

TXW SERIES

UPGRADE

105°C Long Life(7000~10000 hours), Miniaturized

◆FEATURES

- Load Life : 105°C 7000-10000 hours.
- Body diameter of $\phi 6.3$ to $\phi 18$ mm with high ripple current capability.
- RoHS compliance.



◆SPECIFICATIONS

Items	Characteristics																							
Category Temperature Range	-40~+105℃					-25~+105℃																		
Rated Voltage Range	35~100V.DV					160~450V.DC																		
Capacitance Tolerance	±20% (20℃,120Hz)																							
Leakage Current(MAX)	I=0.01CV or 3μA whichever is greater. (After 2minites)					I=3 √CV (After 5 minutes application of rated voltage)																		
	I=(μA) Leakage Current		C=(μF) Rated Capacitance		V=(V) Rated Voltage																			
(tanδ) Dissipation Factor(MAX)	<table><tr><td>Rated Voltage</td><td>35</td><td>50</td><td>63</td><td>80</td><td>100</td><td>160~400</td><td>420~450</td></tr><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>0.2</td><td>0.25</td></tr></table> (20℃,120Hz)								Rated Voltage	35	50	63	80	100	160~400	420~450	tanδ	0.12	0.10	0.09	0.08	0.08	0.2	0.25
Rated Voltage	35	50	63	80	100	160~400	420~450																	
tanδ	0.12	0.10	0.09	0.08	0.08	0.2	0.25																	
Endurance	After life test with rated Ripplle current at conditions stated in the table below, the capacitors shall meet the following requirements.																							
		35~100V.DC			160~450V.DC			Case Size	(hrs) Life Time															
	Capacitance Change	Within ±25% of the initial value.			Within ±20% of the initial value.			φ6.3	7000															
	Dissipation Factor	Not more than 200% of the specified value.						φD≥8	10000															
Leakage Current	Not more than the specified value.																							
Low Temperature Stability Impedance Ration(MAX)																								
	Rated Voltage	35	50	63	80	100	160~250	350~450	(120Hz)															
	Z(-25℃)/Z(20℃)	2	2	2	2	2	3	8																
	Z(-40℃)/Z(20℃)	3	3	3	3	3	—	—																

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient
(35~100WV)

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

(160~450WV)

(Hz) Frequency	60(50)	120	500	1k	10k $\leq$
Coefficient	160~250WV	0.80	1.00	1.20	1.30
	350~450WV	0.80	1.00	1.25	1.40

◆OPTION

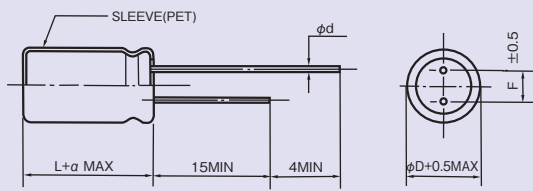
	Code
PET Sleeve	EFC

◆PART NUMBER

	TXW		M			DxL
Rated Voltage	Series	Rated 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	35~100V.DC	2.0			—		
	160~450V.DC	—	2.5				

◆ STANDARD SIZE

Rated Voltage (V.DC)	Rated Capacitance (μF)	Size $\phi D \times L$ (mm)	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 (V.DC)	Rated Capacitance (μF)	Size $\phi D \times L$ (mm)	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 (V.DC)	Rated Capacitance (μF)	Size φD×L (mm)	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 (V.DC)	Rated Capacitance (μF)	Size φD×L (mm)	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	0.420
	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 (V.DC)	Rated Capacitance (μF)	Size φD×L (mm)	Ripple Current (A r.m.s.105℃)	
			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
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
450	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
	12	8×30	0.15	0.225
	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
450	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

A custom design of the follow products is available. Please contact our sales office.

WV	Cap(μF)	Size(mm)	Ripple Current(A r.m.s. / 105℃)		
			120Hz	10kHz	100kHz
450	82	18×30	0.65	1.07	1.11
	100	18×35	0.74	1.28	1.34
	120	18×40	0.93	1.63	1.70
	150	18×41	0.95	1.81	1.90

※Multiplier for Ripple Current is not applicable