

RXQ Series

Features

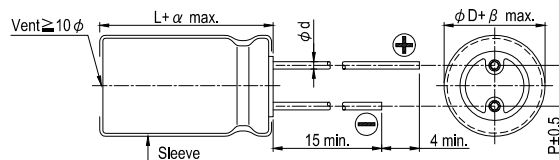
- 105°C, 8,000 ~ 10,000 hours assured
- Suitable for switching power supplies, UPS, Ballast
- Smaller case size current
- RoHS compliant



Specifications

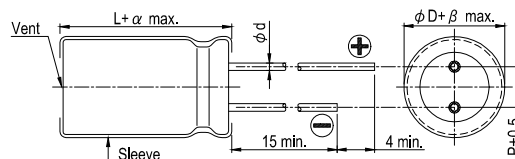
Items	Performance																																	
Category Temperature Range	160 ~ 400V -40°C ~ +105°C			450V -25°C ~ +105°C																														
Capacitance Tolerance	± 20% (at 120 Hz, 20°C)																																	
Leakage Current (at 20°C)	<table><tr><td>Time</td><td colspan="5">after 5 minutes</td></tr><tr><td>Leakage Current</td><td colspan="2">CV ≤ 1,000 I = 0.03CV + 15(μA)</td><td colspan="3">CV > 1,000 I = 0.02CV + 25(μA)</td></tr></table> Where, C = rated capacitance in μF, V = rated DC working voltage in V						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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Tanδ (at 120 Hz, 20°C)	<table><tr><td>Rated Voltage</td><td>160</td><td>200</td><td>250</td><td>350</td><td>400</td><td>450</td></tr><tr><td>Tanδ (max.)</td><td>0.20</td><td>0.20</td><td>0.20</td><td>0.24</td><td>0.24</td><td>0.24</td></tr></table>						Rated Voltage	160	200	250	350	400	450	Tanδ (max.)	0.20	0.20	0.20	0.24	0.24	0.24														
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Low Temperature Characteristics (at 120 Hz)	Impedance ratio shall not exceed the values given in the table below. <table><tr><td colspan="2">Rated Voltage</td><td>160</td><td>200</td><td>250</td><td>350</td><td>400</td><td>450</td></tr><tr><td rowspan="2">Impedance Ratio</td><td>Z(-25°C) / Z(+20°C)</td><td>3</td><td>3</td><td>3</td><td>5</td><td>5</td><td>6</td></tr><tr><td>Z(-40°C) / Z(+20°C)</td><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td><td>-</td></tr></table>						Rated Voltage		160	200	250	350	400	450	Impedance Ratio	Z(-25°C) / Z(+20°C)	3	3	3	5	5	6	Z(-40°C) / Z(+20°C)	6	6	6	6	6	-					
Rated Voltage		160	200	250	350	400	450																											
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Endurance	<table><tr><td>Test Time</td><td colspan="6">8,000 Hrs for ϕ D = 10 mm; 10,000 Hrs for ϕ D ≥ 12.5 mm</td></tr><tr><td>Capacitance Change</td><td colspan="6">Within ± 20% of initial value</td></tr><tr><td>Tanδ</td><td colspan="6">Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td colspan="6">Within specified value</td></tr></table> * 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.						Test Time	8,000 Hrs for ϕ D = 10 mm; 10,000 Hrs for ϕ D ≥ 12.5 mm						Capacitance Change	Within ± 20% of initial value						Tanδ	Less than 200% of specified value						Leakage Current	Within specified value					
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Shelf Life Test	<table><tr><td>Test Time</td><td colspan="6">1,000 Hrs</td></tr><tr><td>Capacitance Change</td><td colspan="6">Within ± 20% of initial value</td></tr><tr><td>Tanδ</td><td colspan="6">Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td colspan="6">Within specified value</td></tr></table> * 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).						Test Time	1,000 Hrs						Capacitance Change	Within ± 20% of initial value						Tanδ	Less than 200% of specified value						Leakage Current	Within specified value					
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Ripple Current and Frequency Multipliers	<table><tr><td rowspan="3">Cap. (μF)</td><td colspan="4">Frequency (Hz)</td></tr><tr><td>120</td><td>1k</td><td>10k</td><td>100k up</td></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 ≤</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 ≤	1.00	1.67	2.05	2.25									
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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	L<20: 1.5, L $\geq$ 20: 2.0			
β	0.5			

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



All product specifications in the catalog are subject to change without notice. (Cat. 2025E3)

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

Rated Volt. (Voc) Contents Cap.(μ F)	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													

Rated Volt. (Voc) Contents Cap.(μ F)	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 μ F $\pm 20\%$ 450V Bulk Package Gas Type 12.5 $\phi \times 20L$
RXQ **100** **M** **2W** **BK** - **1320**
 Series Name Capacitance Capacitance Tolerance Rated Voltage Lead Configuration and Package Rubber Type Case Size

Regional Tracking Purpose

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

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