



RXW Series

Features

- 105°C, 4,000 ~ 7,000 hours assured
- Low ESR, suitable for switching power supplies
- Smaller size with large permissible ripple current
- RoHS Compliance

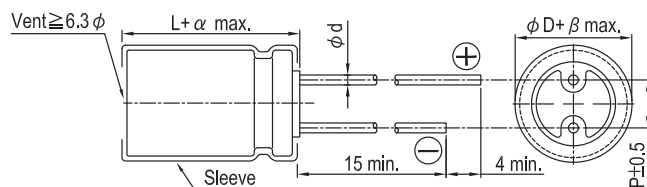


Specifications

Sleeve & Marking Color: Black & Golden

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 120 Hz, 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												
	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																														
When the capacitance exceeds 1000μF, 0.02 shall be added every 1000μF increase.																																							
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.																																						
	Rated Voltage		6.3	10	16	25	35	50	63	100																													
	Impedance Ratio	Z(-55℃/-40℃) / Z(+20℃)	3	3	3	3	3	3	3	3																													
Endurance	Test Time		4,000 Hrs for ϕ D ≤ 6.3 mm; 5,000 Hrs for ϕ D = 8 mm; 6,000 Hrs for ϕ D = 10 mm; 7,000 Hrs for ϕ D ≥ 12.5 mm																																				
	Capacitance Change		Within ±25% 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℃ after the rated voltage applied with rated ripple current for 4,000 ~ 7,000 hours at 105℃.																																						
Shelf Life Test	Test Time		1,000 Hrs																																				
	Capacitance Change		Within ±25% 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℃ after exposing them for 1,000 hours at 105℃ without voltage applied.																																						
Ripple Current and Frequency Multipliers	<table><tr><td>Freq.(Hz) Cap.(μF)</td><td>120</td><td>1k</td><td>10k</td><td>100k up</td></tr><tr><td>under ~ 33</td><td>0.42</td><td>0.70</td><td>0.90</td><td>1.0</td></tr><tr><td>39 ~ 270</td><td>0.5</td><td>0.73</td><td>0.92</td><td>1.0</td></tr><tr><td>330 ~ 680</td><td>0.55</td><td>0.77</td><td>0.94</td><td>1.0</td></tr><tr><td>820 ~ 1,800</td><td>0.6</td><td>0.80</td><td>0.96</td><td>1.0</td></tr><tr><td>2,200 ~ 15,000</td><td>0.7</td><td>0.85</td><td>0.98</td><td>1.0</td></tr></table>									Freq.(Hz) Cap.(μF)	120	1k	10k	100k up	under ~ 33	0.42	0.70	0.90	1.0	39 ~ 270	0.5	0.73	0.92	1.0	330 ~ 680	0.55	0.77	0.94	1.0	820 ~ 1,800	0.6	0.80	0.96	1.0	2,200 ~ 15,000	0.7	0.85	0.98	1.0
	Freq.(Hz) Cap.(μF)	120	1k	10k	100k up																																		
	under ~ 33	0.42	0.70	0.90	1.0																																		
	39 ~ 270	0.5	0.73	0.92	1.0																																		
	330 ~ 680	0.55	0.77	0.94	1.0																																		
	820 ~ 1,800	0.6	0.80	0.96	1.0																																		
	2,200 ~ 15,000	0.7	0.85	0.98	1.0																																		

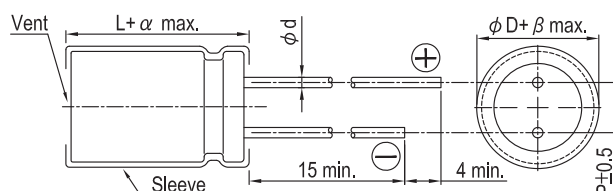
Diagram of Dimensions



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, 18×20 and 18×25 are suitable for below diagram:



Dimension: $\phi D \times L$ (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)			25V (1E)		
		$\phi D \times L$	Impedance (Ω, max./100kHz)		$\phi D \times L$	Impedance (Ω, max./100kHz)		$\phi D \times L$	Impedance (Ω, max./100kHz)		$\phi D \times L$	Impedance (Ω, max./100kHz)	
			20°C	-10°C		20°C	-10°C		20°C	-10°C		20°C	-10°C
				100k Hz			100k Hz			100k Hz			100k Hz
4.7											5×11	0.6	1.2
10								5×11	0.6	1.2	5×11	0.6	1.2
22	5×11	0.6	1.2	180	5×11	0.6	1.2	5×11	0.6	1.2	5×11	0.6	1.2
33	5×11	0.6	1.2	180	5×11	0.6	1.2	5×11	0.6	1.2	5×11	0.6	1.2
39											5×11	0.6	1.2
47	5×11	0.6	1.2	180	5×11	0.6	1.2	5×11	0.6	1.2	5×11	0.6	1.2
56								5×11	0.6	1.2			
82					5×11	0.6	1.2				6.3×11	0.25	0.50
100	5×11	0.6	1.2	180	5×11	0.6	1.2	6.3×11	0.25	0.5	6.3×11	0.25	0.50
120								6.3×11	0.25	0.5	6.3×15	0.23	0.46
150	6.3×11	0.25	0.5	290	6.3×11	0.25	0.5	6.3×11	0.25	0.5	8×11.5	0.117	0.234
180					6.3×11	0.25	0.5	6.3×15	0.23	0.46			
220	6.3×11	0.25	0.5	290	6.3×11	0.25	0.5	8×11.5	0.117	0.234	8×11.5	0.117	0.234
					6.3×15	0.23	0.46						
330	6.3×11	0.25	0.50	290	8×11.5	0.117	0.234	8×11.5	0.117	0.234	8×15	0.085	0.17
	6.3×15	0.23	0.46	430							10×12.5	0.090	0.18
470	8×11.5	0.117	0.234	555	8×11.5	0.117	0.234	8×15	0.085	0.17	8×20	0.065	0.130
								10×12.5	0.090	0.18	10×16	0.068	0.136
560	8×11.5	0.117	0.234	555							10×20	0.052	0.104
680	10×12.5	0.090	0.180	755	8×15	0.085	0.170	8×20	0.065	0.130	10×20	0.052	0.104
					10×12.5	0.090	0.180	10×16	0.068	0.136			
820	8×15	0.085	0.170	730				10×20	0.052	0.104	10×25	0.045	0.090
	10×12.5	0.090	0.180	755									
1,000	10×12.5	0.090	0.180	755	8×20	0.065	0.130	10×20	0.052	0.104	10×30	0.035	0.070
					10×16	0.068	0.136				12.5×20	0.038	0.076
1,200	8×20	0.065	0.130	955	10×20	0.052	0.104	10×25	0.045	0.090			
	10×16	0.068	0.136	1,050									
1,500	10×20	0.052	0.104	1,220	10×20	0.052	0.104	12.5×20	0.038	0.076	12.5×25	0.030	0.060
					10×25	0.045	0.090	10×30	0.035	0.070	16×25	0.022	0.044
1,800											12.5×30	0.025	0.050
											16×20	0.029	0.058
2,200	10×25	0.045	0.090	1,440	10×30	0.035	0.070	12.5×25	0.030	0.06	12.5×35	0.022	0.044
	12.5×20	0.038	0.076	1,615	12.5×20	0.038	0.076				16×25	0.022	0.044
2,700	10×30	0.035	0.070	1,815	12.5×25	0.030	0.060				18×20	0.028	0.056
								12.5×30	0.025	0.05			
3,300	12.5×20	0.038	0.076	1,655	12.5×25	0.030	0.060	16×20	0.029	0.058	16×25	0.022	0.044
					12.5×30	0.025	0.050				18×25	0.020	0.040
3,900	12.5×25	0.030	0.060	1,945	12.5×35	0.022	0.044	12.5×35	0.022	0.044	18×25	0.020	0.040
					16×20	0.029	0.058	16×25	0.022	0.044	18×35.5	0.016	0.032
4,700	12.5×30	0.025	0.050	2,310	16×25	0.022	0.044	18×20	0.028	0.056	18×31.5	0.016	0.032
	16×25	0.022	0.044	2,555									
5,600	12.5×35	0.022	0.044	2,510	16×25	0.022	0.044	16×31.5	0.018	0.036	18×35.5	0.015	0.030
	16×20	0.029	0.058	2,205	18×20	0.028	0.056	18×25	0.020	0.040			
6,800	16×25	0.022	0.044	2,555	16×31.5	0.018	0.036	16×35.5	0.016	0.032			
	18×20	0.028	0.056	2,490	18×25	0.020	0.040	18×31.5	0.016	0.032	18×40	0.014	0.028
8,200	16×31.5	0.018	0.036	3,010	18×35.5	0.015	0.030	18×35.5	0.015	0.030			
10,000	16×31.5	0.016	0.032	3,150	18×35.5	0.015	0.030	18×40	0.014	0.028			
	18×25	0.020	0.040	2,740									
12,000	18×31.5	0.016	0.032	3,635									
15,000	18×35.5	0.015	0.030	3,680	18×40	0.014	0.028						



