	0.615
	39	12.5×30	0.39	0.585
	47	12.5×35	0.45	0.675
	56	12.5×40	0.52	0.780
	56	16×25	0.46	0.690
	68	12.5×45	0.58	0.870
	68	16×30	0.55	0.825
	82	12.5×50	0.66	0.990
	82	16×35	0.63	0.945
	82	18×25	0.56	0.840
	100	16×40	0.73	1.09
	100	18×30	0.67	1.00
	120	18×35	0.77	1.15
	150	18×40	0.90	1.35
	450	12	8×30	0.15
15		8×40	0.19	0.285
18		8×45	0.21	0.315
33		10×40	0.36	0.540
33		12.5×30	0.37	0.555
39		10×50	0.41	0.615
39		12.5×35	0.42	0.630
47		12.5×40	0.48	0.720
47		16×25	0.44	0.660
56		12.5×45	0.53	0.795
56		16×30	0.51	0.765
68		12.5×50	0.62	0.930
68		16×35	0.59	0.885
68		18×25	0.57	0.855
82		16×40	0.68	1.02
82		18×30	0.65	0.975
100		18×35	0.74	1.11
120		18×40	0.83	1.24
150	18×45	0.95	1.42	