



RXQ Series

Features

- 105°C, 8,000 ~ 10,000 hours assured
- Suitable for switching power supplies, UPS, Ballast
- Smaller case size current
- RoHS Compliance

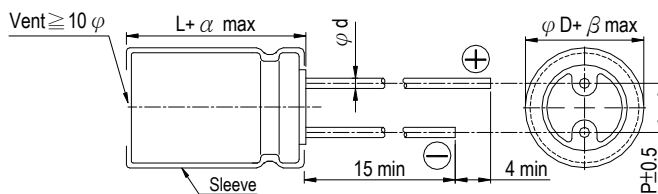


Sleeve & Marking Color: Black & Golden

Specifications

Items	Performance																							
Category Temperature Range	160 ~ 400V	450V																						
	-40°C ~ +105°C	-25°C ~ +105°C																						
Capacitance Tolerance	±20% (at 120Hz, 20°C)																							
Leakage Current (at 20°C)	<table border="1"> <tr> <th>Time</th> <th colspan="2">after 5 minutes</th> </tr> <tr> <td rowspan="2">Leakage Current</td> <td>CV ≤ 1,000 I = 0.03CV + 15(μA)</td> <td>CV > 1,000 I = 0.02CV + 25(μA)</td> </tr> </table> <p>Where, C = rated capacitance in μF V = rated DC working voltage in V</p>		Time	after 5 minutes		Leakage Current	CV ≤ 1,000 I = 0.03CV + 15(μA)	CV > 1,000 I = 0.02CV + 25(μA)																
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Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.																							
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Rated Voltage		160	200	250	350	400	450																	
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Endurance	<table border="1"> <tr> <th>Test Time</th> <td>8,000 Hrs for φ D = 10mm; 10,000 Hrs for φ D ≥ 12.5mm</td> </tr> <tr> <th>Capacitance Change</th> <td>Within ±20% of initial value</td> </tr> <tr> <th>Tanδ</th> <td>Less than 200% of specified value</td> </tr> <tr> <th>Leakage Current</th> <td>Within specified value</td> </tr> </table>		Test Time	8,000 Hrs for φ D = 10mm; 10,000 Hrs for φ D ≥ 12.5mm	Capacitance Change	Within ±20% of initial value	Tanδ	Less than 200% of specified value	Leakage Current	Within specified value														
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* The above Specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 8,000 / 10,000 hours at 105°C.																								
Shelf Life Test	<table border="1"> <tr> <th>Test Time</th> <td>1,000 Hrs</td> </tr> <tr> <th>Capacitance Change</th> <td>With in ±20% of initial value</td> </tr> <tr> <th>Tanδ</th> <td>Less than 200% of specified value</td> </tr> <tr> <th>Leakage Current</th> <td>Less than 500% of specified value</td> </tr> </table>		Test Time	1,000 Hrs	Capacitance Change	With in ±20% of initial value	Tanδ	Less than 200% of specified value	Leakage Current	Less than 500% of specified value														
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* 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	<table border="1"> <tr> <th rowspan="3">Cap. (μF)</th> <th colspan="4">Frequency (Hz)</th> </tr> <tr> <th>120</th> <th>1k</th> <th>10k</th> <th>100k up</th> </tr> <tr> <td>6.8 ~ 82</td> <td>1.00</td> <td>1.75</td> <td>2.25</td> <td>2.50</td> </tr> <tr> <td>100 up</td> <td>1.00</td> <td>1.67</td> <td>2.05</td> <td>2.25</td> </tr> </table>					Cap. (μF)	Frequency (Hz)				120	1k	10k	100k up	6.8 ~ 82	1.00	1.75	2.25	2.50	100 up	1.00	1.67	2.05	2.25
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Diagram of Dimensions

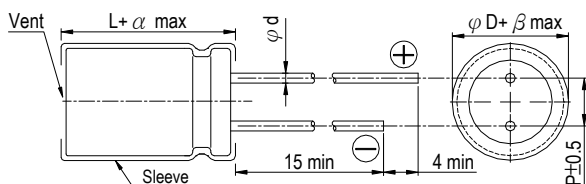


Lead Spacing and Diameter

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	L < 20: 1.5, L ≥ 20: 2.0			
β	0.5			

The case size of 16×20, 18×20 and 18×25 are suitable for below diagram:





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

Dimension & Permissible Ripple Current

V.DC Contents μF	160V (2C)				200V (2D)			250V (2E)			350V (2V)			400V (2G)		
	$\phi D \times L$	Ripple Current		$\phi D \times L$	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		120 Hz	100k Hz	
6.8										10×16	110	275	10×16	110	275	
10	10×12.5	100	250	10×16	125	313	10×20	140	350	10×20	140	350	10×20	140	350	
22	10×16 10×20	170 200	425 500	10×20	200	500	10×20	200	500	12.5×20	260	650	12.5×20	260	650	
33	10×20	250	625	10×20	260	650	12.5×20	320	800	16×20	360	900	16×20	360	900	
47	10×20	300	750	12.5×20	390	975	12.5×20	390	975	16×20	430	1,075	16×25 18×20	470 450	1,175 1,125	
68	12.5×20	470	1,175	12.5×20	470	1,175	16×20	520	1,300	16×25 18×20	560 550	1,400 1,375	18×25	585	1,463	
82	12.5×20	510	1,275	16×20	550	1,375	16×20	550	1,375	18×25	610	1,525	18×25	610	1,525	
100	12.5×25 16×20	620 630	1,395 1,418	16×20	630	1,418	16×25	680	1,530	18×25	700	1,575	18×31.5	765	1,721	
120										18×31.5	830	1,868	18×35.5	865	1,946	
150	16×25	770	1,733	16×25	840	1,890	18×25	860	1,935	18×35.5	960	2,160	18×40	985	2,216	
220	16×31.5	1,020	2,295	18×25	1,050	2,363	18×31.5	1,130	2,543							
330	18×35.5	1,390	3,128	18×35.5	1,430	3,218										

V.DC Contents μF	450V (2W)		
	$\phi D \times L$	Ripple Current	
		120 Hz	100k Hz
6.8	10×20	110	275
10	12.5×20	180	450
22	16×20	290	725
33	16×25 18×20	390 380	975 950
47	18×25	480	1,200
68	18×31.5	630	1,575
82	18×35.5	715	1,788
100	18×40	800	1,800

Part Numbering System

RXQ series 10 μF $\pm 20\%$ 450V Bulk Package Gas Type 12.5 $\phi \times 20\text{L}$ Pb-free and PET coating case

RXQ **100** **M** **2W** **BK** **-** **1320**

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.