



RXJ Series

Features

- 105°C, 2,000 ~ 5,000 hours assured
- Low ESR, suitable for switching power supplies
- Smaller size with large permissible ripple current
- RoHS Compliance

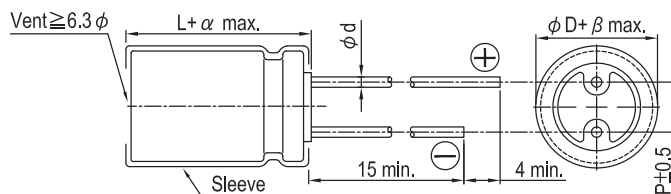


Sleeve & Marking Color: Brown & White

Specifications

Items	Performance																																																	
Category Temperature Range	6.3 ~ 63V					100V																																												
	-55℃ ~ +105℃					-40℃ ~ +105℃																																												
Capacitance Tolerance	±20% (at 120Hz, 20℃)																																																	
Leakage Current (at 20℃)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF, V = rated DC working voltage in V																																																	
Tanδ (at 120Hz, 20℃)	<table><tr><td>Rated Voltage</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td>Tanδ (max)</td><td>0.22</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.09</td><td>0.08</td></tr></table>										Rated Voltage	6.3	10	16	25	35	50	63	100	Tanδ (max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08																						
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When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase.																																																		
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below. <table><tr><td colspan="2">Rated Voltage</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td>Impedance Ratio</td><td>Z(-55℃)/Z(+20℃)</td><td>4</td><td>4</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr></table>										Rated Voltage		6.3	10	16	25	35	50	63	100	Impedance Ratio	Z(-55℃)/Z(+20℃)	4	4	3	3	3	3	3	3																				
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Impedance Ratio	Z(-55℃)/Z(+20℃)	4	4	3	3	3	3	3	3																																									
Endurance	<table><tr><td>Test Time</td><td colspan="9">2,000 Hrs for ϕD ≤ 8 mm; 5,000 Hrs for ϕD ≥ 10 mm</td></tr><tr><td>Capacitance Change</td><td colspan="9">Within ±20% of initial value</td></tr><tr><td>Tanδ</td><td colspan="9">Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td colspan="9">Within specified value</td></tr></table>										Test Time	2,000 Hrs for ϕD ≤ 8 mm; 5,000 Hrs for ϕD ≥ 10 mm									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℃ after the rated voltage applied with rated ripple current for 2,000/5,000 hours at 105℃.																																																		
Shelf Life Test	<table><tr><td>Test Time</td><td colspan="9">1,000 Hrs</td></tr><tr><td>Capacitance Change</td><td colspan="9">Within ±20% of initial value</td></tr><tr><td>Tanδ</td><td colspan="9">Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td colspan="9">Within specified value</td></tr></table>										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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* The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied.																																																		
Ripple Current and Frequency Multipliers	<table><tr><th>Cap.(μF) \ Freq.(Hz)</th><th>60 (50)</th><th>120</th><th>500</th><th>1k</th><th>10k</th><th>100k</th></tr><tr><td>Under 33</td><td>0.40</td><td>0.55</td><td>0.65</td><td>0.80</td><td>0.90</td><td>1.00</td></tr><tr><td>39 ~ 330</td><td>0.60</td><td>0.70</td><td>0.80</td><td>0.90</td><td>0.95</td><td>1.00</td></tr><tr><td>390 ~ 1,000</td><td>0.65</td><td>0.80</td><td>0.85</td><td>0.98</td><td>1.00</td><td>1.00</td></tr><tr><td>1,200 up above</td><td>0.80</td><td>0.90</td><td>0.95</td><td>0.98</td><td>1.00</td><td>1.00</td></tr></table>										Cap.(μF) \ Freq.(Hz)	60 (50)	120	500	1k	10k	100k	Under 33	0.40	0.55	0.65	0.80	0.90	1.00	39 ~ 330	0.60	0.70	0.80	0.90	0.95	1.00	390 ~ 1,000	0.65	0.80	0.85	0.98	1.00	1.00	1,200 up above	0.80	0.90	0.95	0.98	1.00	1.00					
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Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

Load Spacing and Diameters						Grain Size	
ϕD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ϕd	0.5		0.6			0.8	
α	L<20: 1.5, L $\geq$ 20: 2.0						
β	0.5						



