



## Features

- 85°C, 1,000 hours assured, 5mm height with low leakage current
- Use in very compact high temperature industrial equipment
- RoHS Compliance

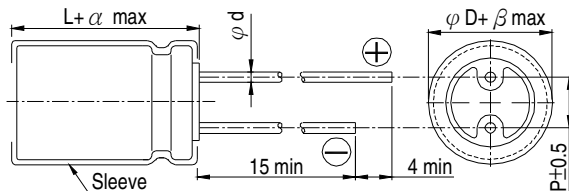


Sleeve & Marking Color: Orange & Black

## SPECIFICATIONS

Items	Performance																											
Category Temperature Range	-40°C ~ +85°C																											
Capacitance Tolerance	±20% (at 120Hz, 20°C)																											
Leakage Current (at 20°C)	I = 0.002CV or 0.4 (μA) whichever is greater (after 2 minutes) Where, C= rated capacitance in μF V = rated DC working voltage in V																											
Dissipation Factor (Tan δ at 120Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Tan δ (max)</td> <td>0.35</td> <td>0.27</td> <td>0.23</td> <td>0.19</td> <td>0.15</td> <td>0.13</td> <td>0.11</td> </tr> </tbody> </table>	Rated Voltage	4	6.3	10	16	25	35	50	Tan δ (max)	0.35	0.27	0.23	0.19	0.15	0.13	0.11											
Rated Voltage	4	6.3	10	16	25	35	50																					
Tan δ (max)	0.35	0.27	0.23	0.19	0.15	0.13	0.11																					
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>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Impedance</td> <td>Z(-25°C)/Z(+20°C)</td> <td>6</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Ratio</td> <td>Z(-40°C)/Z(+20°C)</td> <td>12</td> <td>9</td> <td>7</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Rated Voltage		4	6.3	10	16	25	35	50	Impedance	Z(-25°C)/Z(+20°C)	6	3	2	2	2	2	2	Ratio	Z(-40°C)/Z(+20°C)	12	9	7	5	3	3	3
Rated Voltage		4	6.3	10	16	25	35	50																				
Impedance	Z(-25°C)/Z(+20°C)	6	3	2	2	2	2	2																				
Ratio	Z(-40°C)/Z(+20°C)	12	9	7	5	3	3	3																				
Endurance	<table border="1"> <thead> <tr> <th>Test Time</th> <th>1,000 Hrs</th> </tr> </thead> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±30% of initial value for 4 ~ 6.3V; Within ±25% of initial value for 10 ~ 50V</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 200% 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 1,000 hours at 85°C.</p>	Test Time	1,000 Hrs	Capacitance Change	Within ±30% of initial value for 4 ~ 6.3V; Within ±25% of initial value for 10 ~ 50V	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value																			
Test Time	1,000 Hrs																											
Capacitance Change	Within ±30% of initial value for 4 ~ 6.3V; Within ±25% of initial value for 10 ~ 50V																											
Dissipation Factor	Less than 200% of specified value																											
Leakage Current	Within specified value																											
Shelf Life Test	Test time: 500 hours; other items are the same as those for the Endurance.																											

## DIAGRAM OF DIMENSIONS



## LEAD SPACING AND DIAMETER Unit: mm

φ D	4	5	6.3
P	1.5	2.0	2.5
φ d	0.45		
α	1.0		
β	0.5		

## DIMENSION & PERMISSIBLE RIPPLE CURRENT

Dimension: φ D × L(mm)

Ripple Current: mA/rms at 120 Hz, 85°C

μF	V. DC Contents	4V (0G)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)	
		φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA
0.1	0R1													4×5	1
0.22	R22													4×5	2
0.33	R33													4×5	3
0.47	R47													4×5	3.8
1	010													4×5	6.9
2.2	2R2													4×5	10
3.3	3R3													4×5	13
4.7	4R7									4×5	14	4×5	16	5×5	19
10	100							4×5	19	5×5	23	5×5	24	6.3×5	32
22	220			4×5	22	5×5	24	5×5	28	6.3×5	38	6.3×5	42		
33	330	5×5	27	5×5	28	5×5	30	6.3×5	41	6.3×5	46				
47	470	5×5	32	5×5	34	6.3×5	43	6.3×5	50						
100	101	6.3×5	54	6.3×5	60										