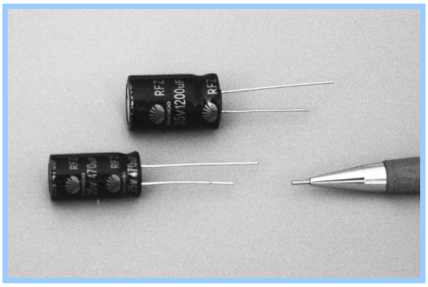
RFZ SERIES

105℃, Long Life, Radial Leads

▣ Features

- Low Impedance, Long life
- Large permissible ripple current
- High reliability continuous operation
- Load life of 4,000 ~ 10,000 hours at 105℃

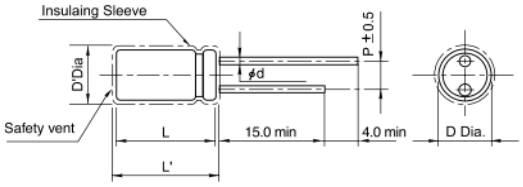


RFX → Long Life → RFZ

▣ Specifications

Item	Performance Characteristics									
Operating temperature range	-40℃ ~ +105℃									
Rated working voltage range	6.3V ~ 100V									
Nominal capacitance range	10 μF ~ 18,000 μF , ±20% (at 20℃, 120Hz)									
D.C Leakage current(at 20℃)	The following specifications shall be satisfied when the rated voltage is applied for the required time.									
	I ≤ 0.01CV or 3μA (2min), Whichever is greater.									
	Where I = Leakage current(μA) C = Nominal capacitance(μF) V = Rated voltage (V)									
Tan δ (max., at 20℃, 120Hz)	W.V	6.3	10	16	25	35	50	63	80	100
	Tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.09	0.08
	When capacitance is over 1,000μF, Tanδ shell be added 0.02 to the listed value with increase of every each 1,000μF.									
Characteristics at low temperature(max.) (impedance ratio at 120Hz)	W.V(V)	6.3	10	16	25	35	50	63	80	100
	Z-25℃/Z+20℃	4	3	2	2	2	2	2	2	2
	Z-40℃/Z+20℃	8	6	4	3	3	3	3	3	3
Load life	After applying rated working voltage for 10,000 hours at +105℃ and then listed being stabilized at +20℃, capacitors shall meet following limits. (Life time : See on the right table →)							Φ (D)	LIFE TIME 6.3~10V	LIFE TIME 16~100V
	Capacitance change	Within ±25% of the initial measured value						5~6.3	4Khr	5Khr
	Tan δ	≤ 200% of the initial specified value						8~10	6Khr	7Khr
	Leakage current	≤ The initial specified value						12.5~	8Khr	10Khr
Shelf life	After storage for 1,000hours at +105℃ with no voltage applied and then being stabilized at +20℃, capacitors shall meet following limits.									
	Capacitance change	Within ±25% of the initial measured value								
	Tan δ	≤ 200% of the initial specified value								
	Leakage current	≤ The initial specified value								

▣ Dimensions



· Standard lead style

Φ D	5.0	6.3	8.0	10.0	12.5	16.0	18.0
P	2.0	2.5	3.5	5.0		7.5	
Φ d	0.5		0.6			0.8	

D' = [D+0.5] Max. L' = [L+1.5] Max. at D≤8.0
L' = [L+2.0] Max. at D≤10.0

▣ Ripple current coefficient

· Frequency

Cap(μF) \ Freq(Hz)	120	1K	10K	100K
Cap≤33	0.42	0.70	0.90	1.0
33≤Cap≤330	0.50	0.73	0.92	1.0
330≤Cap≤1000	0.55	0.77	0.94	1.0
1000≤Cap	0.60	0.80	0.96	1.0

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▣ Dimensions, Ripple current & Impedance

