

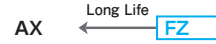
FZ Series

Low Impedance

Long Life



- 105°C 3,000 to 5,000hours
- Solvent proof (within 2 minutes)

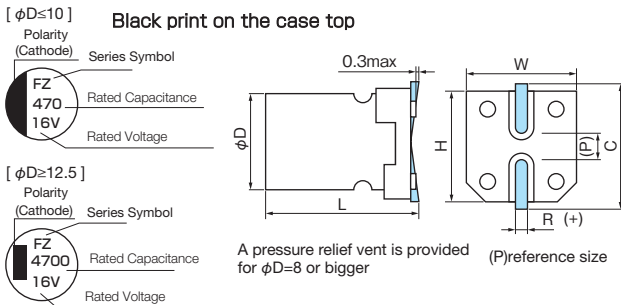


Specifications

Items	Condition	Specifications									
Rated voltage (V)	—	6.3	10	16	25	35	50	63	80	100	
Surge voltage (V)	Room temperature	8.0	13	20	32	44	63	79	100	125	
Category temperature range (°C)	—	-55 to +105									
Capacitance tolerance (%)	120Hz/20°C	M : ±20									
Dissipation Factor (tan δ)	tan δ (max) 120Hz/20°C	φ4 to φ6.3	0.26	0.20	0.18	0.16	0.14	0.12	0.12	0.12	0.12
		φ8 to φ18	0.28	0.22	0.20	0.18	0.16	0.14	0.12	0.12	0.12
Leakage current (LC)	μA/after 2minutes (max)	Exceeding 1,000μF, +0.02 every 1,000μF The greater value of either 0.01CV or 3μA									
Impedance ratio at low temperature	Based on the value at 120Hz, +20°C	-40°C Z/Z _{20°C}	3	3	3	3	3	3	2	2	2
		-55°C Z/Z _{20°C}	4	4	4	3	3	3	3	3	3
Endurance	105°C rated voltage applied (With the rated ripple current)	Test	φ4 to φ6.3, φ10×7.7 and φ8×6.5: 3,000hours, φ8 to φ18: 5,000hours								
		ΔC/C	Within ±30% of the initial value								
		tan δ	Less than 300% of the specified value								
		LC	Less than the specified value								

Marking, Dimensions

(Unit : mm)



D ^{±0.5}	L	W ^{±0.2}	H ^{±0.2}	C ^{±0.2}	R	P ^{±0.2}
4	5.8 ^{±0.4}	4.3	4.3	5.1	0.5 to 0.8	1.0
5	5.8 ^{±0.4}	5.3	5.3	6.1	0.5 to 0.8	1.3
6.3	5.8 ^{±0.4}	6.6	6.6	7.3	0.5 to 0.8	2.2
6.3	7.7 ^{±0.4}	6.6	6.6	7.3	0.5 to 0.8	2.2
8	6.5 ^{±0.5}	8.3	8.3	9.2	0.7 to 1.2	3.1
8	10.5 ^{±0.5}	8.3	8.3	9.2	0.7 to 1.2	3.1
10	7.7 ^{±0.5}	10.3	10.3	11.2	0.7 to 1.2	4.4
10	10.5 ^{±0.5}	10.3	10.3	11.2	0.7 to 1.2	4.4
10	13.5 ^{±0.5}	10.3	10.3	11.2	0.7 to 1.2	4.4
12.5	13.5 ^{±0.5}	13.0	13.0	14.0	1.0 to 1.4	4.4
12.5	16.0 ^{±0.5}	13.0	13.0	14.0	1.0 to 1.4	4.4
16	16.5 ^{±0.5}	17.0	17.0	18.0	1.0 to 1.4	6.4

Ripple Current Frequency Coefficient

Frequency:F(Hz)		100≤F<1k	1k≤F<10k	10k≤F<100k	100k≤F
Capacitance:C(μF)	C≤33	0.35	0.70	0.90	1.00
	33<C≤150	0.40	0.85	0.92	1.00
	150<C	0.60	0.85	0.95	1.00

