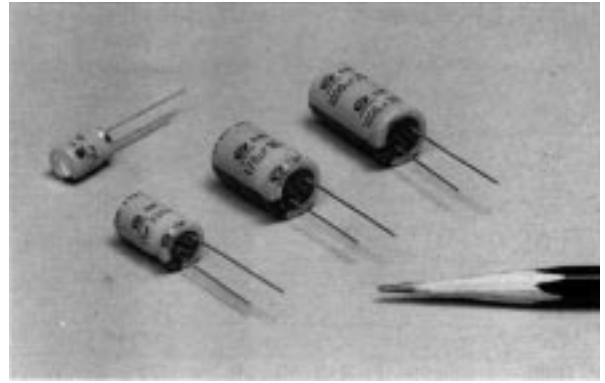


Features

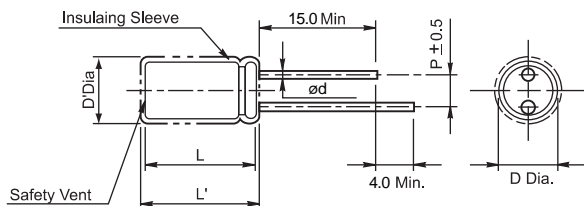
- Miniature, Radial (Smaller than RSF)
- Low impedance value at high frequency
- High performance and reliability
- Load life of 2000 hours at 105°C
- Possible cleaning by Freon TE, TES, TMS (5 min)



Specifications

Item	Performance Characteristics							
Operating temperature range	-55°C ~ +105°C							
Rated working voltage range	6.3V ~ 63V							
Nominal capacitance range	0.47μF ~ 6800μF, ±20% (at 20°C, 120Hz)							
D.C Leakage current(at 20°C)	The following specifications shall be satisfied when the rated voltage is applied for the required time. $I \leq 0.01CV$ (2 min) Where I=Leakage current(μA) C=Nominal capacitance(μF) V=Rated voltage(V)							
Tan δ(max., at 20°C, 120Hz)	W.V(V)	6.3	10	16	25	35	50	63
	Tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.08
When capacitance is over 1000μF, Tan δ shall be added 0.02 to the listed value with increase of every each 1000μF.								
Characteristics at low temperature(max.) (impedance ratio at 120Hz)	W.V(V)	6.3~10		16		25~63		
	Z-55°C/Z20°C	3		2		2		
Load life	After applying rated working voltage for 2000 hours at +105°C and then being stabilized at +20°C, capacitors shall meet following limits.(5, 6.3, 8ø: 1000 Hours)							
	Capacitance change	Within ± 20% of initial measured value						
	Tan δ	≤ 200% of initial specified value						
	Leakage current	≤ Initial specified value						
Shelf life	After storage for 1000 hours at +105°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet following limits.							
	Capacitance change	Within ± 20% of initial measured value						
	Tan δ	≤ 150% of initial specified value						
	Leakage current	≤ 200% of initial specified value						

Case sizes and Dimensions



Standard lead style

øD	5.0	6.3	8.0	10.0	13.0	16.0
P	2.0	2.5	3.5	5.0		7.5
ød	0.5		0.6			0.8

D' = [D+0.5]Max.

L' = [L+1.0]Max. at D≤8.0

L' = [L+1.5]Max.

Ripple current coefficient

Frequency

W.V	Freq(Hz)	50	120	300	1K	10K~100K
6.3~16V		0.54	0.70	0.85	0.95	1
25~35V		0.43	0.57	0.73	0.88	1
50~63V		0.39	0.55	0.71	0.86	1

Temperature

Temperature	≤ 45°C	65°C	85°C	105°C
Factor	2.4	2.2	1.7	1.0



Standard ratings [Dimensions, Impedance, Ripple Current]

øD x L(mm)

W.V(V) Cap(µF)	6.3(0J)			10(1A)			16(1C)			25(1E)		
	SIZE	Z	I _R	SIZE	Z	I _R	SIZE	Z	I _R	SIZE	Z	I _R
33										5x11	1.67	180
47							5x11	1.40	178	6.3x11	1.25	228
68				5x11	1.72	152	6.3x11	0.98	192	6.3x11	0.78	235
100	5x11	1.8	163	6.3x11	1.20	217	6.3x11	0.77	225	8x11.5	0.55	310
150	6.3x11	1.05	225	6.3x11	0.85	277	8x11.5	0.53	337	10x12.5	0.44	440
220	6.3x11	0.75	300	8x11.5	0.56	365	10x12.5	0.37	485	10x16	0.26	620
330	8x11.5	0.48	395	10x12.5	0.38	521	10x16	0.24	670	10x20	0.21	810
470	10x12.5	0.32	580	10x16	0.25	690	10x20	0.22	850	10x20	0.14	1010
680	10x16	0.24	750	10x20	0.17	955	10x20	0.14	1080	13x20	0.13	1295
1000	10x20	0.18	795	10x20	0.14	980	13x20	0.086	1150	13x25	0.071	1410
1500	10x20	0.14	920	13x20	0.087	1100	13x25	0.072	1395	16x25	0.063	1650
2200	13x20	0.089	1170	13x25	0.073	1390	16x25	0.064	1680	16x31.5	0.053	2020
3300	13x25	0.075	1500	16x25	0.065	1750	16x31.5	0.053	1970	16x35.5	0.045	2480
4700	16x25	0.066	1820	16x31.5	0.054	2100	16x35.5	0.046	2550			
6800	16x31.5	0.055	2150	16x35.5	0.046	2550						

W.V(V) Cap(µF)	35(1V)			50(1H)			63(1J)		
	SIZE	Z	I _R	SIZE	Z	I _R	SIZE	Z	I _R
0.47							5x11	28	20
0.68							5x11	25	30
1.0				5x11	20.0	38	5x11	20	38
1.5				5x11	14.0	51	5x11	14	51
2.2				5x11	9.0	64	5x11	9.0	64
3.3				5x11	6.5	78	5x11	6.5	78
4.7				5x11	5.0	90	5x11	5.0	90
6.8				5x11	3.2	110	5x11	3.2	110
10				5x11	2.2	128	5x11	2.2	128
15				5x11	1.4	160	6.3x11	1.4	165
22	5x11	1.60	159	6.3x11	1.0	210	6.3x11	1.0	220
33	6.3x11	0.95	211	6.3x11	0.66	270	8x11.5	0.50	285
47	6.3x11	0.77	270	8x11.5	0.50	388	10x12.5	0.25	400
68	8x11.5	0.55	300	10x12.5	0.25	420	10x16	0.20	450
100	10x12.5	0.32	405	10x16	0.20	530	10x20	0.13	560
150	10x16	0.25	540	10x20	0.13	750	10x20	0.11	775
220	10x20	0.20	710	10x20	0.11	925	13x20	0.081	980
330	10x20	0.14	920	13x20	0.081	1250	13x25	0.068	1295
470	13x20	0.083	1250	13x25	0.068	1700	16x25	0.060	1780
680	13x25	0.070	1670	16x25	0.060	2190	16x31.5	0.050	2220
1000	16x25	0.063	1700	16x31.5	0.050	2270	16x35.5	0.048	2330
1500	16x31.5	0.052	2010	16x35.5	0.048	2490			
2200	16x31.5	0.044	2350						

I_r: Maximum permissible ripple current[mA(rms) at 105°C,100KHz]

Z: Max. Impedance[Ω at 20°C,100KHz]

PERFORMANCE CURVES

———— 10V-1,000 μ F
 - - - - - 16V-2,200 μ F

