



RXK 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

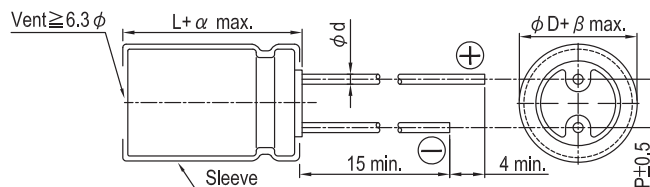


Sleeve & Marking Color: Black & Golden

Specifications

Items	Performance																																										
Category Temperature Range	-55°C ~ +105°C																																										
Capacitance Tolerance	±20% (at 120Hz, 20°C)																																										
Leakage Current (at 20°C)	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°C)	<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></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></tr></table> When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase.								Rated Voltage	6.3	10	16	25	35	50	63	Tanδ (max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09																			
Rated Voltage	6.3	10	16	25	35	50	63																																				
Tanδ (max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09																																				
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></tr><tr><td>Impedance Ratio</td><td>Z(-55°C)/Z(+20°C)</td><td>4</td><td>4</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	Impedance Ratio	Z(-55°C)/Z(+20°C)	4	4	3	3	3	3	3																	
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Impedance Ratio	Z(-55°C)/Z(+20°C)	4	4	3	3	3	3	3																																			
Endurance	<table><tr><td>Test Time</td><td>2,000 Hrs for ϕ D ≤ 6.3 mm; 3,000 Hrs for ϕ D = 8 mm; 4,000 Hrs for ϕ D = 10 mm; 5,000 Hrs for ϕ D ≥ 12.5 mm</td></tr><tr><td>Capacitance Change</td><td>Within ±20% of initial value</td></tr><tr><td>Tanδ</td><td>Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td>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 2,000 ~ 5,000 hours at 105°C.								Test Time	2,000 Hrs for ϕ D ≤ 6.3 mm; 3,000 Hrs for ϕ D = 8 mm; 4,000 Hrs for ϕ D = 10 mm; 5,000 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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Capacitance Change	Within ±20% of initial value																																										
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Leakage Current	Within specified value																																										
Shelf Life Test	<table><tr><td>Test Time</td><td>1,000 Hrs</td></tr><tr><td>Capacitance Change</td><td>Within ±20% of initial value</td></tr><tr><td>Tanδ</td><td>Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td>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.								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><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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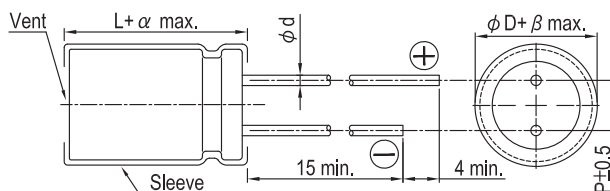
Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

Lead Spacing and Diameter					Unit: mm		
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						

The case size of 16×20 is suitable for below diagram:





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

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

Dimension and Permissible Ripple Current

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
56												5×11	0.72	1.8	116	165
68												5×11	0.72	1.8	126	180
82							5×11	0.72	1.8	116	165					
100							5×11	0.72	1.8	126	180					
120		5×11	0.72	1.8	116	165						6.3×11	0.38	0.95	179	255
180							6.3×11	0.38	0.95	179	255	6.3×15	0.27	0.68	231	330
220		6.3×11	0.38	0.95	179	255	6.3×11	0.38	0.95	196	280					
270		6.3×11	0.38	0.95	196	280	6.3×15	0.27	0.68	231	330	8×11.5	0.20	0.50	291	415
330		6.3×15	0.27	0.68	231	330	8×11.5	0.20	0.50	291	415	10×12.5	0.12	0.30	438	625
390		8×11.5	0.20	0.50	332	415	8×11.5	0.20	0.50	360	450	8×11.5	0.20	0.50	315	450
470		8×11.5	0.20	0.50	360	450	8×15	0.16	0.40	396	495	8×15	0.16	0.40	347	495
560		8×15	0.16	0.40	396	495	10×12.5	0.12	0.30	540	675	10×12.5	0.12	0.30	540	675
680		10×12.5	0.12	0.30	540	675	8×15	0.16	0.40	472	590	8×15	0.16	0.40	512	590
820		10×16	0.084	0.21	660	825	8×15	0.16	0.40	472	590	8×20	0.11	0.28	512	640
1,000		8×15	0.16	0.40	472	590	8×20	0.11	0.28	560	700	10×16	0.084	0.21	660	825
1,200		8×20	0.11	0.28	560	700	10×16	0.084	0.21	728	910	10×16	0.084	0.21	728	910
1,500		10×20	0.062	0.16	936	1,040	10×20	0.062	0.16	832	1,040	10×20	0.062	0.16	904	1,130
1,800		10×20	0.062	0.16	1,017	1,130	10×25	0.052	0.13	1,251	1,390	10×25	0.052	0.13	1,008	1,260
2,200		10×25	0.052	0.13	1,251	1,390	10×30	0.044	0.11	1,413	1,570	10×30	0.044	0.11	1,112	1,390
2,700		12.5×20	0.046	0.12	1,206	1,340	12.5×20	0.046	0.12	1,305	1,450	12.5×20	0.046	0.12	1,296	1,440
3,300		12.5×25	0.034	0.085	1,521	1,690	12.5×25	0.034	0.085	1,521	1,690	12.5×25	0.034	0.085	1,206	1,340
3,900		16×20	0.028	0.070	2,196	2,440	16×20	0.028	0.070	2,196	2,440	16×20	0.028	0.070	1,413	1,570
4,700		16×25	0.022	0.055	2,295	2,550	16×25	0.022	0.055	2,295	2,550	16×25	0.022	0.055	1,305	1,450
5,600		18×35.5	0.021	0.053	2,448	2,720	18×35.5	0.021	0.053	2,448	2,720	18×35.5	0.021	0.053	1,521	1,690
6,800		20×25	0.018	0.045	2,610	2,900	20×25	0.018	0.045	2,610	2,900	20×25	0.018	0.045	1,521	1,690
8,200		25×20	0.015	0.037	3,320	3,960	25×20	0.015	0.037	3,320	3,960	25×20	0.015	0.037	1,629	1,810
10,000		35×16	0.012	0.030	4,380	5,475	35×16	0.012	0.030	4,380	5,475	35×16	0.012	0.030	1,755	1,950