Dimension and Permissible Ripple Current

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

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

Rated Volt. V _{DC} Contents Cap. (μF)	35V (1V)				50V (1H)				63V (1J)				100V (2A)			
	ϕ D×L	Impedance (Ω, max./100kHz)		Ripple Current (mA/rms, 105°C)	ϕ D×L	Impedance (Ω, max./100kHz)		Ripple Current (mA/rms, 105°C)	ϕ D×L	Impedance (Ω, max./100kHz)		Ripple Current (mA/rms, 105°C)	ϕ D×L	Impedance (Ω, max./100kHz)		Ripple Current (mA/rms, 105°C)
		20°C	-10°C			100k Hz	20°C			-10°C	100k Hz			20°C	-10°C	
2.2													5×11	9.8	19.6	44
3.3													5×11	6.6	13.2	58
4.7	5×11	0.6	1.2	180	5×11	2.3	4.6	90	5×11	4.7	9.4	68	5×11	4.6	9.2	74
6.8									5×11	2.5	5.0	95	5×11	3.5	7.0	95
10	5×11	0.6	1.2	180	5×11	1.4	2.8	120	5×11	2.1	4.2	110	6.3×11	1.8	3.6	130
12									5×11	2.0	4.0	145				
15									6.3×11	1.2	2.4	160	8×11.5	0.83	1.66	180
18					5×11	1.3	2.6	155					6.3×15	0.80	1.60	200
22	5×11	0.6	1.2	180	5×11	1.2	2.4	170	6.3×11	0.71	1.42	250	8×11.5	0.68	1.36	230
27	5×11	0.6	1.2	180												
33	5×11	0.6	1.2	180	6.3×11	0.43	0.86	300	6.3×11	0.71	1.42	250	8×15 10×12.5	0.45 0.46	0.90 0.92	360 320
39									6.3×15	0.70	1.40	330				
47	6.3×11	0.25	0.5	290	6.3×11	0.43	0.86	300	8×11.5	0.342	0.684	405	10×16 8×20	0.37 0.37	0.74 0.74	420 420
56	6.3×11	0.25	0.5	290	6.3×15	0.40	0.80	360								
68									8×11.5	0.342	0.684	405	10×20	0.30	0.60	490
82	6.3×15	0.23	0.46	430	8×11.5	0.234	0.468	485					10×25	0.25	0.50	540
100	8×11.5	0.117	0.234	555	8×11.5	0.234	0.468	485	10×12.5 8×15	0.256 0.230	0.512 0.460	535 535	12.5×20	0.18	0.36	580
120					8×15 10×12.5	0.155 0.162	0.310 0.324	635 615	10×16	0.194	0.388	600				
150	8×11.5	0.117	0.234	555	10×12.5	0.162	0.324	615	10×16	0.194	0.388	660	12.5×25	0.13	0.26	710
180					8×20 10×16	0.120 0.119	0.240 0.238	860 850	10×20 12.5×16	0.147 0.150	0.294 0.300	885 1,020	12.5×30 16×20	0.12 0.13	0.24 0.26	790 750
220	8×15 10×12.5	0.085 0.090	0.17 0.18	730 755	10×16 10×20	0.119 0.090	0.238 0.180	850 1,030	10×20 10×25	0.147 0.130	0.294 0.260	885 1,050	16×25 18×20	0.10 0.11	0.20 0.22	890 850
270					10×25	0.082	0.164	1,200	16×16	0.090	0.180	1,410				
330	8×20 10×16	0.065 0.068	0.130 0.136	995 1,050	10×20 10×30	0.090 0.060	0.180 0.120	1,030 1,610	12.5×20	0.085	0.170	1,285	16×25	0.090	0.180	1,080
390	10×20	0.052	0.104	1,220	12.5×20	0.063	0.126	1,480	12.5×25 18×16	0.070 0.086	0.140 0.172	1,720 1,690	18×25	0.083	0.166	1,260
470	10×20	0.052	0.104	1,220	12.5×20	0.060	0.120	1,500	12.5×25 12.5×30 16×20	0.070 0.055 0.059	0.140 0.110 0.118	1,720 2,090 1,765	16×31.5	0.076	0.152	1,310
560	10×25	0.045	0.090	1,440	12.5×25	0.050	0.100	1,832	16×25	0.050	0.100	2,160	18×31.5 18×35.5	0.068 0.064	0.136 0.128	1,370 1,410
680	10×30 12.5×20	0.035 0.038	0.070 0.076	1,815 1,655	12.5×25 16×20	0.050 0.048	0.100 0.096	1,832 1,835	12.5×35 18×20	0.047 0.055	0.094 0.110	2,265 2,290				
820					12.5×35 18×20	0.034 0.042	0.068 0.084	2,285 2,200	16×31.5 18×25	0.043 0.043	0.086 0.086	2,670 2,585	18×40	0.047	0.094	1,520
1,000	12.5×25	0.030	0.060	1,945	16×25	0.034	0.068	2,235	16×31.5 16×35.5	0.043 0.036	0.086 0.072	2,670 2,770				
1,200	12.5×30 16×20	0.025 0.029	0.050 0.058	2,310 2,205	16×31.5 18×25	0.028 0.029	0.056 0.058	2,700 2,610	18×31.5	0.032	0.064	2,950				
1,500	12.5×35 16×25	0.022 0.022	0.044 0.044	2,510 2,555	16×31.5 16×35.5	0.028 0.025	0.056 0.050	2,700 2,790	18×35.5	0.030	0.060	3,095				
1,800	16×25 18×20	0.022 0.028	0.044 0.056	2,555 2,490	18×31.5	0.025	0.05	3,000								
2,200	16×31.5 18×25	0.018 0.020	0.036 0.040	3,010 2,740	18×35.5	0.023	0.046	3,100	18×40	0.028	0.056	3,200				
2,700	16×35.5 18×31.5	0.016 0.016	0.032 0.032	3,150 3,635												
3,300	18×35.5	0.015	0.030	3,680												
4,700	18×40	0.014	0.028	3,800												

Part Numbering System

RXW Series	470μF	±20%	6.3V	Bulk Package	Gas Type	8 ϕ × 11.5L	Pb-free and PET sleeve
RXW	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.