



RPL Series

Features

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

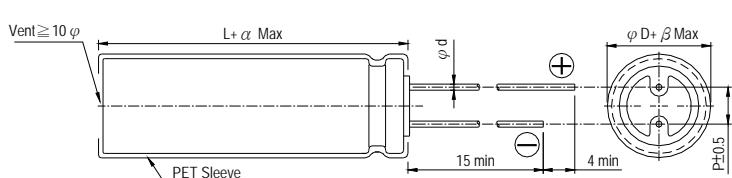


Specifications

Sleeve & Marking Color: Black & Golden

Items	Performance					
Category Temperature Range	400V		420 ~ 450V			
	-40°C ~ +105°C		-25°C ~ +105°C			
Capacitance Tolerance	$\pm 20\%$ (at 120Hz, 20°C)					
Leakage Current (at 20°C)	Time	after 5 minutes				
	Leakage Current	$CV \leq 1,000$ $I = 0.03CV + 15(\mu A)$	$CV > 1,000$ $I = 0.02CV + 25(\mu A)$			
	Where, C = rated capacitance in μF V = rated DC working voltage in V					
Dissipation Factor ($\tan \delta$ at 120Hz, 20°C)	Rated Voltage	400	420	450		
	$\tan \delta$ (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	$Z(-25^\circ C)/Z(+20^\circ C)$	5	6		
		$Z(-40^\circ C)/Z(+20^\circ C)$	6	-		
Endurance	Test Time	5,000 Hrs				
	Capacitance Change	Within $\pm 20\%$ of initial value				
	Dissipation Factor	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 $\pm 20\%$ of initial value				
	Dissipation Factor	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 & 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: $\phi D \times L(\text{mm})$

Dimension & Permissible Ripple Current

Ripple Current: mA/rms at 105°C

V. DC	Cap. (μF)	10 ϕ		12.5 ϕ		16 ϕ		18 ϕ	
		$\phi D \times L$	Ripple Current						
			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
	82				12.5x45	615	923	16x35.5	605
	100				12.5x50	690	1,035	16x40	740
	120							16x45	795
	150							16x50	865
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
	68				12.5x45	560	840	16x35.5	550
	82				12.5x50	625	938	16x40	630
	100							16x45	750
	120							16x50	865
	150								18x45 18x50
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
	56				12.5x45	500	750	16x35.5	560
	68				12.5x50	540	810	16x40 16x35.5	590 530
	82				12.5x50	625	938	16x45	675
	100							16x50	785
	120								1,178
	150								18x50

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