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

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

Dimension and Permissible Ripple Current

Cap. (μF)	Contents	25V (1E)					35V (1V)					50V (1H)								
		φ D×L	Impedance (Ω, max./100k Hz)		Ripple Current (mA/rms, 105°C)		φ D×L	Impedance (Ω, max./100k Hz)		Ripple Current (mA/rms, 105°C)		φ D×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				
18												5×11	1.1	3.3	72	130				
22												5×11	1.1	3.3	83	150				
27						5×11	0.72	1.8	91	165										
33						5×11	0.72	1.8	99	180										
39	5×11	0.72	1.8	116	165							6.3×11	0.56	1.6	154	220				
47	5×11	0.72	1.8	126	180							6.3×11	0.56	1.6	161	230				
56						6.3×11	0.38	0.95	179	255		6.3×15	0.41	1.2	217	310				
68						6.3×11	0.38	0.95	196	280		8×11.5	0.29	0.84	238	340				
82	6.3×11	0.38	0.95	179	255	6.3×15	0.27	0.68	231	330	8×11.5	0.29	0.84	249	355					
											8×15	0.25	0.75	329	470					
											10×12.5	0.16	0.40	336	480					
100	6.3×11	0.38	0.95	196	280						10×12.5	0.16	0.40	371	530					
120	6.3×15	0.27	0.68	231	330	8×11.5	0.20	0.50	291	415	8×15	0.25	0.75	392	560					
						10×12.5	0.12	0.30	438	625	8×20	0.18	0.52	427	610					
						10×16	0.12	0.30	438	625	10×16	0.12	0.30	529	755					
150	8×11.5	0.20	0.50	291	415	8×11.5	0.20	0.50	315	450	10×16	0.12	0.30	588	840					
180	8×11.5	0.20	0.50	315	450	8×15	0.16	0.40	347	495	8×20	0.18	0.52	525	750					
											10×12.5	0.12	0.30	438	625	10×20	0.088	0.22	662	945
220	8×15	0.16	0.40	347	495	8×15	0.16	0.40	413	590	10×20	0.088	0.22	728	1,040					
						8×20	0.11	0.28	448	640	10×25	0.068	0.17	805	1,150					
						10×16	0.084	0.21	578	825										
270						8×20	0.11	0.28	490	700	10×25	0.068	0.17	896	1,280					
						10×16	0.084	0.21	637	910										
330	8×15	0.16	0.40	413	590	10×20	0.062	0.16	728	1,040	10×30	0.059	0.15	882	1,260					
											8×20	0.11	0.28	448	640	12.5×20	0.059	0.15	833	1,190
											10×16	0.084	0.21	578	825					
390	8×20	0.11	0.28	560	700	10×20	0.062	0.16	904	1,130	12.5×20	0.059	0.15	952	1,190					
																10×16	0.084	0.21	728	910
470	10×20	0.062	0.16	832	1,040	10×25	0.052	0.13	1,112	1,390	10×30	0.059	0.15	1,176	1,470					
											12.5×25	0.045	0.11	1,192	1,490					
560	10×20	0.062	0.16	904	1,130	10×30	0.044	0.11	1,152	1,440	12.5×25	0.045	0.11	1,304	1,630					
											10×25	0.052	0.13	1,008	1,260	12.5×30	0.039	0.098	1,376	1,720
680	10×25	0.052	0.13	1,112	1,390	10×30	0.044	0.11	1,256	1,570	12.5×30	0.039	0.098	1,520	1,800					
						12.5×20	0.046	0.12	1,160	1,450	12.5×35	0.033	0.083	1,512	1,900					
						12.5×25	0.034	0.085	1,352	1,690	16×20	0.048	0.120	1,248	1,560					
820	10×30	0.044	0.11	1,152	1,440	12.5×25	0.034	0.085	1,448	1,810	12.5×35	0.033	0.083	1,624	2,030					
											12.5×40	0.029	0.073	1,656	2,070					
											16×25	0.033	0.083	1,504	1,880					
1,000	10×30	0.044	0.11	1,256	1,570	12.5×30	0.030	0.075	1,560	1,950	12.5×40	0.029	0.073	1,800	2,250					
											16×20	0.035	0.087	1,376	1,720	16×25	0.033	0.083	1,664	2,080
											12.5×25	0.034	0.085	1,352	1,690	16×31.5	0.029	0.073	1,720	2,150
1,200	12.5×25	0.034	0.085	1,629	1,810	12.5×30	0.030	0.075	1,917	2,130	16×31.5	0.029	0.073	2,088	2,320					
						12.5×35	0.027	0.068	1,980	2,200										
						16×25	0.028	0.070	1,863	2,070										
1,500	12.5×30	0.030	0.075	1,755	1,950	12.5×35	0.027	0.068	2,151	2,390	16×35.5	0.025	0.063	2,160	2,400					
						12.5×40	0.024	0.060	2,196	2,440										
						16×25	0.028	0.070	2,025	2,250										
1,800	12.5×30	0.030	0.075	1,917	2,130	12.5×40	0.024	0.060	2,358	2,620	16×40	0.021	0.063	2,466	2,740					
																12.5×35	0.027	0.068	1,980	2,200
																16×25	0.028	0.070	1,863	2,070
2,200	12.5×35	0.027	0.068	2,151	2,390	16×31.5	0.025	0.063	2,295	2,550	18×35.5	0.023	0.058	2,349	2,610					
																12.5×40	0.024	0.060	2,196	2,440
																16×25	0.028	0.070	2,025	2,250
2,700	16×31.5	0.025	0.063	2,115	2,350	16×35.5	0.022	0.055	2,394	2,660	18×40	0.020	0.050	2,385	2,650					
						16×40	0.018	0.045	2,610	2,900										
						18×35.5	0.021	0.053	2,448	2,720										
3,300	16×31.5	0.025	0.063	2,295	2,550	18×35.5	0.021	0.053	2,601	2,890	18×40	0.017	0.043	2,934	3,260					
						16×35.5	0.022	0.055	2,295	2,550										
3,900	16×40	0.018	0.045	2,610	2,900	18×40	0.017	0.043	2,934	3,260										
											18×35.5	0.021	0.053	2,448	2,720					
4,700	18×35.5	0.021	0.053	2,601	2,890															
5,600	18×40	0.017	0.043	2,934	3,260															