■ Size, Impedance, Rated Ripple Current

μF \ V	6.3			10			16			25			35		
4.7													4x5.8	1.45	90
10										4x5.8	1.45	90	5x5.8	0.76	170
15							4x5.8	1.45	90	5x5.8	0.76	170	5x5.8	0.76	170
22				4x5.8	1.45	90	5x5.8	0.76	170	5x5.8	0.76	170	5x5.8	0.76	170
27	4x5.8	1.45	90	5x5.8	0.76	170	5x5.8	0.76	170	6.3x5.8	0.44	250	6.3x5.8	0.44	250
33	5x5.8	0.76	170	5x5.8	0.76	170	6.3x5.8	0.44	250	6.3x5.8	0.44	250	6.3x5.8	0.44	250
47	5x5.8	0.76	170	6.3x5.8	0.44	250	6.3x5.8	0.44	250	6.3x5.8	0.44	250	6.3x5.8	0.44	250
56	5x5.8	0.76	170	6.3x5.8	0.44	250	6.3x5.8	0.44	250	6.3x5.8	0.44	250	6.3x7.7	0.34	300
68	6.3x5.8	0.44	250	6.3x5.8	0.44	250	6.3x5.8	0.44	250	6.3x5.8	0.44	250	6.3x7.7	0.34	300
100	5x5.8	0.76	170							6.3x7.7	0.34	300	6.3x7.7	0.34	300
	6.3x5.8	0.44	250	6.3x5.8	0.44	250	6.3x5.8	0.44	250	8x6.5	0.34	300	8x10.5	0.17	600
150	6.3x5.8	0.44	250	6.3x5.8	0.44	250	6.3x7.7	0.34	300	8x10.5	0.17	600	8x10.5	0.17	600
							8x6.5	0.34	300				10x7.7	0.17	600
220	6.3x5.8	0.44	250	6.3x7.7	0.34	300	6.3x7.7	0.34	300	8x10.5	0.17	600	8x10.5	0.17	600
				8x6.5	0.34	300				10x7.7	0.17	600			
330	6.3x7.7	0.30	300	8x10.5	0.17	600	8x10.5	0.17	600	8x10.5	0.17	600	10x10.5	0.090	850
	8x6.5	0.34	300				10x7.7	0.17	600						
470	8x10.5	0.17	600	8x10.5	0.17	600	8x10.5	0.17	600	10x10.5	0.090	850	10x13.5	0.070	950
				10x7.7	0.17	600							12.5x13.5	0.060	1100
680	8x10.5	0.17	600	10x10.5	0.090	850	10x10.5	0.090	850	10x13.5	0.070	950			
	10x7.7	0.17	600							12.5x13.5	0.060	1100	12.5x13.5	0.060	1100
1000							10x13.5	0.070	950				12.5x16.0	0.055	1200
	8x10.5	0.17	600	10x10.5	0.090	850	12.5x13.5	0.060	1100	12.5x13.5	0.060	1100	16x16.5	0.035	1800
1500				10x13.5	0.070	950				12.5x16.0	0.055	1200			
	10x10.5	0.090	850	12.5x13.5	0.060	1100	12.5x13.5	0.060	1100	16x16.5	0.035	1800	16x16.5	0.035	1800
2200	12.5x13.5	0.060	1100	12.5x13.5	0.060	1100	12.5x16.0	0.055	1200	16x16.5	0.035	1800			
2700				12.5x16.0	0.055	1200									
3300	12.5x16.0	0.055	1200	16x16.5	0.050	1450	16x16.5	0.035	1800						
4700	16x16.5	0.050	1800	16x16.5	0.035	1800									
6800	16x16.5	0.035	1800												

μF \ V	50			63			80			100		
4.7	4x5.8	2.90	60	5x5.8	1.90	70				6.3x5.8	3.00	80
10	6.3x5.8	0.88	165	6.3x5.8	1.50	80				6.3x7.7	2.40	120
22	6.3x5.8	0.88	165	6.3x7.7	1.20	120				8x10.5	1.30	130
27	6.3x7.7	0.68	195				10x10.5	0.70	200			
33	6.3x7.7	0.68	195	8x6.5	1.20	120				10x10.5	0.65	200
47	6.3x7.7	0.68	195	10x7.7	0.70	200	10x10.5	0.65	200	12.5x13.5	0.32	500
56	8x10.5	0.34	350	10x10.5	0.50	300						
68	8x10.5	0.34	350				10x13.5	0.45	300	12.5x13.5	0.32	500
100	8x10.5	0.34	350	10x13.5	0.45	300	12.5x13.5	0.32	500	16x16.5	0.17	793
	10x7.7	0.34	330	12.5x13.5	0.16	800						
150	10x10.5	0.18	670	12.5x13.5	0.16	800	12.5x13.5	0.32	500	16x16.5	0.17	793
220	10x10.5	0.18	670	12.5x13.5	0.16	800	12.5x16.0	0.25	600			
330	12.5x13.5	0.12	900	16x16.5	0.082	1410	16x16.5	0.17	793			
470	16x16.5	0.073	1610	16x16.5	0.082	1410						
680	16x16.5	0.073	1610									
1000	16x16.5	0.073	1610									

 Case size: ϕ DxL(mm)

 Impedance(Ω)
 max at 100kHz, 20°C

 Rated ripple current
 mA rms(100kHz, 105°C)