Dimension and Permissible Ripple Current

Dimension: $\phi D \times L(\text{mm})$

Ripple Current: mA/rms at 100k Hz, 105°C

Cap. (μF)	Contents	6.3V (0J)					10V (1A)					16V (1C)				
		$\phi D \times L$	Impedance (Ω , max./100k Hz)		Ripple Current (mA/rms, 105°C)		$\phi D \times L$	Impedance (Ω , max./100k Hz)		Ripple Current (mA/rms, 105°C)		$\phi D \times L$	Impedance (Ω , max./100k Hz)		Ripple Current (mA/rms, 105°C)	
			20°C	-10°C	120 Hz	100k Hz		20°C	-10°C	120 Hz	100k Hz		20°C	-10°C	120 Hz	100k Hz
33												5×11	1.30	3.90	108	154
39												5×11	1.30	3.90	108	154
47							5×11	2.10	5.50	78	111	6.3×11	0.60	1.80	182	260
56							5×11	1.90	4.80	85	121	6.3×11	0.60	1.80	182	260
68							5×11	1.30	3.90	108	154	6.3×11	0.60	1.80	182	260
100		5×11	1.30	3.90	108	154	6.3×11	0.60	1.80	182	260	6.3×11	0.60	1.80	182	260
220		6.3×11	0.60	1.80	182	260	8×11.5	0.33	0.99	280	400	8×11.5	0.33	0.99	320	400
330		8×11.5	0.33	0.88	280	400	8×11.5	0.33	0.99	280	400	10×12.5	0.25	0.75	360	510
390		8×11.5	0.33	0.88	320	400	10×12.5	0.27	0.75	410	510	10×16	0.19	0.57	510	635
470		10×12.5	0.25	0.75	410	510	10×12.5	0.25	0.75	410	510	10×16	0.19	0.57	510	635
560		10×12.5	0.25	0.75	410	510	10×16	0.19	0.57	510	635	10×20	0.14	0.42	775	860
680		10×16	0.19	0.57	510	635	10×16	0.19	0.57	510	635	10×20	0.14	0.42	775	860
1,000		10×20	0.14	0.42	690	860	10×20	0.14	0.37	690	860	12.5×20	0.085	0.26	1,000	1,250
1,200		10×20	0.14	0.42	775	860	10×25	0.12	0.30	930	1,030	12.5×20	0.085	0.26	1,125	1,250
2,200		12.5×20	0.085	0.26	1,125	1,250	12.5×25	0.070	0.21	1,200	1,355	12.5×25	0.070	0.21	1,200	1,355
3,300		12.5×25	0.070	0.21	1,200	1,355	12.5×25	0.070	0.21	1,200	1,355	16×31.5	0.048	0.14	1,830	2,030
4,700		16×25	0.060	0.18	1,595	1,770	16×31.5	0.048	0.14	1,830	2,030	16×35.5	0.044	0.13	2,065	2,295

