

RBD SERIES

ALUMINUM ELECTROLYTIC CAPACITORS

Bi-Polar, Subminiature, Radial Leads

Features

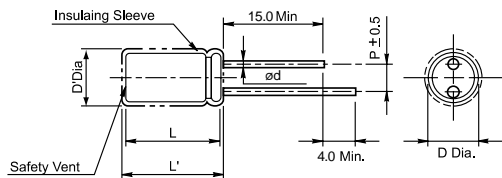
- Bi-polar, subminiature, radial leads
- Ideal for inconsistent polarity circuits
- For the compaction of equipment
- load life of 1000 hours at 85°C



Specifications

Item	Performance Characteristics								
Operating temperature range	-40°C ~ +85°C								
Rated working voltage range	6.3V ~ 100V								
Nominal capacitance range	0.47μF ~ 6800μF, ±20% (at 20°C, 120μA)								
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
	δ								
when capacitance is over 1000μF, δtan 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	35	50	63	100
	Z-25°C/Z20°C	4	3	2	2	2	2	2	2
	Z-40°C/Z20°C		8	6		4	4	3	3
Load life	After applying rated working voltage for 1000 hours at +85°C with the polarity inverted every 250 hours and then being stabilized at +20°C, capacitors shall meet following limits.								
	Capacitance change	Within ±20% of initial measured value							
	Tan	≤ 200% of initial specified value							
Shelf life	Leakage current ≤ Initial specified value								
	After storage for 500 hours at +85°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	≤ 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	18.0
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. at D ≥ 10.0

Ripple current coefficient

Frequency

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

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]

∅D x L (mm)

Cap(μF)	W.V	6.3		10		16		25	
		SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R
10						5x11	42	5x11	42
22				5x11	58	5x11	58	6.3x11	60
33		5x11	66	5x11	67	5x11	70	6.3x11	75
47		5x11	77	5x11	77	6.3x11	90	6.3x11	95
100		6.3x11	125	6.3x11	125	8x11.5	150	8x11.5	165
220		8x11.5	210	8x11.5	210	10x12.5	250	10x16	285
330		10x12.5	270	10x12.5	330	10x16	350	10x20	390
470		10x12.5	360	10x16	410	10x20	460	13x20	510
1000		10x20	640	13x20	720	13x25	810	16x25	870
2200		13x25	105	16x25	117	16x31.5	142	18x35.5	158
3300		16x25	0	16x31.5	0	18x35.5	0		0
4700		16x31.5	147	18x35.5	160		178		
		18x35.5	0		0		0		

Cap(μF)	W.V	35		50		63		100	
		SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R
0.47				5x11	10			5x11	12
1.0				5x11	16			5x11	19
2.2				5x11	23			6.3x1	26
3.3				5x11	27	5x11	28	1	33
4.7		5x11	34	5x11	31	6.3x1	32	6.3x1	42
10		5x11	43	6.3x1	50	1	55	1	70
22		6.3x11	70	1	80	6.3x1	90	6.3x1	120
33		8x11.5	88	8x11.5	96	1	12	1	180
47		8x11.5	105	8x11.5	13	8x11.5	0		210
100		10x16	190	10x12.5	5	10x12.5	16	8x11.5	370
220		13x20	370	10x20	25	10x16	0	10x16	630
330		13x20	480	13x25	0	13x20	30	10x20	
470		13x25	610	16x25	44	16x25	0	13x20	
1000		16x31.5	104	16x31.5		16x31.5	54	16x25	