



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

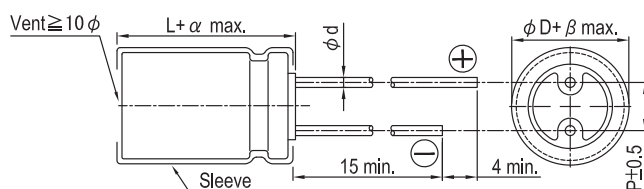


Sleeve & Marking Color: Brown & White

Specifications

Items	Performance							
Category Temperature Range	160 ~ 400V				450V			
	-40℃ ~ +105℃				-25℃ ~ +105℃			
Capacitance Tolerance	±20% (at 120Hz, 20℃)							
Leakage Current (at 20℃)	Time		after 5 minutes					
	Leakage Current		CV ≤ 1,000 I = 0.03CV(μA)		CV > 1,000 I = 0.02CV(μA)			
	Where, C = rated capacitance in μF V = rated DC working voltage in V							
Tanδ (at 120Hz, 20℃)								
	Rated Voltage	160	200	250	350	400	450	
	Tanδ (max)	0.20	0.20	0.20	0.24	0.24	0.24	
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.							
	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	-	
Endurance	Test Time		5,000 Hrs					
	Capacitance Change		Within ±20% of initial value					
	Tanδ		Less than 200% of specified value					
	Leakage Current		Within specified value					
	* 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℃.							
Shelf Life Test	Test Time		1,000 Hrs					
	Capacitance Change		Within ±20% of initial value					
	Tanδ		Less than 200% of specified value					
	Leakage Current		Within specified value					
	* The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors before the measurements (Refer to JIS C 5101-4 4.1).							
Ripple Current and Frequency Multipliers								
	Freq.(Hz)		120	1k	10k	100k up		
	Cap. (μF)	4.7 to 82	1.00	1.20	1.40	1.50		
		100 up	1.00	1.18	1.35	1.45		

Diagram of Dimensions



Lead Spacing and Diameter

Unit: mm

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			



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

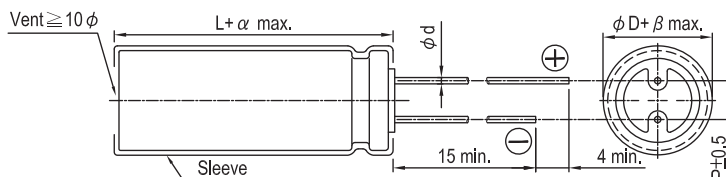


Sleeve & Marking Color: Black & Golden

Specifications

Items	Performance				
Category Temperature Range	400V			420 ~ 450V	
	-40℃ ~ +105℃			-25℃ ~ +105℃	
Capacitance Tolerance	±20% (at 120Hz, 20℃)				
Leakage Current (at 20℃)	Time		after 5 minutes		
	Leakage Current	CV ≤ 1,000 I = 0.03CV + 15(μA)		CV > 1,000 I = 0.02CV + 25(μA)	
		Where, C = rated capacitance in μF V = rated DC working voltage in V			
Tanδ (at 120Hz, 20℃)	Rated Voltage		400	420	450
	Tanδ (max)		0.24	0.24	0.24
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.				
	Rated Voltage		400	420	450
	Impedance Ratio	Z(-25℃)/Z(+20℃)	5	6	6
Z(-40℃)/Z(+20℃)		6	-	-	
Endurance	Test Time		5,000 Hrs		
	Capacitance Change		Within ±20% of initial value		
	Tanδ		Less than 200% of specified value		
	Leakage Current		Within specified value		
	* 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℃.				
Shelf Life Test	Test Time		1,000 Hrs		
	Capacitance Change		Within ±20% of initial value		
	Tanδ		Less than 200% of specified value		
	Leakage Current		Within specified value		
	* The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors before the measurements (Refer to JIS C 5101-4 4.1).				
Ripple Current and Frequency Multipliers	Frequency (Hz)		60	120	500
	Multipliers		0.80	1.00	1.25
				1k	10k up
				1.40	1.50

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	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.