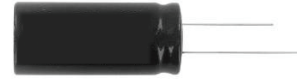


Features

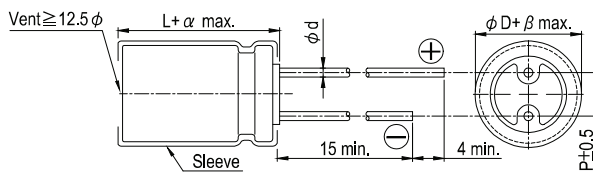
- 125°C, 3,000 ~ 5,000 hours assured
- Low impedance and high-ripple current
- For automobile modules and other high temperature applications
- RoHS Compliance



Specifications

Items	Performance																																		
Category Temperature Range	-40°C ~ +125°C																																		
Capacitance Tolerance	± 20% (at 120 Hz, 20°C)																																		
Leakage Current (at 20°C)	$I = 0.03CV$ or 4 (μA) whichever is greater (after 1 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>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Tanδ (max)</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> </tr> </tbody> </table> <p>When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase.</p>	Rated Voltage	25	35	50	63	80	100	Tanδ (max)	0.14	0.12	0.10	0.10	0.08	0.08																				
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Low Temperature Characteristics (at 120 Hz)	<p>Impedance ratio shall not exceed the values given in the table below.</p> <table border="1"> <thead> <tr> <th colspan="2">Rated Voltage</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance Ratio</td> <td>Z(-25°C) / Z(+20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C) / Z(+20°C)</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> </tbody> </table> <p>When the capacitance exceeds 1000μF, 0.02 shall be added every 1000μF increase</p>	Rated Voltage		25	35	50	63	80	100	Impedance Ratio	Z(-25°C) / Z(+20°C)	2	2	2	2	2	2	Z(-40°C) / Z(+20°C)	4	4	4	4	4	4											
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Endurance	<table border="1"> <tbody> <tr> <td>Test Time</td> <td>3,000 Hrs for L ≤ 25mm; 5,000 Hrs for L > 25mm</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±30% of initial value</td> </tr> <tr> <td>Tanδ</td> <td>Less than 300% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </tbody> </table> <p>* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 3,000 / 5,000 hours at 125°C.</p>	Test Time	3,000 Hrs for L ≤ 25mm; 5,000 Hrs for L > 25mm	Capacitance Change	Within ±30% of initial value	Tanδ	Less than 300% of specified value	Leakage Current	Within specified value																										
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Diagram of Dimensions

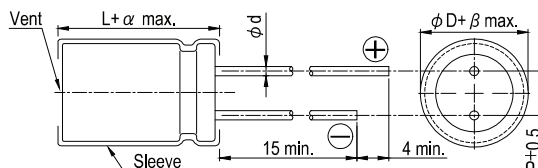


Lead Spacing and Diameter

Unit: mm

φ D	12.5	16	18
P	5.0	7.5	7.5
φ d	0.6	0.8	
α	2.0		
β	0.5		

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



Dimension: $\phi D \times L$ (mm)
 Impedance: Ω / at 100k Hz, 20°C
 Ripple Current: mA/rms at 100 kHz, 125°C

Dimension and Permissible Ripple Current

Rated Volt. (V _{DC})		25V (1E)			35V (1V)			50V (1H)			63V (1J)			80V (1K)		
Cap. (μF)	Contents	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA
330	331													16×20	0.085	1,790
470	471							12.5×20	0.065	1,500	16×20	0.085	1,790	16×25	0.061	2,030
560	561													18×25	0.049	2,280
680	681				12.5×20	0.044	1,820	12.5×25 16×20	0.048 0.043	1,900 2,040	16×25	0.061	2,030	16×35.5	0.044	2,580
820	821							12.5×30	0.041	2,150				16×40 18×35.5	0.036 0.035	2,900 2,890
1,000	102				12.5×25	0.033	2,400	12.5×35 16×25	0.034 0.031	2,510 2,620	16×35.5 18×25	0.044 0.049	2,580 2,280			
1,200	122	12.5×20	0.044	1,820	12.5×30 16×20	0.029 0.034	2,560 2,280	12.5×40 18×25	0.028 0.029	2,870 2,750	16×40	0.036	2,900	18×40	0.030	3,210
1,500	152				12.5×35	0.024	2,970	16×35.5	0.023	3,300	18×35.5	0.035	2,890			
1,800	182	12.5×25 16×20	0.033 0.034	2,400 2,280	12.5×40 16×25	0.021 0.026	3,600 3,100				18×40	0.030	3,210			
2,200	222	12.5×30	0.029	2,560	18×25	0.024	3,200	16×40 18×35.5	0.020 0.022	3,720 3,510						
2,700	272	12.5×35 16×25	0.024 0.026	2,970 3,100	16×35.5	0.020	3,590	18×40	0.018	3,940						
3,300	332	12.5×40	0.021	3,600	16×40 18×35.5	0.017 0.019	4,300 4,200									
3,900	392	16×35.5 18×25	0.020 0.024	3,590 3,200												
4,700	472				18×40	0.016	4,600									
5,600	562	16×40 18×35.5	0.017 0.019	4,300 4,200												
6,800	682	18×40	0.016	4,600												

Rated Volt. (V _{DC})		100V (2A)		
Cap. (μF)	Contents	$\phi D \times L$	Imp.	mA
200	201	16×20	0.11	1,580
330	331	16×25 18×25	0.079 0.064	1,990 2,110
470	471	16×35.5	0.056	2,500
560	561	16×40 18×35.5	0.046 0.044	2,700 2,690
680	681	18×40	0.039	2,880

Part Numbering System

RUZ series 1200μF ±20% 25V Bulk Package Gas Type 12.5φ×20L

RUZ **122** **M** **1E** **BK** **-** **1320** **XX**

Series Capacitance Capacitance Tolerance Rated Voltage Lead Configuration and Package Rubber Type Case Size **S** = Standard
KS = AEC-Q200 Qualified, Safety Critical Application
LS = AEC-Q200 Qualified, Non-Safety Critical Application