Dimension and Permissible Ripple Current

Dimension: $\phi D \times L(\text{mm})$
Ripple Current: mA/rms at 100k Hz, 105°C

Cap. (μF)	Contents	63V(1J)				
		$\phi D \times L$	Impedance (Ω, max./100k Hz)		Ripple Current (mA/rms, 105°C)	
			20°C	-10°C	120 Hz	100k Hz
12	5×11		1.90	4.78	55	100
27	6.3×11		1.10	2.78	88	160
33	6.3×11		1.10	2.75	96	175
39	6.3×15		0.62	1.55	161	230
47	8×11.5		0.49	1.23	193	275
56	8×11.5		0.49	1.23	203	290
	10×12.5		0.27	0.675	294	420
68	8×15		0.34	0.850	252	360
	10×12.5		0.27	0.675	354	505
	10×16		0.21	0.525	366	523
82	8×20		0.21	0.525	350	500
100	8×15		0.34	0.850	308	440
120	10×16		0.210	0.525	455	650
	10×20		0.160	0.400	490	700
150	8×20		0.210	0.525	476	680
	10×25		0.130	0.325	546	780
180	10×20		0.160	0.400	553	790
	10×30		0.100	0.250	672	960
220	10×25		0.130	0.325	648	925
	12.5×20		0.110	0.275	609	870
270	10×30		0.100	0.250	812	1,160
	12.5×25		0.074	0.185	805	1,150
330	12.5×20		0.110	0.275	746	1,065
390	12.5×25		0.074	0.185	1,088	1,280
	12.5×30		0.068	0.170	1,024	1,360
470	12.5×30		0.068	0.170	1,120	1,360
	12.5×35		0.063	0.158	1,112	1,400
	16×20		0.059	0.148	1,080	1,350
	16×25		0.055	0.138	1,184	1,480
560	12.5×40		0.051	0.128	1,224	1,530
	16×25		0.055	0.138	1,296	1,620
680	12.5×40		0.051	0.128	1,336	1,670
	16×31.5		0.046	0.115	1,376	1,720
820	12.5×40		0.051	0.128	1,480	1,850
	16×31.5		0.046	0.115	1,512	1,890
	16×35.5		0.040	0.100	1,528	1,910
1,000	16×35.5		0.040	0.100	1,576	1,970
	18×35.5		0.040	0.100	1,688	2,110
1,500	18×35.5		0.040	0.100	2,169	2,410

Part Numbering System

RXK Series	470μF	±20%	6.3V	Bulk Package	Gas Type	8φ×11.5L	Pb-free and PET sleeve
RXK	471	M	0J	BK	-	0811	
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

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.