

## RQL Series

### Features

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

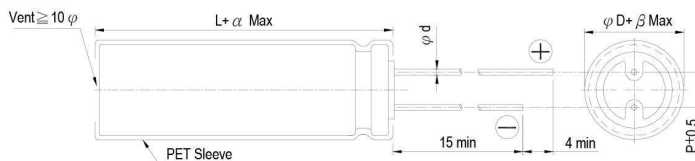


Sleeve & Marking Color: Black & Golden

### Specifications

Items	Performance						
Category Temperature Range	400V			420 ~ 450V			
	-40°C ~ +105°C			-25°C ~ +105°C			
Capacitance Tolerance	±20%					(at 120Hz, 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 120Hz, 20°C)	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	Z(-25°C)/Z(+20°C)	5	6	6		
Ratio	Z(-40°C)/Z(+20°C)	6	-	-			
Endurance	Test Time		10,000 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 10,000 hours at 105°C.							
Shelf Life Test	Test Time		1,000 Hrs				
	Capacitance Change		With in ±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 & 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

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

V. DC	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	10×40	315	475									
	39	10×45	360	545									
	47	10×50	420	630	12.5×30	440	660						
	56				12.5×35	500	750						
	68				12.5×40	580	870	16×31.5	530	795			
	82				12.5×50	625	935	16×35.5	615	920			
	100							16×40	715	1,070			
	120							16×40	800	1,200	18×35.5	790	1,185
	150							16×45	915	1,375	18×40	870	1,305
420V (2P)	33	10×40	370	555									
	39	10×45	410	615	12.5×30	390	585						
	47	10×50	465	700	12.5×35	450	675						
	56				12.5×40	520	780	16×31.5	500	750			
	68				12.5×45	580	870	16×35.5	580	870			
	82				12.5×50	660	990	16×35.5	730	1,095			
	100							16×40	675	1,010			
	120							16×40	750	1,125	18×35.5	725	1,085
	150							16×45	755	1,130	18×40	835	1,250
450V (2W)	33	10×45	330	495	12.5×30	370	555						
	39	10×50	380	570	12.5×35	420	630						
	47				12.5×40	480	720						
	53				12.5×45	500	750						
	56				12.5×45	530	795	16×31.5	510	765			
	68				12.5×50	620	930	16×35.5	590	885			
	82							16×40	615	920	18×35.5	645	965
	100							16×45	715	1,070	18×40	750	1,125
	120										18×45	835	1,250
150										18×50	975	1,465	

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

### Part Numbering System

RQL series	39 $\mu$ F	$\pm 20\%$	450V	Bulk Package	Gas Type	10 $\phi$ × 50L	Pb-free and PET coating case
<b>RQL</b>	<b>390</b>	<b>M</b>	<b>2W</b>	<b>BK</b>	-	<b>1050</b>	
Series	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration & Package	Rubber Type	Case Size	Lead Wire and Coating Type

Note: For more details, please refer to "Part Numbering System (Radial Type)" on page 10.