

RZW Series

Features

- 105°C, 4,000 ~ 10,000 hours assured
- Low ESR, suitable for switching power supplies
- Smaller size with large permissible ripple current
- RoHs Compliance

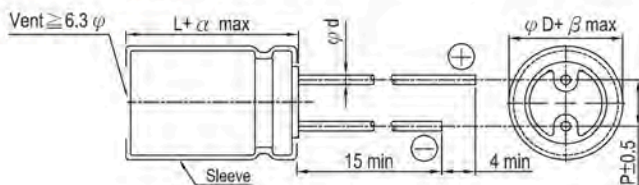


Sleeve & Marking Color: Black & Golden

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 120 Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>When the capacitance exceeds 1000μF, 0.02 shall be added every 1000μF increase.</p>	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																		
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Low Temperature Characteristics (at 120Hz)	<p>Impedance ratio shall not exceed the values given in the table below.</p> <table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td>Impedance Ratio Z(-55°C)/Z(+20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Rated Voltage	6.3	10	16	25	35	50	63	Impedance Ratio Z(-55°C)/Z(+20°C)	3	3	3	3	3	3	3																		
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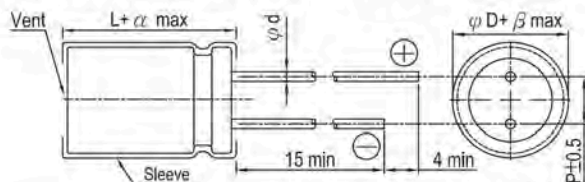
Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

φ D	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φ d	0.5		0.6			0.8	
α	L < 20: 1.5, L ≥ 20: 2.0						
β	0.5						

The case size of 12.5×16, 16×16, 16×20, 18×16, 18×20 and 18×25 are suitable for below diagram:



All product specifications in the catalog are subject to change without notice. (CAT. 2017E1)

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

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

Dimension and Permissible Ripple Current

V DC Contents μF	6.3V (0J)				10V (1A)				16V (1C)				25V (1E)			
	$\phi D \times L$	Impedance (Ω , Max/100kHz)		Ripple Current (mA/rms, 105°C) 100k Hz	$\phi D \times L$	Impedance (Ω , Max/100kHz)		Ripple Current (mA/rms, 105°C) 100k Hz	$\phi D \times L$	Impedance (Ω , Max/100kHz)		Ripple Current (mA/rms, 105°C) 100k Hz	$\phi D \times L$	Impedance (Ω , Max/100kHz)		Ripple Current (mA/rms, 105°C) 100k Hz
		20°C	-10°C			20°C	-10°C			20°C	-10°C			20°C	-10°C	
47												5×11	0.58	1.16	210	
56									5×11	0.58	1.16	210				
100					5×11	0.58	1.16	210					6.3×11	0.22	0.44	340
120									6.3×11	0.22	0.44	340				
150	5×11	0.58	1.16	210												
220					6.3×11	0.22	0.44	340	8×11.5	0.11	0.22	640	8×11.5	0.11	0.22	640
330	6.3×11	0.22	0.44	340					8×11.5	0.11	0.22	640	8×15	0.083	0.166	840
470					8×11.5	0.11	0.22	640	8×15	0.083	0.166	840	10×12.5	0.080	0.160	865
680	8×11.5	0.11	0.22	640	8×15	0.083	0.166	840	8×20	0.064	0.128	1,050	10×20	0.046	0.092	1,400
820	10×12.5	0.080	0.16	865	10×12.5	0.080	0.160	865	10×16	0.060	0.120	1,210	12.5×16	0.049	0.098	1,450
1,000	8×15	0.087	0.174	840	8×20	0.064	0.128	1,050	10×20	0.046	0.092	1,400	10×25	0.042	0.084	1,650
1,200	8×20	0.069	0.128	1,050	10×16	0.060	0.120	1,210	10×25	0.042	0.084	1,650	10×30	0.031	0.062	1,910
1,500	10×20	0.046	0.092	1,400	10×25	0.042	0.084	1,650	12.5×16	0.042	0.084	1,940	12.5×20	0.035	0.070	1,900
1,800	12.5×16	0.045	0.090	1,450					16×16	0.042	0.084	1,940	16×16	0.042	0.084	1,940
2,200	10×25	0.042	0.084	1,650	10×30	0.031	0.062	1,910	12.5×25	0.027	0.054	2,230	12.5×30	0.024	0.048	2,650
2,700	10×30	0.031	0.062	1,910	12.5×20	0.042	0.084	1,940	18×16	0.043	0.086	2,210	16×20	0.027	0.054	2,530
3,300	16×16	0.042	0.084	1,940	18×16	0.043	0.086	2,210	12.5×30	0.024	0.048	2,650	12.5×35	0.020	0.040	2,880
3,900	12.5×25	0.027	0.054	2,230	12.5×25	0.027	0.054	2,230	12.5×35	0.020	0.040	2,880	16×25	0.021	0.042	2,930
4,700	18×16	0.043	0.086	2,210	16×20	0.027	0.054	2,530	18×20	0.026	0.052	2,860	18×20	0.026	0.052	2,860
5,600	12.5×30	0.024	0.048	2,650	12.5×35	0.020	0.040	2,880	16×31.5	0.017	0.034	3,450	16×31.5	0.017	0.034	3,450
6,800	12.5×35	0.020	0.040	2,880	12.5×40	0.017	0.034	3,350	18×25	0.019	0.038	3,140	18×25	0.019	0.038	3,140
8,200	16×20	0.027	0.054	2,530	16×25	0.021	0.042	2,930	16×35.5	0.015	0.030	3,610	16×40	0.013	0.026	4,080
10,000	18×20	0.042	0.084	1,940	18×20	0.042	0.084	1,940	18×31.5	0.015	0.030	3,610	18×31.5	0.015	0.030	3,610
12,000	12.5×40	0.017	0.034	3,350	16×31.5	0.017	0.034	3,450	16×40	0.013	0.026	4,080	16×40	0.013	0.026	4,080
15,000	16×25	0.021	0.042	2,930	18×25	0.019	0.038	3,140	18×35.5	0.014	0.028	4,220	18×35.5	0.014	0.028	4,220
18,000	18×25	0.019	0.038	3,140	18×35.5	0.014	0.028	4,220	18×40	0.012	0.024	4,280	18×40	0.012	0.024	4,280

