

HRJ Series

Features

- 150°C, 1,000 hours assured
- Low ESR and High ripple current
- RoHS compliant

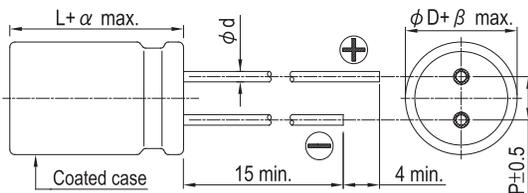


Marking color: Dark Green

Specifications

Items	Performance																	
Category Temperature Range	-55°C ~ +150°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)	See Standard Ratings																	
Low Temperature Characteristics (at 100k Hz)	Impedance ratio shall not exceed the values given in the table below																	
	<table border="1"> <thead> <tr> <th colspan="2">Rated Voltage</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td>Impedance</td> <td>Z (-25°C) / Z (+20°C)</td> <td>1.5</td> <td>1.5</td> <td>1.5</td> <td>1.5</td> </tr> <tr> <td>ratio</td> <td>Z (-55°C) / Z (+20°C)</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> <td>2.0</td> </tr> </tbody> </table>	Rated Voltage		25	35	50	63	Impedance	Z (-25°C) / Z (+20°C)	1.5	1.5	1.5	1.5	ratio	Z (-55°C) / Z (+20°C)	2.0	2.0	2.0
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Shelf Life Test	* 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 150°C. * After storage for 1,000 hours at $150 \pm 2^\circ C$ with no voltage applied and then being stabilized at 20°C, capacitors shall meet the limits specified in Endurance. (With voltage treatment)																	
Resistance to Soldering Heat	<table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±10% of initial value</td> </tr> <tr> <td>Tanδ</td> <td>Within specified value</td> </tr> <tr> <td>ESR</td> <td>Within specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </tbody> </table>	Capacitance Change	Within ±10% of initial value	Tan δ	Within specified value	ESR	Within specified value	Leakage Current	Within specified value									
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Diagram of Dimensions

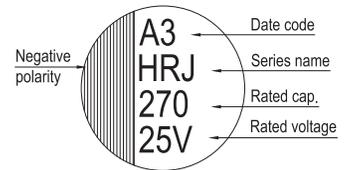


Lead Spacing and Diameter

φD	8	10
L	10	10
P	3.5	5.0
φd	0.6	
α	1.0	
β	0.5	

Unit: mm

Marking



Dimension: φD×L(mm)

Ripple Current: mA/rms at 100k Hz, 150°C

Standard Ratings

Rated Voltage (V)	Surge Voltage (V)	Capacitance (μF)	Size φD×L (mm)	Tan δ (120 Hz, 20°C)	LC (μA)	ESR (mΩ/at 100kHz, 20°C max.)	Rated R. C. (mA/rms at 100k Hz, 150°C)
25V (1E)	28.8	150	8 × 10	0.14	37.5	27	800
		270	10 × 10		67.5	20	1,000
35V (1V)	40.3	100	8 × 10	0.12	35.0	30	770
		150	10 × 10		52.5	23	950
50V (1H)	57.5	56	8 × 10	0.10	28.0	35	700
		100	10 × 10		50.0	28	900
63V (1J)	72.5	33	8 × 10	0.08	20.8	40	650
		56	10 × 10		35.3	30	840

Part Numbering System

HRJ Series	150μF	±20%	25V	Bulk Package	Gas Type	8 φ × 10L	General Purpose
HRJ	151	M	1E	BK	-	0810	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration and Package	Rubber Type	Case Size	Application

Note: For more details, please refer to "Part Numbering System" on page 87.