



RXB Series

Features

- 105°C, 5,000 hours assured
- Suitable for switching power supplies, UPS, Ballast
- Smaller size with large permissible ripple current
- RoHS Compliance

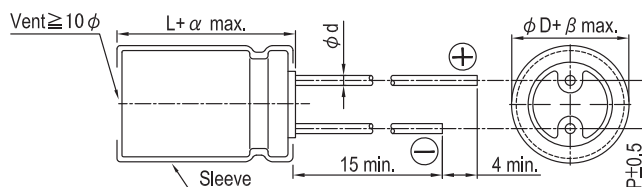


Sleeve & Marking Color: Brown & White

Specifications

Items	Performance																																		
Category Temperature Range	160 ~ 400V				450V																														
	-40℃ ~ +105℃				-25℃ ~ +105℃																														
Capacitance Tolerance	±20% (at 120Hz, 20℃)																																		
Leakage Current (at 20℃)	<table><tr><td>Time</td><td colspan="6">after 5 minutes</td></tr><tr><td>Leakage Current</td><td colspan="3">CV ≤ 1,000 I = 0.03CV(μA)</td><td colspan="3">CV > 1,000 I = 0.02CV(μA)</td></tr></table> Where, C = rated capacitance in μF V = rated DC working voltage in V							Time	after 5 minutes						Leakage Current	CV ≤ 1,000 I = 0.03CV(μA)			CV > 1,000 I = 0.02CV(μA)																
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Tanδ (at 120Hz, 20℃)	<table><tr><td>Rated Voltage</td><td>160</td><td>200</td><td>250</td><td>350</td><td>400</td><td>450</td></tr><tr><td>Tanδ (max)</td><td>0.20</td><td>0.20</td><td>0.20</td><td>0.24</td><td>0.24</td><td>0.24</td></tr></table>							Rated Voltage	160	200	250	350	400	450	Tanδ (max)	0.20	0.20	0.20	0.24	0.24	0.24														
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Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below. <table><tr><td colspan="2">Rated Voltage</td><td>160</td><td>200</td><td>250</td><td>350</td><td>400</td><td>450</td></tr><tr><td rowspan="2">Impedance Ratio</td><td>Z(-25℃) /Z(+20℃)</td><td>3</td><td>3</td><td>3</td><td>3</td><td>5</td><td>6</td></tr><tr><td>Z(-40℃) /Z(+20℃)</td><td>4</td><td>4</td><td>4</td><td>4</td><td>6</td><td>-</td></tr></table>							Rated Voltage		160	200	250	350	400	450	Impedance Ratio	Z(-25℃) /Z(+20℃)	3	3	3	3	5	6	Z(-40℃) /Z(+20℃)	4	4	4	4	6	-					
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Endurance	<table><tr><td>Test Time</td><td colspan="6">5,000 Hrs</td></tr><tr><td>Capacitance Change</td><td colspan="6">Within ±20% of initial value</td></tr><tr><td>Tanδ</td><td colspan="6">Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td colspan="6">Within specified value</td></tr></table> * The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied with rated ripple current for 5,000 hours at 105℃.							Test Time	5,000 Hrs						Capacitance Change	Within ±20% of initial value						Tanδ	Less than 200% of specified value						Leakage Current	Within specified value					
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Ripple Current and Frequency Multipliers	<table><tr><td>Freq.(Hz) Cap. (μF)</td><td>120</td><td>1k</td><td>10k</td><td>100k up</td></tr><tr><td>4.7 to 82</td><td>1.00</td><td>1.20</td><td>1.40</td><td>1.50</td></tr><tr><td>100 up</td><td>1.00</td><td>1.18</td><td>1.35</td><td>1.45</td></tr></table>							Freq.(Hz) Cap. (μF)	120	1k	10k	100k up	4.7 to 82	1.00	1.20	1.40	1.50	100 up	1.00	1.18	1.35	1.45													
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Diagram of Dimensions



Lead Spacing and Diameter

ϕD	10	12.5	16	18
P	5.0	5.0	7.5	7.5
ϕd	0.6		0.8	
α	L<20: 1.5, L $\geq$ 20: 2.0			
β	0.5			

Unit: mm



Dimension and Permissible Ripple Current

Dimension: $\phi D \times L(\text{mm})$
Ripple Current: mA/rms at 105°C

V _{DC} Contents Cap.(μF)	160V (2C)			200V (2D)			250V (2E)			350V (2V)			400V (2G)		
	$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current	
		120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz
4.7													10×16	98	147
6.8										10×16	100	150	10×16	120	180
10							10×16	155	233	10×20	160	240	10×20	170	255
22	10×16	190	285	10×16	205	305	12.5×20	210	315	12.5×25	305	460	12.5×25	320	480
33	10×20	255	380	10×20	280	420	12.5×20	335	505	16×25	410	615	16×25	425	635
47	10×20	265	395	12.5×20	330	495	16×25	560	840	16×31.5	510	765	16×31.5	530	795
68	12.5×20	430	645	12.5×25	480	720	16×25	600	900	18×31.5	580	870	18×31.5	600	900
100	12.5×25	540	780	16×20	570	825	16×31.5	700	1,015	18×35.5	665	965	18×40	700	1,015
120	16×20	555	805	16×25	700	1,015	18×31.5	790	1,145	18×40	715	1,035	18×45	780	1,130
150	16×25	645	935	16×31.5	750	1,090	18×35.5	875	1,270						
180	16×31.5	745	1,080	18×31.5	830	1,205	18×40	980	1,420						
220	18×31.5	825	1,196	18×35.5	900	1,305	18×45	1,100	1,595						
270	18×35.5	930	1,350	18×40	1,100	1,595									
330	18×40	995	1,440	18×45	1,250	1,815									

