

### Features

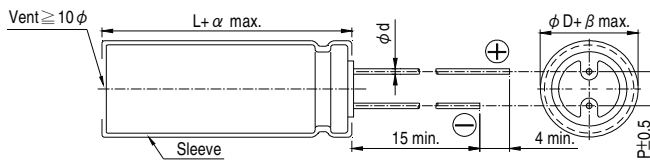
- 105°C, 10,000 hours assured
- 10 φ ~ 18 φ with large permissible ripple current
- Slim type included
- RoHS compliance



### Specifications

Items	Performance					
Category	400V		420 ~ 450V			
Temperature Range	-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	
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

	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 120 Hz	100k Hz	φ D×L	Ripple Current 120 Hz	100k Hz	φ D×L	Ripple Current 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
	150							16×45	840	1,260
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
	150							16×45	755	1,130
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
	100							16×45	715	1,070
	120							16×50	820	1,230
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    10 φ ×50L

**RQL**    **390**    **M**    **2W**    **BK**    **-**    **1050**

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

**XX**

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