Cap. (μF)	Contents	25V (1E)					35V (1V)					50V (1H)				
		$\phi D \times L$	Impedance (Ω , max./100k Hz)		Ripple Current (mA/rms, 105°C)		$\phi D \times L$	Impedance (Ω , max./100k Hz)		Ripple Current (mA/rms, 105°C)		$\phi D \times L$	Impedance (Ω , max./100k Hz)		Ripple Current (mA/rms, 105°C)	
			20°C	-10°C	120Hz	100KHz		20°C	-10°C	120Hz	100KHz		20°C	-10°C	120Hz	100KHz
2.2												5×11	4.0	12.0	48	88
3.3												5×11	3.50	11.0	52	94
4.7												5×11	3.00	9.00	55	100
6.8												5×11	3.00	9.00	55	100
10												5×11	2.00	6.00	68	124
22							5×11	1.30	3.90	108	154	6.3×11	0.60	1.80	143	260
33		5×11	1.30	3.90	108	154	6.3×11	0.60	1.80	182	260	6.3×11	0.60	1.80	143	260
39		6.3×11	0.60	1.80	182	260	6.3×11	0.60	1.80	182	260	6.3×11	0.60	1.80	182	260
47		6.3×11	0.60	1.80	182	260	6.3×11	0.60	1.80	182	260	8×11.5	0.33	0.99	320	400
56		6.3×11	0.60	1.80	182	260	6.3×11	0.60	1.80	182	260	8×11.5	0.33	0.99	320	400
68		6.3×11	0.60	1.80	182	260	6.3×11	0.60	1.80	182	260	8×11.5	0.33	0.99	320	400
100		8×11.5	0.33	0.99	320	400	8×11.5	0.33	0.99	320	400	10×16	0.19	0.57	445	635
220		10×12.5	0.25	0.75	360	510	10×16	0.19	0.57	445	635	10×25	0.12	0.30	825	1,030
330		10×16	0.19	0.57	445	635	10×20	0.12	0.42	600	860	12.5×20	0.085	0.26	875	1,250
390		10×20	0.14	0.42	775	965	10×25	0.12	0.30	930	1,030	12.5×25	0.070	0.21	1,085	1,355
470		10×20	0.14	0.42	775	965	12.5×20	0.085	0.26	1,000	1,250	12.5×25	0.070	0.21	1,085	1,355
560		10×25	0.12	0.30	930	1,030	12.5×20	0.085	0.26	1,000	1,250	12.5×25	0.070	0.21	1,085	1,355
680		12.5×20	0.085	0.26	1,000	1,250	12.5×25	0.070	0.21	1,085	1,355	16×25	0.060	0.18	1,415	1,770
1,000		12.5×25	0.070	0.23	1,080	1,355	12.5×25	0.070	0.21	1,085	1,355	16×25	0.060	0.18	1,595	1,770
1,200		12.5×25	0.070	0.21	1,200	1,355	12.5×25	0.070	0.21	1,200	1,355	16×31.5	0.048	0.14	1,830	2,030
2,200		16×25	0.060	0.18	1,595	1,770	16×35.5	0.044	0.13	2,065	2,295	18×40	0.037	0.10	2,465	2,740
3,300		16×35.5	0.044	0.13	2,065	2,295	18×40	0.037	0.10	2,465	2,740					
4,700		18×40	0.037	0.10	2,465	2,740										



Dimension: $\phi D \times L$ (mm)

Ripple Current: mA/rms at 100k Hz, 105°C

Dimension and Permissible Ripple Current

Cap. (μF) Contents	Rated Volt. V _{DC}	63V (1J)					100V (2A)				
		$\phi D \times L$	Impedance (Ω , max./100k Hz)		Ripple Current (mA/rms, 105°C)		$\phi D \times L$	Impedance (Ω , max./100k Hz)		Ripple Current (mA/rms, 105°C)	
			20°C	-10°C	120 Hz	100k Hz		20°C	-10°C	120 Hz	100k Hz
2.2							5×11	6.00	21.0	40	72
3.3							5×11	5.00	18.0	43	78
4.7							6.3×11	1.20	4.20	100	180
6.8							6.3×11	1.20	4.20	100	180
10		6.3×11	1.20	4.20	100	180	8×11.5	0.56	2.00	168	305
22		6.3×11	1.20	4.20	100	180	8×11.5	0.56	2.00	168	308
33		8×11.5	0.56	2.00	170	305	10×12.5	0.50	1.80	210	380
39		8×11.5	0.56	2.00	170	305	10×16	0.32	1.10	350	500
47		8×11.5	0.56	2.00	170	305	10×20	0.27	0.95	435	620
56		10×12.5	0.50	1.80	265	380	10×20	0.27	0.95	435	620
68		10×12.5	0.50	1.80	265	380	10×25	0.21	0.63	530	760
100		10×20	0.27	0.95	435	620	12.5×20	0.16	0.56	625	890
220		12.5×20	0.094	0.24	570	820	16×25	0.090	0.32	1,010	1,440
330		12.5×25	0.073	0.21	770	1,100	16×31.5	0.060	0.17	1,255	1,790
390		12.5×25	0.073	0.21	770	1,100	16×35.5	0.056	0.14	1,650	2,065
470		16×25	0.060	0.18	1,420	1,770					
560		16×31.5	0.048	0.14	1,625	2,030					
680		16×31.5	0.048	0.14	1,625	2,030					
1,000		18×35.5	0.041	0.11	1,790	2,240					

Part Numbering System

RXJ Series	470μF	±20%	6.3V	Bulk Package	Gas Type	10 ϕ × 12.5L	Pb-free and PET sleeve
RXJ	471	M	0J	BK	-	1012	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration & Package	Rubber Type	Case Size	Lead Wire and Sleeve type

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



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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