

## RPL Series

### Features

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



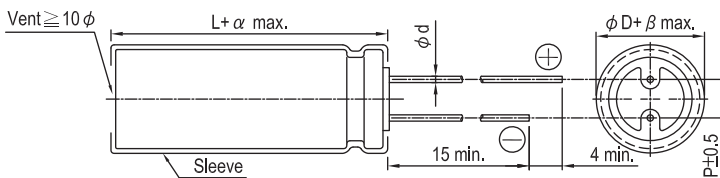
### Specifications

Items	Performance						
Category Temperature Range	400V		420 ~ 450V				
	-40°C ~ +105°C		-25°C ~ +105°C				
Capacitance Tolerance	±20% (at 120 Hz, 20°C)						
Leakage Current (at 20°C)	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 120 Hz, 20°C)	Rated Voltage						
	Tanδ (max)	400	420	450			
Low Temperature Characteristics (at 120 Hz)	Impedance ratio shall not exceed the values given in the table below.						
	Impedance Ratio	Z(-25°C)/Z(+20°C)	5	6	6		
Endurance	Test Time						
	Capacitance Change	5,000 Hrs					
Shelf Life Test	Test Time						
	Capacitance Change	1,000 Hrs					
	Tanδ	Within ±20% of initial value					
	Leakage Current	Less than 200% of specified value					
Ripple Current and Frequency Multipliers	Leakage Current						
	Frequency (Hz)	60	120	500	1k	10k up	
		Multipliers	0.80	1.00	1.25	1.40	1.50

\* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 5,000 hours at 105°C.

\* The above specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors before the measurements (Refer to JIS C 5101-4 4.1).

### Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

	10	12.5	16	18
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			

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

Rated Voltage (V <sub>DC</sub> )	Cap. (μF)	10 φ				12.5 φ			16 φ			18 φ		
		φ D×L	Ripple Current		φ D×L	Ripple Current		φ D×L	Ripple Current		φ D×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	810	1,238	
	150										18×45	825	1,215	
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	590	885				
	82							16×35.5	530	795				
	100							16×45	675	1,013	18×35.5	645	968	
	120							16×50	785	1,178	18×40	740	1,110	
	150										18×35.5	685	1,025	
										18×45	825	1,238		
										18×40	790	1,185		
										18×50	950	1,425		

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

### Part Numbering System

RPL Series	33μF	±20%	450V	Bulk Package	Gas Type	10 φ ×45L	Pb-free and PET sleeve
<b>RPL</b>	<b>330</b>	<b>M</b>	<b>2W</b>	<b>BK</b>	<b>-</b>	<b>1045</b>	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration and 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.