Aluminum Electrolytic Type / Surface Mount Type

RoHS compliance

FZ Series

Low Impedancw

Long Life

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

AX ← Long Life FZ

■ Specifications

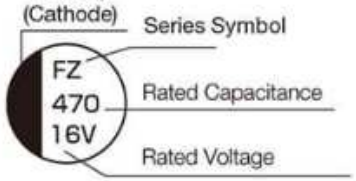
Items	Condition		Specifications								
Rated voltage (V)	–		6.3	10	16	25	35	50	63	80	100
Surge voltage (V)	Room temperature		8.0	13	20	32	44	63	79	100	125
Category temperature range (℃)	–		−55 to +105								
Capacitance tolerance (%)	120Hz/20℃		M : ±20								
Dissipation Factor (tan δ)	tanδ (max) 120Hz/20℃	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
			Exceeding 1,000μF, +0.02 every 1,000μF								
Leakage current (LC)	μA/after 2minutes (max)		The greater value of either 0.01CV or 3μA								
Impedance ratio at low temperature	Based on the value at 120Hz, +20℃	−40℃ $Z/Z_{20℃}$	3	3	3	3	3	3	2	2	2
		−55℃ $Z/Z_{20℃}$	4	4	4	3	3	3	3	3	3
Endurance	105℃ 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								
		△C/C	Within ±30% of the initial value								
		tanδ	Less than 300% of the specified value								
		LC	Less than the specified value								

■ Marking, Dimensions

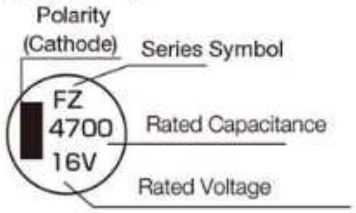
(Unit : mm)

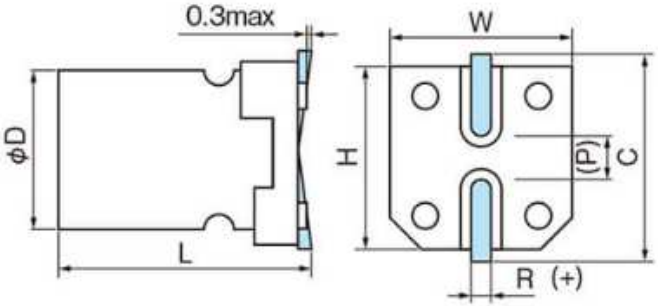
[φD≤10]

Black print on the case top



[φD≥12.5]





A pressure relief vent is provided for φD=8 or bigger

(P)reference size

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													4×5.8	1.45	90
10										4×5.8	1.45	90	5×5.8	0.76	170
15							4×5.8	1.45	90	5×5.8	0.76	170	5×5.8	0.76	170
22				4×5.8	1.45	90	5×5.8	0.76	170	5×5.8	0.76	170	5×5.8	0.76	170
27	4×5.8	1.45	90	5×5.8	0.76	170	5×5.8	0.76	170	6.3×5.8	0.44	250	6.3×5.8	0.44	250
33	5×5.8	0.76	170	5×5.8	0.76	170	6.3×5.8	0.44	250	6.3×5.8	0.44	250	6.3×5.8	0.44	250
47	5×5.8	0.76	170	6.3×5.8	0.44	250	6.3×5.8	0.44	250	6.3×5.8	0.44	250	6.3×5.8	0.44	250
56	5×5.8	0.76	170	6.3×5.8	0.44	250	6.3×5.8	0.44	250	6.3×5.8	0.44	250	6.3×7.7	0.34	300
68	6.3×5.8	0.44	250	6.3×5.8	0.44	250	6.3×5.8	0.44	250	6.3×5.8	0.44	250	6.3×7.7	0.34	300
100	5×5.8	0.76	170							6.3×7.7	0.34	300	6.3×7.7	0.34	300
	6.3×5.8	0.44	250	6.3×5.8	0.44	250	6.3×5.8	0.44	250	8×6.5	0.34	300	8×10.5	0.17	600
150	6.3×5.8	0.44	250	6.3×5.8	0.44	250	6.3×7.7	0.34	300	8×10.5	0.17	600	8×10.5	0.17	600
							8×6.5	0.34	300				10×7.7	0.17	600
220	6.3×5.8	0.44	250	6.3×7.7	0.34	300	6.3×7.7	0.34	300	8×10.5	0.17	600	8×10.5	0.17	600
				8×6.5	0.34	300				10×7.7	0.17	600			
330	6.3×7.7	0.30	300	8×10.5	0.17	600	8×10.5	0.17	600	8×10.5	0.17	600	10×10.5	0.090	850
	8×6.5	0.34	300				10×7.7	0.17	600						
470	8×10.5	0.17	600	8×10.5	0.17	600	8×10.5	0.17	600	10×10.5	0.090	850	10×13.5	0.070	950
				10×7.7	0.17	600							12.5×13.5	0.060	1100
680	8×10.5	0.17	600	10×10.5	0.090	850	10×10.5	0.090	850	10×13.5	0.070	950			
	10×7.7	0.17	600							12.5×13.5	0.060	1100	12.5×13.5	0.060	1100

