RXQ Series

Features

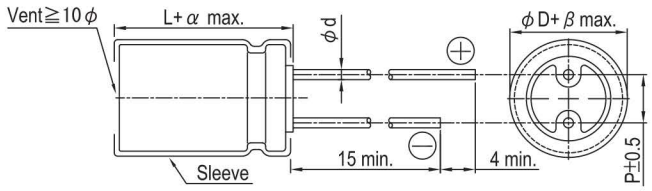
- 105℃, 8,000 ~ 10,000 hours assured
- Suitable for switching power supplies, UPS, Ballast
- Smaller case size current
- RoHS compliance

AEC-Q200 Qualified Parts Available: Use “LS” or “KS” Suffix

Specifications

Items	Performance						
Category Temperature Range	160 ~ 400V						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: 160 / 200 / 250 / 350 / 400 / 450 Tanδ (max): 0.20 / 0.20 / 0.20 / 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		160	200	250	350	400	450
	Impedance Ratio	Z(-25℃)/Z(+20℃)	3	3	3	5	5	6
		Z(-40℃)/Z(+20℃)	6	6	6	6	6	-
Endurance	Test Time: 8,000 Hrs for ϕD = 10mm; 10,000 Hrs for ϕD ≥ 12.5mm 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 8,000 / 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) / Cap. (μF)		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	

Diagram of Dimensions

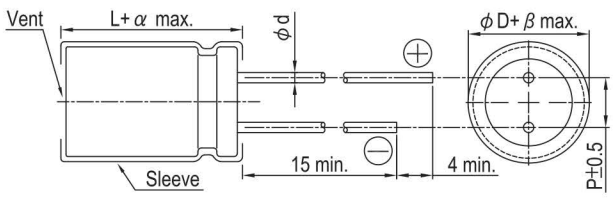


Lead Spacing and Diameter

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≧20: 2.0			
β	0.5			

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



Dimension: ϕD × L(mm)
Ripple Current: mA/rms at 105°C

Dimension and Permissible Ripple Current

Rated Volt. (VDC) / Contents / Cap.(μF)	160V (2C)			200V (2D)			250V (2E)			350V (2V)			400V (2G)		
	ϕD×L	Ripple Current		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		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. (VDC) / Contents / Cap.(μF)	450V (2W)		
	ϕD×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	10μF	±20%	450V	Bulk Package	Gas Type	12.5ϕ×20L	Pb-free and PET sleeve
RXQ	**100**	**M**	**2W**	**BK**	**-**	**1320**	**S**
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration and Package	Rubber Type	Case Size	Lead Wire and Sleeve type

For automotive application, please replace “S” suffix with an “LS” or “KS” suffix, for non-safety critical and safety critical applications respectively

Note: For more details, please refer to “Part Numbering System (Radial Type)” on page 13.

Tel: 631.595.1818