



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

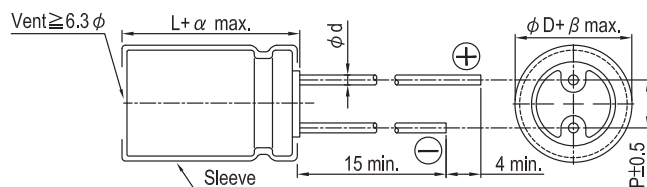


Sleeve & Marking Color: Black & Golden

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 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																																		

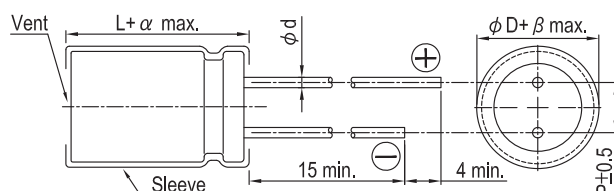
Diagram of Dimensions



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	16×35.5	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

Cap. (μF)	Contents	35V (1V)			50V (1H)			63V (1J)			100V (2A)		
		$\phi D \times L$	Impedance (Ω, max./100kHz)		Ripple Current (mA/rms, 105°C)	Impedance (Ω, max./100kHz)		Ripple Current (mA/rms, 105°C)	Impedance (Ω, max./100kHz)		Ripple Current (mA/rms, 105°C)	Impedance (Ω, max./100kHz)	
			20°C	-10°C		20°C	-10°C		20°C	-10°C		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 0.45 0.90 360 10×12.5 0.46 0.92 320
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 0.37 0.74 420 8×20 0.37 0.74 420
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 0.256 0.512 535 8×15 0.230 0.460 535			12.5×20 0.18 0.36 580	
120					8×15 0.155 0.310 635 10×12.5 0.162 0.324 615				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 0.120 0.240 860 10×16 0.119 0.238 850				10×20 0.147 0.294 885 12.5×16 0.150 0.300 1,020			12.5×30 0.12 0.24 790 16×20 0.13 0.26 750	
220	8×15 0.085 0.17 730 10×12.5 0.090 0.18 755				10×16 0.119 0.238 850 10×20 0.090 0.180 1,030				10×20 0.147 0.294 885 10×25 0.130 0.260 1,050			16×25 0.10 0.20 890 18×20 0.11 0.22 850	
270					10×25 0.082 0.164 1,200				16×16 0.090 0.180 1,410				
330	8×20 0.065 0.130 995 10×16 0.068 0.136 1,050				10×20 0.090 0.180 1,030 10×30 0.060 0.120 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 0.070 0.140 1,720 18×16 0.086 0.172 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 0.070 0.140 1,720 12.5×30 0.055 0.110 2,090 16×20 0.059 0.118 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 0.068 0.136 1,370 18×35.5 0.064 0.128 1,410	
680	10×30 0.035 0.070 1,815 12.5×20 0.038 0.076 1,655				12.5×25 0.050 0.100 1,832 16×20 0.048 0.096 1,835				12.5×35 0.047 0.094 2,265 18×20 0.055 0.110 2,290				
820					12.5×35 0.034 0.068 2,285 18×20 0.042 0.084 2,200				16×31.5 0.043 0.086 2,670 18×25 0.043 0.086 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 0.043 0.086 2,670 16×35.5 0.036 0.072 2,770				
1,200	12.5×30 0.025 0.050 2,310 16×20 0.029 0.058 2,205				16×31.5 0.028 0.056 2,700 18×25 0.029 0.058 2,610				18×31.5 0.032 0.064 2,950				
1,500	12.5×35 0.022 0.044 2,510 16×25 0.022 0.044 2,555				16×31.5 0.028 0.056 2,700 16×35.5 0.025 0.050 2,790				18×35.5 0.030 0.060 3,095				
1,800	16×25 0.022 0.044 2,555 18×20 0.028 0.056 2,490				18×31.5 0.025 0.05 3,000								
2,200	16×31.5 0.018 0.036 3,010 18×25 0.020 0.040 2,740				18×35.5 0.023 0.046 3,100				18×40 0.028 0.056 3,200				
2,700	16×35.5 0.016 0.032 3,150 18×31.5 0.016 0.032 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

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