RQL Series

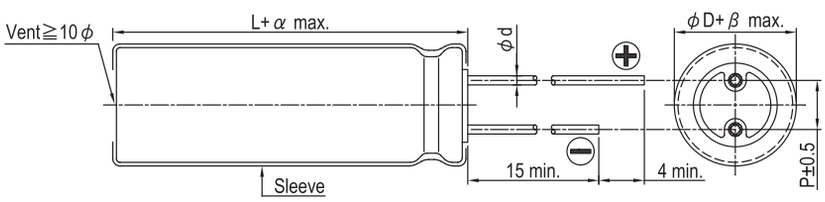
Features

- 105℃, 10,000 hours assured
- 10ϕ ~ 18ϕ with large permissible ripple current
- Slim type included
- RoHS compliant

Specifications

Items	Performance		
Category Temperature Range	400V	420 ~ 450V	
	-40℃ ~ +105℃	-25℃ ~ +105℃	
Capacitance Tolerance	±20% (at 120 Hz, 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 120 Hz, 20℃)	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℃)/Z(+20℃): 5 / 6 / 6		
	Impedance Ratio Z(-40℃)/Z(+20℃): 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: 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

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			

Dimension: ϕD × L(mm)

Dimension and Permissible Ripple Current

Ripple Current: mA/rms at 105℃

Rated Voltage (V_{DC})	Cap. (μF)	10ϕ			12.5ϕ			16ϕ			18ϕ		
		ϕD×L	Ripple Current		ϕD×L	Ripple Current		ϕD×L	Ripple Current		ϕD×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 16×45	800 840	1,200 1,260	18×35.5 18×40	790 870	1,185 1,305
	150							16×50	990	1,485	18×45	985	1,475
	180										18×50	1,120	1,685
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 16×40	730 675	1,095 1,010			
	100							16×40 16×45	750 755	1,125 1,130	18×35.5	725	1,085
	120							16×50	865	1,300	18×40 18×45	835 880	1,250 1,320
	150										18×50	1,030	1,550
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							16×50	820	1,230	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	39μF	±20%	450V	Bulk Package	Gas Type	10ϕ×50L	General Purpose
RQL	**390**	**M**	**2W**	**BK**	**-**	**1050**	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration and Package	Rubber Type	Case Size	Application

Note: For more details, please refer to “Part Numbering System - Radial Type” on page 139.