μF \ V	6.3	10	16	25	35	50	63	80	100
10						5 x 11 90 1.80	5 x 11 110 1.30		6.3 x 11 150 0.63
22						6.3 x 11 165 0.85	6.3 x 11 180 0.38		8 x 11.5 290 0.57
33					5 x 11 190 0.60	6.3 x 11 240 0.40	6.3 x 11 245 0.43		8 x 11.5 400 0.31
47			5 x 11 180 0.60	5 x 11 190 0.60	6.3 x 11 265 0.50	6.3 x 11 320 0.36	8 x 11.5 470 0.27		10 x 12.5 450 0.25
56			5 x 11 190 0.59	6.3 x 11 265 0.50	6.3 x 11 300 0.30	8 x 11.5 450 0.31	8 x 11.5 470 0.27	10 x 12.5 420 0.25	10 x 16 530 0.15
100		5 x 11 190 0.65	6.3 x 11 270 0.30	6.3 x 11 300 0.30		8 x 11.5 520 0.28		12.5 x 16 570 0.18	10 x 20 595 0.16
150	5 x 11 190 0.65	6.3 x 11 200 0.35	8 x 11.5 430 0.25	8 x 11.5 530 0.18	8 x 11.5 590 0.16	10 x 12.5 710 0.20		10 x 25 860 0.080	12.5 x 20 1000 0.071
220	5 x 11 210 0.40	6.3 x 11 320 0.30	5 x 11 300 0.27	8 x 16 590 0.16	8 x 16 780 0.10	10 x 16 930 0.10	10 x 25 1200 0.055	12.5 x 20 1000 0.074	12.5 x 25 1050 0.065
330	6.3 x 11 310 0.28		8 x 11.5 610 0.18	8 x 16 780 0.10	10 x 16 1080 0.075	12.5 x 20 1280 0.072	12.5 x 20 1600 0.048	12.5 x 25 1150 0.069	16 x 25 1500 0.042
470		8 x 11.5 600 0.18	8 x 16 800 0.023	10 x 20 1080 0.075	10 x 20 1270 0.060	12.5 x 20 1540 0.056	12.5 x 25 2100 0.040	16 x 25 1600 0.050	16 x 31.5 1720 0.038
680	8 x 11.5 580 0.17	8 x 16 780 0.099	8 x 20 990 0.080	10 x 25 1270 0.060	12.5 x 20 1480 0.057	12.5 x 25 1990 0.050	16 x 25 2300 0.036	16 x 31.5 1750 0.440	18 x 35.5 2000 0.032
820	10 x 12.5 790 0.10			10 x 25 1480 0.057	12.5 x 20 1730 0.043	16 x 20 2030 0.048	16 x 25 2650 0.033	16 x 35.5 1850 0.037	18 x 40 2550 0.030
1,000	8 x 16 760 0.12	10 x 16 1060 0.070	10 x 20 1350 0.051	10 x 25 1730 0.043	12.5 x 25 1750 0.040	16 x 20 2380 0.037	16 x 31.5 2700 0.026	18 x 35.5 2000 0.036	
1,200	10 x 16 1090 0.075	10 x 20 1300 0.052	10 x 25 1600 0.049	12.5 x 31.5 1750 0.040	12.5 x 25 2000 0.037	16 x 25 2820 0.044	16 x 35.5 3100 0.027	18 x 40 2500 0.034	
1,500	10 x 20 1260 0.060	10 x 25 1450 0.045	10 x 30 1780 0.036	12.5 x 31.5 2000 0.037	12.5 x 30 2630 0.030	18 x 25 2970 0.035	18 x 31.5 3200 0.025		
2,200	10 x 25 1500 0.056	12.5 x 20 1850 0.039	12.5 x 25 2010 0.031	12.5 x 25 2630 0.030	16 x 25 2760 0.031	16 x 31.5 3470 0.025	18 x 40 3300 0.023		
2,700	10 x 30 1720 0.041	12.5 x 25 1900 0.036	12.5 x 30 2380 0.028	16 x 12.5 2760 0.031	16 x 31.5 3190 0.026	16 x 35.5 3660 0.021			
3,300	12.5 x 20 1700 0.045	12.5 x 25 2330 0.031	12.5 x 35 2520 0.024	16 x 12.5 3190 0.026	16 x 35.5 3320 0.024	18 x 35.5 3700 0.018			
3,900	12.5 x 25 2000 0.036	12.5 x 30 2530 0.026	16 x 25 2700 0.025	16 x 12.5 3320 0.024	16 x 40 3850 0.019	18 x 40 4020 0.015			
4,700	12.5 x 30 2400 0.033	12.5 x 35 2870 0.023	16 x 31.5 3120 0.020	16 x 12.5 3850 0.019	18 x 40 4010 0.014				
5,600	16 x 20 2280 0.038	16 x 25 2570 0.022	16 x 35.5 3230 0.018	18 x 12.5 4010 0.014					
6,800	16 x 25 2650 0.030	16 x 31.5 3040 0.019	16 x 40 3650 0.015						
8,200	16 x 31.5 3110 0.026	16 x 35.5 3270 0.017	18 x 35.5 3940 0.016						
10,000	16 x 35.5 3240 0.025	16 x 40 3550 0.015	18 x 40 4000 0.014						
12,000	16 x 40 3650 0.021	18 x 40 3820 0.014							
15,000	18 x 35.5 3700 0.020								
18,000	18 x 40 3740 0.017	**Case size : ΦD x L(mm)** **Maximum permissible ripple current[mA(rms) at 105℃, 100㎑]** **Impedance(Z) [Ω max. / 20℃ , 100㎑]**							