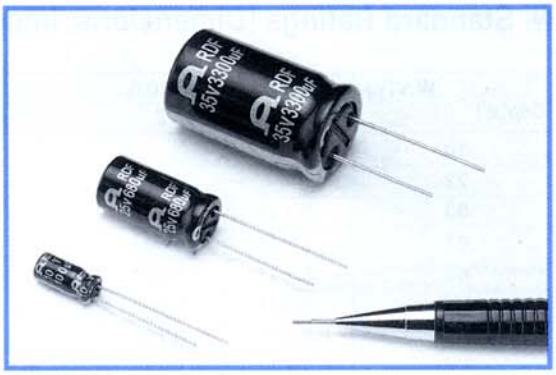
DAEWOO
DAEWOO ELECTRONIC COMPONENTS COMPANY, LIMITED

RDF SERIES

Low Z, Microminiature, Radial Leads

Features

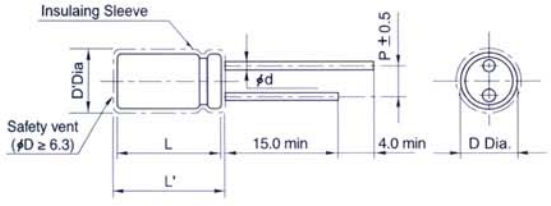
- Microminiature, Radial(Smaller than RMF)
- Low ESR, Low impedance
- Large permissible ripple current
- Load life of 2000 hours at 105°C
- Possible cleaning by Freon TE, TES, TMS(5min)



Specifications

Item	Performance Characteristics						
Operating temperature range	−55°C ~ +105°C						
Rated working voltage range	6.3V ~ 50V						
Nominal capacitance range	2.2μF ~ 10000μF, ±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 ≤ 0.03CV(1 min) or 4μA, whichever is greater I ≤ 0.01CV(2 min) or 3μA, whichever is greater 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
	Tan δ	0.22	0.19	0.16	0.14	0.12	0.10
	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		25~50	
	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. (φ5, φ6, φ8 : 1000 hours)						
	Capacitance change	Within ± 20% of the initial measured value					
	Tan δ	≤ 200% of the initial specified value					
	Leakage current	≤ The 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 the initial measured value					
	Tan δ	≤ 150% of the initial specified value					
	Leakage current	≤ 200% of the initial specified value					

Dimensions



• Standard lead style

φD	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	
φd	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. at D≥10.0

Ripple current coefficient

• Frequency

W.V(V) \ Freq(Hz)	50	120	300	1K	10~100K
6.3~16	0.54	0.70	0.85	0.95	1.0
25~35	0.43	0.57	0.73	0.88	1.0
50	0.39	0.55	0.71	0.86	1.0

• Temperature

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

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▣ Standard Ratings [Dimensions, Impedance, Ripple Current]

φ D x L(mm)

W.V(V) / Cap(μF)	6.3(0J)			10(1A)			16(1C)		
	SIZE	Z	I_R	SIZE	Z	I_R	SIZE	Z	I_R
10							5 x 11	2.20	70
22				5 x 11	1.60	97	5 x 11	1.60	108
33	5 x 11	1.60	107	5 x 11	1.60	120	5 x 11	1.60	127
47	5 x 11	1.60	129	5 x 11	1.60	140	5 x 11	1.60	168
68	5 x 11	1.60	148	5 x 11	1.60	160	5 x 11	1.60	189
100	5 x 11	1.60	172	5 x 11	1.60	189	6.3 x 11	0.78	238
220	6.3 x 11	0.78	290	6.3 x 11	0.78	324	8 x 11.5	0.38	415
330	6.3 x 11	0.78	355	8 x 11.5	0.38	465	8 x 11.5	0.38	508
470	8 x 11.5	0.38	504	8 x 11.5	0.38	556	10 x 12.5	0.30	704
680	10 x 12.5	0.30	650	10 x 16	0.22	750	10 x 16	0.22	926
1000	10 x 12.5	0.30	850	10 x 16	0.22	820	10 x 20	0.16	1225
2200	12.5 x 20	0.12	1140	12.5 x 20	0.12	1238	12.5 x 25	0.080	1435
3300	12.5 x 20	0.080	1330	12.5 x 25	0.080	1560	16 x 25	0.070	1830
4700	16 x 25	0.070	1840	16 x 25	0.070	1996			
6800	16 x 25	0.055	2050	16 x 31.5	0.055	2370			
10000	16 x 31.5	0.050	2468						

W.V(V) / Cap(μF)	25(1E)			35(1V)			50(1H)		
	SIZE	Z	I_R	SIZE	Z	I_R	SIZE	Z	I_R
2.2							5 x 11	5.00	63
3.3							5 x 11	4.30	77
4.7	5 x 11	4.0	62	5 x 11	3.80	87	5 x 11	3.80	92
6.8	5 x 11	3.2	70	5 x 11	3.20	106	5 x 11	3.20	110
10	5 x 11	2.2	80	5 x 11	2.20	125	5 x 11	2.20	135
22	5 x 11	1.6	114	5 x 11	1.60	159	5 x 11	1.60	172
33	5 x 11	1.6	156	5 x 11	1.60	178	6.3 x 11	0.78	220
47	5 x 11	1.6	188	6.3 x 11	0.78	230	6.3 x 11	0.78	264
68	6.3 x 11	0.78	216	6.3 x 11	0.78	273	8 x 11.5	0.38	375
100	6.3 x 11	0.78	262	8 x 11.5	0.38	328	8 x 11.5	0.38	378
220	8 x 11.5	0.38	457	10 x 12.5	0.30	564	10 x 16	0.22	715
330	10 x 12.5	0.30	652	10 x 16	0.22	756	10 x 20	0.16	1030
470	10 x 16	0.22	850	10 x 20	0.16	985	12.5 x 20	0.12	1335
680	10 x 20	0.18	950	12.5 x 20	0.12	1125	12.5 x 25	0.080	1696
1000	12.5 x 20	0.12	1145	12.5 x 25	0.080	1367	16 x 25	0.070	1750
2200	16 x 25	0.070	1704	16 x 31.5	0.055	1945			
3300	16 x 31.5	0.055	2130	18 x 35.5	0.050	2485			

I_R : Maximum permissible ripple current[mA(rms) at 105°C,100KHz]
Z : Max. Impedance[Ω at 20°C,100KHz]