

RUK Series

Features

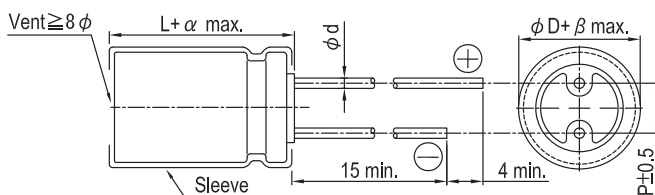
- 125°C, 3,000 ~ 5,000 hours assured
- For automobile modules and other high temperature applications
- RoHS compliance



Specifications

Items	Performance																								
Category Temperature Range	-40°C ~ +125°C																								
Capacitance Tolerance	± 20% (at 120 Hz, 20°C)																								
Leakage Current (at 20°C)	$I = 0.01CV$ or $3 (\mu A)$ whichever is greater (after 2 minutes) Where, C = rated capacitance in μF , V = rated DC working voltage in V																								
Tan δ (at 120 Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</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>0.15</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> </tr> </tbody> </table>	Rated Voltage	10	16	25	35	50	63	Tan δ (max)	0.15	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>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance Ratio</td> <td>$Z(-25^\circ C) / Z(+20^\circ C)$</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>$Z(-40^\circ C) / Z(+20^\circ C)$</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> </tbody> </table>	Rated Voltage		10	16	25	35	50	63	Impedance Ratio	$Z(-25^\circ C) / Z(+20^\circ C)$	3	2	2	2	2	2	$Z(-40^\circ C) / Z(+20^\circ C)$	6	4	4	4	4	4	
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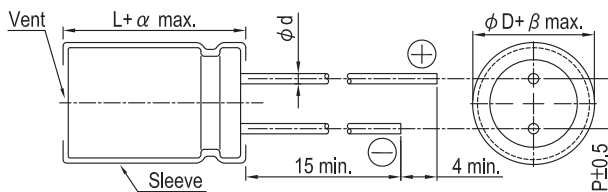
Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

	8	10	12.5	16
ϕD	8	10	12.5	16
P	3.5	5.0	5.0	7.5
ϕd	0.6			0.8
α	$L < 20: 1.5, L \geq 20: 2.0$			
β	0.5			

The case size of 16x20 is suitable for below diagram:





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

Ripple Current: mA/rms at 120 Hz, 125°C

Dimension and Permissible Ripple Current

Cap. (μF)	Contents	10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)		63V (1J)	
		$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA
10	100									8×11.5	56	8×11.5	56
22	220							8×11.5	75	10×12.5	99	10×12.5	99
33	330					8×11.5	92	10×12.5	108	10×16	133	10×16	133
47	470			8×11.5	100	10×12.5	129	10×16	142	10×16	159	10×20	173
100	101	10×12.5	154	10×16	190	10×16	208	10×20	225				
220	221	10×16	252	10×20	305	12.5×20	371	12.5×25	403	12.5×20	279	12.5×20	279
330	331	10×16	308	12.5×20	414	12.5×25	493	16×20	503				
470	471	10×20	399	12.5×25	537	16×20	601			16×20	459		
1,000	102	16×20	715										

Part Numbering System

RUK Series	470 μF	$\pm 20\%$	16V	Bulk Package	Gas Type	12.5 ϕ × 25L	Pb-free and PET sleeve
RUK	471	M	1C	BK	-	1325	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration and 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.