1000							10×13.5	0.070	950				12.5×16.0	0.055	1200	
	8×10.5	0.17	600	10×10.5	0.090	850	12.5×13.5	0.060	1100	12.5×13.5	0.060	1100	16×16.5	0.035	1800	
1500				10×13.5	0.070	950				12.5×16.0	0.055	1200				
	10×10.5	0.090	850	12.5×13.5	0.060	1100	12.5×13.5	0.060	1100	16×16.5	0.035	1800	16×16.5	0.035	1800	
2200	12.5×13.5	0.060	1100	12.5×13.5	0.060	1100	12.5×16.0	0.055	1200	16×16.5	0.035	1800				
2700				12.5×16.0	0.055	1200										
3300	12.5×16.0	0.055	1200	16×16.5	0.050	1450	16×16.5	0.035	1800							
4700	16×16.5	0.050	1800	16×16.5	0.035	1800										
6800	16×16.5	0.035	1800													

μF \ V	50			63			80			100		
4.7	4×5.8	2.90	60	5×5.8	1.90	70				6.3×5.8	3.00	80
10	6.3×5.8	0.88	165	6.3×5.8	1.50	80				6.3×7.7	2.40	120
22	6.3×5.8	0.88	165	6.3×7.7	1.20	120				8×10.5	1.30	130
27	6.3×7.7	0.68	195				10×10.5	0.70	200			
33	6.3×7.7	0.68	195	8×6.5	1.20	120				10×10.5	0.65	200
47	6.3×7.7	0.68	195	10×7.7	0.70	200	10×10.5	0.65	200	12.5×13.5	0.32	500
56	8×10.5	0.34	350	10×10.5	0.50	300						
68	8×10.5	0.34	350				10×13.5	0.45	300	12.5×13.5	0.32	500
100	8×10.5	0.34	350	10×13.5	0.45	300	12.5×13.5	0.32	500	16×16.5	0.17	793
	10×7.7	0.34	330	12.5×13.5	0.16	800						
150	10×10.5	0.18	670	12.5×13.5	0.16	800	12.5×13.5	0.32	500	16×16.5	0.17	793
220	10×10.5	0.18	670	12.5×13.5	0.16	800	12.5×16.0	0.25	600			
330	12.5×13.5	0.12	900	16×16.5	0.082	1410	16×16.5	0.17	793			
470	16×16.5	0.073	1610	16×16.5	0.082	1410						
680	16×16.5	0.073	1610									
1000	16×16.5	0.073	1610									

Case size: φDxL(mm)

Impedance(Ω)
max at 100kHz, 20℃

Rated ripple current
mArms(100kHz, 105℃)