



## RUK Series

### Features

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

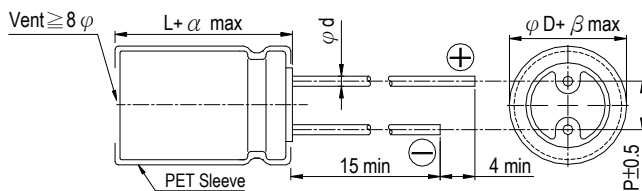


Sleeve & Marking Color: Black & White

### Specifications

Items	Performance																								
Category Temperature Range	-40°C ~ +125°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>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	Tanδ (max)	0.15	0.12	0.10	0.10	0.08	0.08										
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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 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°C) / Z(+20°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°C) / Z(+20°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°C) / Z(+20°C)	3	2	2	2	2	2	Z(-40°C) / Z(+20°C)	6	4	4	4	4	4	
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### Diagram of Dimensions

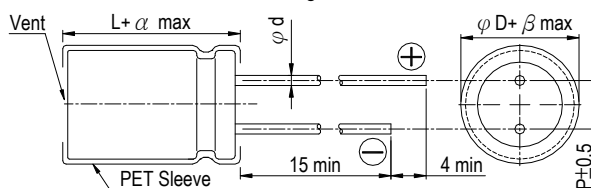


Lead Spacing and Diameter

φD	8	10	12.5	16
P	3.5	5.0	5.0	7.5
φd	0.6		0.8	
α	2.0			
β	0.5			

Unit: mm

The case size of 16×20 is suitable for below diagram:





Dimension:  $\phi D \times L(\text{mm})$   
 Ripple Current: mA/rms at 120 Hz, 125°C

### Dimension & Permissible Ripple Current

$\mu\text{F}$	V. DC 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 $\mu\text{F}$	$\pm 20\%$	16V	Bulk Package	Gas Type	12.5 $\phi \times 25\text{L}$	Pb-free and PET coating case
<b>RUK</b>	<b>471</b>	<b>M</b>	<b>1C</b>	<b>BK</b>	-	<b>1325</b>	
Series	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration & Package	Rubber Type	Case Size	Lead Wire and Coating Type

Note: For more details, please refer to "Part Numbering System (Radial Type)" on page 10.

# Mouser Electronics

Authorized Distributor

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## Lelon:

[RUK102M1ACCF1020](#) [RUK102M1ASAF1020](#) [RUK100M1HBK-0811](#) [RUK101M1CBK-0811](#) [RUK471M1HBKF1620P](#)  
[RUK101M1VBK-1020](#) [RUK102M1ABKF1020](#) [RUK220M1HBK-0811](#) [RUK221M1CBK-1012](#) [RUK221M1HBK-1025](#)  
[RUK221M1VBKF0815](#) [RUK331M1HBK-1320P](#) [RUK470M1HBK-1016P](#) [RUK471M1ABK-1020](#) [RUK471M1EBK-1325](#)  
[RUK471M1JBK-1330](#) [RUK4R7M1JBK-0811](#) [RUK680M1EBK-1012](#) [RUK470M2ABK-1016](#) [RUK151M1VBK-0811](#)  
[RUK221M1VBK-1012](#) [RUK471M1HBK-1620](#) [RUK220M1EBK-0511](#) [RUK471M1EBK-1620](#) [RUK220M2GBK-1320](#)  
[RUK471M1VBK-1320](#) [RUK470M1HBK-1016](#) [RUK331M1EBK-1016](#) [RUK221M1VBK-0815](#) [RUK470M1JBK-0811](#)