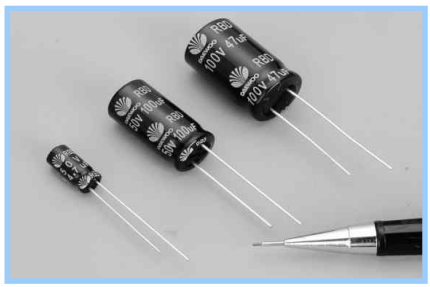
RBD SERIES

85℃, Bi-Polar, Radial Leads

▣ Features

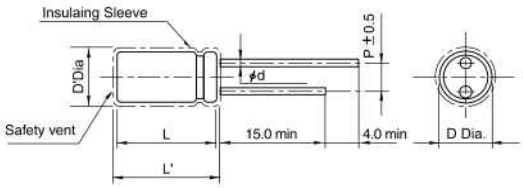
- **Bi-Polar, Standard**
- **Ideal for inconsistent polarity circuits**
- **For digital household appliances**
- **Load life of 1,000 hours at 85℃**



▣ Specifications

Item	Performance Characteristics									
Operating temperature range	-40℃ ~ +85℃									
Rated working voltage range	6.3V ~ 250V									
Nominal capacitance range	3.3 μF ~ 6,800 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 ≤ 0.03CV + 3μA (5min)									
	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	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
	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	50~100	160	200~250	
	Z-25℃/+20℃	4	3	2	2	2	2	3	3	
	Z-40℃/+20℃	10	8	6	4	4	4	5	5	
Load life	After applying rated working voltage for 1,000hours at +85℃ and then being stabilized at +20℃, during this test, the 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 1,000hours at + 85℃ with no voltage applied and then being stabilized at +20℃, 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%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+1.5] Max. at D≤8.0
L′ = [L+2.0] Max. at D≤10.0

▣ Ripple current coefficient

・Frequency

Cap(μF) \ Freq(Hz)	50	120	400	1K	10K	50~100K
Cap≤10	0.8	1.0	1.30	1.45	1.65	1.70
10≤Cap≤100	0.8	1.0	1.23	1.36	1.48	1.53
100≤Cap≤1000	0.8	1.0	1.16	1.25	1.35	1.38
1000≤Cap	0.8	1.0	1.11	1.17	1.25	1.28

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▣ Dimensions & Maximum permissible ripple current

μF \ V	6.3	10	16	25	35	50	63	100	160	200	250
3.3						5 x 11 27	5 x 11 28	6.3 x 11 42			10 x 20 46
4.7					5 x 11 34	5 x 11 31	6.3 x 11 32	6.3 x 11 42	10 x 16 59	10 x 20 55	10 x 20 56
10			5 x 11 42	5 x 11 42	5 x 11 43	6.3 x 11 50	6.3 x 11 55	8 x 11.5 70	12.5 x 20 109	12.5 x 20 95	12.5 x 20 140
22		5 x 11 58	5 x 11 58	6.3 x 11 60	6.3 x 11 70	8 x 11.5 80	8 x 11.5 90	10 x 16 120	12.5 x 25 177	16 x 25 170	16 x 25 186
33	5 x 11 66	5 x 11 67	5 x 11 70	6.3 x 11 73	8 x 11.5 88	8 x 96 115	10 x 12.5 120	10 x 20 180	16 x 25 240	16 x 31.5 239	16 x 35.5 257
47	5 x 11 77	5 x 11 77	6.3 x 11 90	6.3 x 11 95	8 x 11.5 105	10 x 12.5 135	10 x 16 160	12.5 x 20 210	16 x 35.5 329	18 x 35.5 321	18 x 40 324
100	6.3 x 11 125	6.3 x 11 125	8 x 11.5 150	8 x 11.5 165	10 x 16 190	10 x 20 250	12.5 x 20 300	16 x 25 370	18 x 31.5 420	18 x 40 470	
220	8 x 11.5 210	8 x 11.5 210	10 x 12.5 250	10 x 16 285	12.5 x 20 370	12.5 x 25 440	16 x 25 540	16 x 35.5 730			
330	10 x 12.5 270	10 x 12.5 330	10 x 16 350	10 x 20 390	12.5 x 20 480	16 x 25 610	16 x 31.5 630	18 x 40 990			
470	10 x 12.5 360	10 x 16 410	10 x 20 460	12.5 x 20 510	12.5 x 25 610	16 x 31.5 810	18 x 35.5 900				
1,000	10 x 20 640	12.5 x 25 720	12.5 x 25 810	16 x 25 870	16 x 31.5 1040	18 x 35.5 1340	18 x 40 1380				
2,200	12.5 x 25 1050	16 x 25 1170	16 x 31.5 1420	18 x 35.5 1580	18 x 40 1720						
3,300	16 x 25 1470	16 x 31.5 1600	18 x 35.5 1780	18 x 40 2000							
4,700	16 x 31.5 1890	18 x 35.5 1960									
6,800	18 x 35.5 2460	18 x 40 2730	Case size : ΦD x L(mm) Maximum permissible ripple current[mA(rms) at 85℃, 120㎐]								