

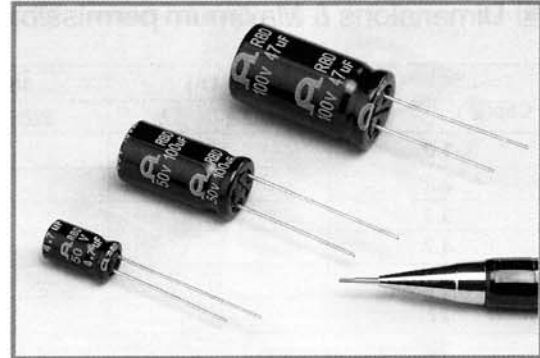


RBD SERIES

Bi-Polar, Standard, Radial Leads

Features

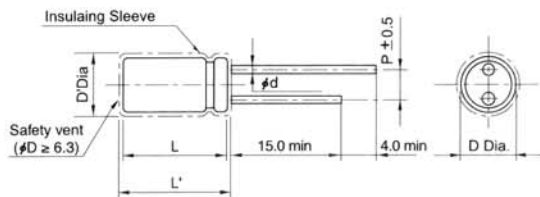
- Bi-polar, Standard, radial leads
- Ideal for inconsistent polarity circuits
- For the compaction of equipment
- Load life of 2000 hours at 85°C



Specifications

Item	Performance Characteristics											
Operating temperature range	-40°C ~ +85°C											
Rated working voltage range	6.3V ~ 250V											
Nominal capacitance range	0.47 μF ~ 6800 μF, ±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. $I \leq 0.03CV + 3\mu A(5 \text{ min})$ 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	100	160	200	250
	Tan δ	0.25	0.24	0.20	0.20	0.16	0.14	0.12	0.12	0.15	0.20	0.20
When capacitance is over 1000 μF, Tan δ shall be added 0.02 to the listed value with increase of every each 1000 μF												
Characteristics at low temperature(max.) (impedance ratio at 120Hz)	W.V(V)	6.3	10	16	25	35	50	63	100	160	200	250
	Z-25°C/+20°C	4	3	2	2	2	2	2	2	3	3	3
	Z-40°C/+20°C	10	8	6	4	4	4	4	4	5	5	5
Load life	After applying rated working voltage for 2000 hrs at +85°C and then being stabilized at +20°C, During this test, the rated voltage shall be reversed on the capacitor every 250hrs, capacitors shall meet following limits.											
	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 hrs at +85°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	≤ 200% 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

Cap(μF) \ Freq(Hz)	50	120	300	1K	10K	50~100K
Cap ≤ 10	0.72	1.0	1.25	1.45	1.65	1.70
10 < Cap ≤ 100	0.75	1.0	1.19	1.36	1.53	1.57
100 < Cap ≤ 1000	0.79	1.0	1.15	1.30	1.45	1.49
1000 < Cap	0.81	1.0	1.12	1.21	1.28	1.33

Temperature

Temperature	≤ 45°C	60°C	70°C	85°C
Factor	1.4	1.25	1.15	1.0

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■ Dimensions & Maximum permissible ripple current [mA(rms) at 85°C, 120Hz]

φ D x L(mm)

Cap(μF)	W.V	6.3(0J)		10(1A)		16(1C)		25(1E)		35(1V)		50(1H)	
		SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r
0.47												5x11	10
1.0												5x11	16
2.2												5x11	23
3.3												5x11	27
4.7										5x11	34	5x11	31
10						5x11	42	5x11	42	5x11	43	6.3x11	50
22				5x11	58	5x11	58	6.3x11	60	6.3x11	70	8x11.5	80
33		5x11	66	5x11	67	5x11	70	6.3x11	75	8x11.5	88	8x11.5	96
47		5x11	77	5x11	77	6.3x11	90	6.3x11	95	8x11.5	105	10x12.5	135
100		6.3x11	125	6.3x11	125	8x11.5	150	8x11.5	165	10x16	190	10x20	250
220		8x11.5	210	8x11.5	210	10x12.5	250	10x16	285	12.5x20	370	12.5x25	440
330		10x12.5	270	10x12.5	330	10x16	350	10x20	390	12.5x20	480	16x25	610
470		10x12.5	360	10x16	410	10x20	460	12.5x20	510	12.5x25	610	16x31.5	800
1000		10x20	640	12.5x25	720	12.5x25	810	16x25	870	16x31.5	1040		
2200		12.5x25	1050	16x25	1170	16x31.5	1420	18x35.5	1580				
3300		16x25	1470	16x31.5	1600	18x35.5	1780						
4700		16x31.5	1890	18x35.5	1960								
6800		18x35.5	2460										

Cap(μF)	W.V	63(1J)		100(2A)		160(2C)		200(2D)		250(2E)	
		SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r
0.47				5x11	12						
1.0				5x11	19						
2.2				6.3x11	26						
3.3		5x11	28	6.3x11	33	10x16	49	10x16	42	10x20	46
4.7		6.3x11	32	6.3x11	42	10x16	59	10x20	55	10x20	56
10		6.3x11	55	8x11.5	70	12.5x20	109	12.5x20	95	12.5x20	140
22		8x11.5	90	10x16	120	12.5x25	177	16x25	170	16x25	186
33		10x12.5	120	10x20	180	16x25	240	16x31.5	239	16x35.5	257
47		10x16	160	12.5x20	210	16x35.5	329	18x35.5	321	18x40	324
100		12.5x20	300	16x25	370						
220		16x25	540	16x35.5	730						
330		16x31.5	630	18x40	990						
470		18x35.5	900								
1000											

I_r: Maximum permissible ripple current[mA(rms) at 85°C, 120Hz]

Bi-polar