

RB (CD287B)

Features

- High reliability high temperature.
- Endurance: +130°C 2000 to 5000 hours.
- RoHS Compliant.

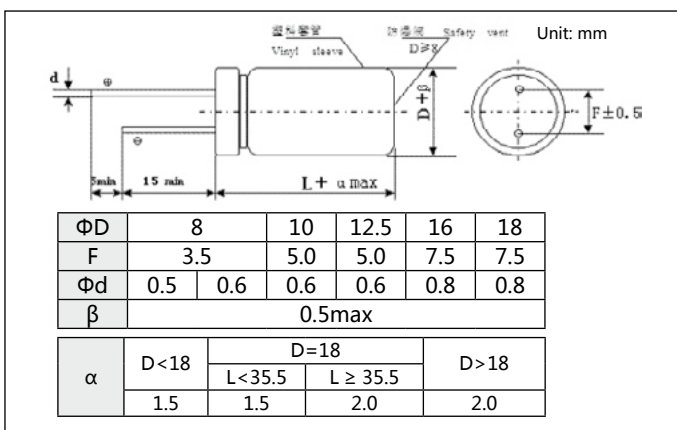


Specifications

Item	Performance Characteristics																							
Operating Temperature Range	-40~+130°C																							
Rated Voltage Range	10~100V																							
Nominal Capacitance Range	1~4700µF																							
Capacitance Tolerance	±20%(+20°C, 120Hz)																							
Leakage Current	$I \leq 0.01CV$ or $3\mu A$ (after 2 minutes at 20°C application of rated voltage)																							
Dissipation Factor ($tg\delta$, +20°C, 120Hz)	<table border="1"> <tr> <td>$U_R(V)$</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>$tg\delta$</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> </tr> </table>	$U_R(V)$	10	16	25	35	50	63	100	$tg\delta$	0.20	0.16	0.14	0.12	0.10	0.09	0.08							
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Temperature Characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>$U_R(V)$</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Z-25°C / +20°C</td> <td>3</td> <td colspan="3"></td> <td colspan="3">2</td> </tr> <tr> <td>Z-40°C / +20°C</td> <td>6</td> <td>4</td> <td colspan="4">3</td> </tr> </table>	$U_R(V)$	10	16	25	35	50	63	100	Z-25°C / +20°C	3				2			Z-40°C / +20°C	6	4	3			
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Z-25°C / +20°C	3				2																			
Z-40°C / +20°C	6	4	3																					
Load Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied at 130°C .</p> <p>Capacitance change : ±30% of the initial measured value</p> <p>Leakage current : ≤ the initial specified value</p> <p>Dissipation factor : ≤ 300% of the initial specified value</p>																							
	<table border="1"> <thead> <tr> <th>Case Size</th> <th>Life Time(hrs)</th> </tr> </thead> <tbody> <tr> <td>ΦD=8</td> <td>2000</td> </tr> <tr> <td>ΦD=10</td> <td>3000</td> </tr> <tr> <td>ΦD ≥ 12.5</td> <td>5000</td> </tr> </tbody> </table>	Case Size	Life Time(hrs)	ΦD=8	2000	ΦD=10	3000	ΦD ≥ 12.5	5000															
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ΦD=8	2000																							
ΦD=10	3000																							
ΦD ≥ 12.5	5000																							
Shelf Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 130°C without voltage applied.</p> <p>Capacitance change : ±30% of the initial measured value</p> <p>Leakage current : ≤ 500% of the initial specified value</p> <p>Dissipation factor : ≤ 300% of the initial specified value</p>																							

LED & Low Impedance

Diagram of Dimensions



Multiplier for Ripple Current

Frequency coefficient

Frequency Cap(µF)	50/60Hz	120Hz	1KHz	10KHz	100KHz
Cap < 10	0.35	0.42	0.60	0.80	1.00
10 ≤ Cap < 47	0.45	0.55	0.75	0.90	1.00
47 ≤ Cap < 470	0.60	0.70	0.85	0.95	1.00
470 ≤ Cap < 2200	0.65	0.75	0.90	0.98	1.00
Cap ≥ 2200	0.75	0.80	0.95	1.00	1.00

Standard Size

Rated Voltage (V _{dc})	Capacitance (μF)	Size ΦD×L (mm)	tanδ	Rated ripple current (mArms) 130°C/100KHz
10 (13) 1A	330	8×11.5	0.20	360
	470	10×12.5	0.20	620
	1000	10×20	0.20	960
	2200	12.5×25	0.22	1430
	3300	16×25	0.24	1900
	4700	16×30	0.26	2300
16 (20) 1C	330	8×11.5	0.16	360
	470	10×12.5	0.16	620
	1000	10×20	0.16	960
	2200	12.5×25	0.18	1430
	3300	16×30	0.20	2300
	4700	16×35	0.22	2550
25 (32) 1E	220	8×11.5	0.14	360
	330	10×12.5	0.14	620
	470	10×16	0.14	800
	1000	12.5×20	0.14	1100
	2200	16×30	0.16	2300
	3300	16×35	0.18	2550
35 (44) 1V	100	8×11.5	0.12	360
	220	10×12.5	0.12	620
	330	10×16	0.12	800
	470	10×20	0.12	960
	1000	12.5×25	0.12	1430
	2200	16×35	0.14	2550
	3300	18×35	0.16	2800

Rated Voltage (V _{dc})	Capacitance (μF)	Size ΦD×L (mm)	tanδ	Rated ripple current (mArms) 130°C/100KHz
50 (63) 1H	1	8×11.5	0.10	35
	2.2	8×11.5	0.10	50
	3.3	8×11.5	0.10	70
	4.7	8×11.5	0.10	100
	10	8×11.5	0.10	200
	22	8×11.5	0.10	260
	33	8×11.5	0.10	300
	47	8×11.5	0.10	300
	100	10×12.5	0.10	520
	220	10×20	0.10	890
	330	12.5×20	0.10	1000
63 (79) 1J	470	12.5×25	0.10	1200
	1000	16×30	0.10	2180
	2200	18×40	0.12	2800
	33	8×11.5	0.09	250
	47	10×12.5	0.09	400
	100	10×16	0.09	450
	220	12.5×20	0.09	820
	330	12.5×25	0.09	1000
	470	16×25	0.09	1500
	1000	16×30	0.09	1850
	1500	18×40	0.09	2350
100 (125) 2A	4.7	8×11.5	0.08	100
	10	8×11.5	0.08	200
	22	8×11.5	0.08	220
	33	10×12.5	0.08	260
	47	10×16	0.08	330
	100	12.5×20	0.08	670
	220	16×25	0.08	1100
	330	16×30	0.08	1300
	470	18×30	0.08	1600

LED & Low Impedance