Radial

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

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

Dimension and Permissible Ripple Current

V DC Contents μF	35V (1V)				50V (1H)				63V (1J)			
	$\phi D \times L$	Impedance (Ω , Max/100kHz)		Ripple Current (mA/Arms, 105°C) 100k Hz	$\phi D \times L$	Impedance (Ω , Max/100kHz)		Ripple Current (mA/Arms, 105°C) 100k Hz	$\phi D \times L$	Impedance (Ω , Max/100kHz)		Ripple Current (mA/Arms, 105°C) 100k Hz
		20°C	-10°C			20°C	-10°C			20°C	-10°C	
3.3					5×11	2.9	5.8	53				
4.7					5×11	2.5	5.0	95				
10					5×11	2.0	4.0	130				
15									5×11	1.2	2.4	165
22					5×11	0.91	1.82	180				
33	5×11	0.58	1.16	210					6.3×11	0.49	0.98	265
56	6.3×11	0.22	0.44	340	6.3×11	0.39	0.78	295	8×11.5	0.31	0.62	500
82									8×15 10×12.5	0.22 0.15	0.44 0.30	665 690
100					8×11.5	0.22	0.44	555				
120					8×15	0.190	0.38	730	8×20 10×16	0.17 0.11	0.34 0.22	820 950
150	8×11.5	0.11	0.22	640	10×12.5	0.160	0.32	760				
180					8×20	0.17	0.34	880	10×20 12.5×16	0.078 0.101	0.156 0.202	1,150 1,150
220	8×15 10×12.5	0.083 0.080	0.166 0.160	840 865	10×16	0.110	0.22	1,050	10×25	0.064	0.128	1,350
270	8×20	0.064	0.128	1,050	10×20 12.5×16	0.078 0.079	0.156 0.158	1,220 1,260	12.5×20	0.057	0.114	1,500
330	10×16	0.060	0.120	1,210	10×25	0.072	0.144	1,440				
390									12.5×25	0.043	0.086	1,900
470	10×20 12.5×16	0.046 0.049	0.092 0.098	1,400 1,450	10×30 12.5×20 16×16	0.056 0.059 0.072	0.112 0.118 0.114	1,690 1,660 1,690	12.5×30 16×20	0.039 0.045	0.078 0.090	2,300 2,000
560	10×25	0.042	0.084	1,650	12.5×25 18×16	0.044 0.070	0.088 0.140	1,950 1,930	12.5×35	0.034	0.068	2,500
680	10×30 12.5×20 16×16	0.031 0.035 0.042	0.062 0.070 0.084	1,910 1,900 1,940	12.5×30	0.039	0.078	2,310	12.5×40 16×25 18×20	0.029 0.035 0.042	0.058 0.070 0.084	2,800 2,600 2,500
820					12.5×35 16×20	0.033 0.044	0.066 0.088	2,510 2,210	16×31.5 18×25	0.029 0.034	0.058 0.068	2,850 2,800
1,000	12.5×25 18×16	0.027 0.043	0.054 0.086	2,230 2,210	12.5×40 16×25 18×20	0.027 0.033 0.047	0.054 0.066 0.094	2,920 2,555 2,490	16×35.5	0.027	0.054	2,900
1,200	12.5×30 16×20	0.024 0.027	0.048 0.054	2,650 2,530	16×31.5 18×25	0.027 0.028	0.054 0.056	3,010 2,740	16×40 18×31.5	0.025 0.028	0.050 0.056	3,400 3,300
1,500	12.5×35	0.020	0.040	2,880	16×35.5	0.024	0.048	3,150	18×35.5	0.025	0.050	3,400
1,800	12.5×40 16×25 18×20	0.017 0.021 0.026	0.034 0.042 0.052	3,350 2,930 2,860	16×40 18×31.5	0.021 0.024	0.042 0.048	3,710 3,635	18×40	0.024	0.048	3,500
2,200	16×31.5 18×25	0.017 0.019	0.034 0.038	3,450 3,140	18×35.5	0.022	0.044	3,680				
2,700	16×35.5 18×31.5	0.015 0.015	0.030 0.030	3,610 4,170	18×40	0.018	0.036	3,800				
3,300	16×40 18×35.5	0.013 0.014	0.026 0.028	4,080 4,220								
3,900	18×40	0.012	0.024	4,280								

Radial

Part Numbering System

RZW Series	470 μF	$\pm 20\%$	16V	Bulk Package	Gas Type	8 ϕ × 15L	Pb-free and PET sleeve
RZW	471	M	1C	BK	-	0815	S
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration & Package	Rubber Type	Case Size	Lead Wire and Sleeve type Supplement Code

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