V _{DC} Contents Cap.(μF)	450V (2W)		
	$\phi D \times L$	Ripple Current	
		120 Hz	100k Hz
4.7	10×16	105	158
6.8	10×20	170	255
10	12.5×20	280	420
22	16×25	405	610
33	16×31.5	490	735
47	18×31.5	575	865
68	18×40	665	1,000

Part Numbering System

RXB Series	22 μF	±20%	450V	Bulk Package	Gas Type	16 ϕ ×25L	Pb-free and PET sleeve
RXB	220	M	2W	BK	-	1625	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration & Package	Rubber Type	Case Size	Lead Wire and Sleeve type

Note: For more details, please refer to "Part Numbering System (Radial Type)" on page 13.

RPL Series

Features

- 105°C, 5,000 hours assured
- 10 ϕ ~ 18 ϕ with large permissible ripple current
- Slim type included
- RoHS Compliance

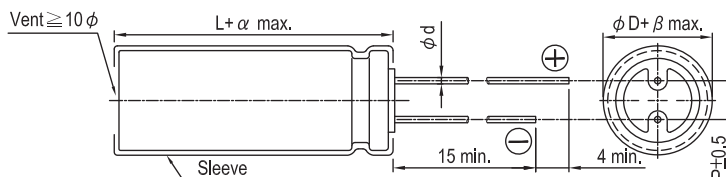


Sleeve & Marking Color: Black & Golden

Specifications

Items	Performance																													
Category Temperature Range	400V			420 ~ 450V																										
	-40℃ ~ +105℃			-25℃ ~ +105℃																										
Capacitance Tolerance	±20% (at 120Hz, 20℃)																													
Leakage Current (at 20℃)	<table><tr><td>Time</td><td colspan="5">after 5 minutes</td></tr><tr><td rowspan="2">Leakage Current</td><td colspan="2">CV ≤ 1,000 I = 0.03CV + 15(μA)</td><td colspan="3">CV > 1,000 I = 0.02CV + 25(μA)</td></tr></table> Where, C = rated capacitance in μF V = rated DC working voltage in V						Time	after 5 minutes					Leakage Current	CV ≤ 1,000 I = 0.03CV + 15(μA)		CV > 1,000 I = 0.02CV + 25(μA)														
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Ripple Current and Frequency Multipliers	<table><tr><td>Frequency (Hz)</td><td>60</td><td>120</td><td>500</td><td>1k</td><td>10k up</td></tr><tr><td>Multipliers</td><td>0.80</td><td>1.00</td><td>1.25</td><td>1.40</td><td>1.50</td></tr></table>						Frequency (Hz)	60	120	500	1k	10k up	Multipliers	0.80	1.00	1.25	1.40	1.50												
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Multipliers	0.80	1.00	1.25	1.40	1.50																									

Diagram of Dimensions



Lead Spacing and Diameter

ϕ D	10	12.5	16	18
P	5.0	5.0	7.5	7.5
ϕ d	0.6		0.8	
α	2.0			
β	0.5			

Unit: mm



Dimension and Permissible Ripple Current

Dimension: $\phi D \times L(\text{mm})$
Ripple Current: mA/rms at 105°C

Rated Voltage V_{DC}	Cap. (μF)	10 ϕ			12.5 ϕ			16 ϕ			18 ϕ		
		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current	
			120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz
400V (2G)	33	10×35	320	480									
	39	10×40	380	570	12.5×30	380	570						
	47	10×45	425	638									
	56	10×50	490	735	12.5×35	475	713						
	68				12.5×40	550	825	16×31.5	530	795			
	82				12.5×45	615	923	16×35.5	605	908			
	100							16×40	740	1,110			
	120							16×45	795	1,193	18×35.5	730	1,095
	150							16×50	865	1,300	18×45	910	1,365
420V (2P)	33	10×40	350	525									
	39	10×45	390	585	12.5×30	380	570						
	47	10×50	445	668	12.5×35	410	615						
	56				12.5×40	490	735	16×31.5	475	713			
	68				12.5×45	560	840	16×35.5	550	825			
	82				12.5×50	625	938	16×40	630	945			
	100							16×45	750	1,125	18×35.5	675	1,013
	120							16×50	865	1,298	18×40 18×45	810 825	1,238 1,215
	150										18×45 18×50	950 950	1,425 1,425
450V (2W)	33	10×45	315	475	12.5×30	350	525						
	39	10×50	360	545	12.5×35	400	600						
	47				12.5×40	425	683	16×31.5	455	683			
	56				12.5×45	500	750	16×35.5	560	750			
	68				12.5×50	540	810	16×40 16×35.5	590 530	885 795			
	82							16×45	675	1,013	18×35.5	645	968
	100							16×50	785	1,178	18×40 18×35.5	740 685	1,110 1,025
	120										18×45 18×40	825 790	1,238 1,185
	150										18×50	950	1,425

Remark: Other sizes and specification are available, please contact us for detail.

Part Numbering System

RPL Series	33 μF	±20%	450V	Bulk Package	Gas Type	10 ϕ ×45L	Pb-free and PET sleeve
RPL	330	M	2W	BK	-	1045	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration & Package	Rubber Type	Case Size	Lead Wire and Sleeve type

Note: For more details, please refer to "Part Numbering System (Radial Type)" on page 13.