

### Features

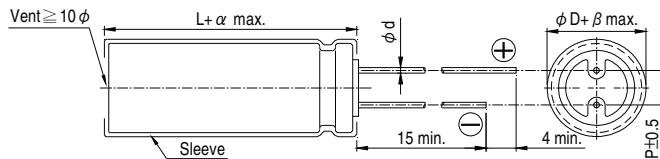
- 105°C, 5,000 hours assured
- 10φ ~ 18φ with large permissible ripple current
- Slim type included
- RoHS compliance



### 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		400	420	450		
	Tanδ (max)		0.24	0.24	0.24		
Low Temperature Characteristics (at 120 Hz)	Impedance ratio shall not exceed the values given in the table below.						
	Rated Voltage		400	420	450		
Impedance Ratio	Z(-25°C)/Z(+20°C)		5	6	6		
	Z(-40°C)/Z(+20°C)		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°C after the rated voltage applied with rated ripple current for 5,000 hours at 105°C.							
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°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).							
Ripple Current and Frequency Multipliers	Frequency (Hz)		60	120	500	1k	10k up
	Multipliers		0.80	1.00	1.25	1.40	1.50

### 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. ( $\mu$ F)	10 $\phi$		12.5 $\phi$			16 $\phi$			18 $\phi$			
		$\phi D \times L$	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	10x35	320	480									
	39	10x40	380	570	12.5x30	380	570						
	47	10x45	425	638									
	56	10x50	490	735	12.5x35	475	713						
	68				12.5x40	550	825	16x31.5	530	795			
	82				12.5x45	615	923	16x35.5	605	908			
	100							16x40	740	1,110			
	150							16x45	795	1,193	18x35.5	730	1,095
420V (2P)	33	10x40	350	525									
	39	10x45	390	585	12.5x30	380	570						
	47	10x50	445	668	12.5x35	410	615						
	56				12.5x40	490	735	16x31.5	475	713			
	68				12.5x45	560	840	16x35.5	550	825			
	82				12.5x50	625	938	16x40	630	945			
	100							16x45	750	1,125	18x35.5	675	1,013
	150							16x50	865	1,298	18x40	810	1,238
450V (2W)	33	10x45	315	475	12.5x30	350	525						
	39	10x50	360	545	12.5x35	400	600						
	47				12.5x40	425	683	16x31.5	455	683			
	56				12.5x45	500	750	16x35.5	560	750			
	68				12.5x50	540	810	16x40	590	885			
	82							16x35.5	530	795			
	100							16x45	675	1,013	18x35.5	645	968
	120							16x50	785	1,178	18x40	740	1,110
	150										18x35.5	685	1,025
										18x45	825	1,238	
										18x40	790	1,185	
										18x50	950	1,425	

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

### Part Numbering System

RPL Series    33 $\mu$ F     $\pm$ 20%    450V    Bulk Package    Gas Type    10  $\phi$  x45L

**RPL**    **330**    **M**    **2W**    **BK**    **-**    **1045**    **XX**

Series Name    Capacitance    Capacitance Tolerance    Rated Voltage    Lead Configuration and Package    Rubber Type    Case Size

**S** = Standard  
**KS** = AEC-Q200 Qualified, Safety Critical Application  
**LS** = AEC-Q200 Qualified, Non-Safety Critical Application