Surge arrester

2-electrode arrester

Series/Type: A81-H08X
Ordering code: B88069X1543****
Date: 2019-07-02
Version: 04
Features

- Standard size
- Very fast response time
- High current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- Line protection
- Consumer electronics
- Alarm system

Electrical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>DC spark-over voltage</th>
<th>Impulse spark-over voltage</th>
<th>Service life</th>
<th>Insulation resistance at 100 V&lt;sub&gt;DC&lt;/sub&gt;</th>
<th>Capacitance at 1 MHz</th>
<th>Arc voltage at 1 A</th>
<th>Glow to arc transition current</th>
<th>Glow voltage</th>
<th>Weight</th>
<th>Operation and storage temperature</th>
<th>Climatic category (IEC 60068-1)</th>
<th>Marking, blue positive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>800 V ±20 %</td>
<td>&lt;1200 V</td>
<td>10 A</td>
<td>&gt;10 GΩ</td>
<td>&lt;1.5 pF</td>
<td>~20 V</td>
<td>&lt;0.5 V</td>
<td>~160 V</td>
<td>~1.5 g</td>
<td>40 ... +125 °C</td>
<td>40/125/21</td>
<td>EPCOS 800 YY O</td>
</tr>
<tr>
<td>DC spark-over voltage</td>
<td>640 V</td>
<td>&lt;950 V</td>
<td>100 A</td>
<td></td>
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<td></td>
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<tr>
<td>Impulse spark-over voltage</td>
<td>960 V</td>
<td>&lt;1300 V</td>
<td>10 kA</td>
<td></td>
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<tr>
<td>Service life</td>
<td></td>
<td></td>
<td>2.5 kA</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 operations</td>
<td>50 Hz, 1 s</td>
<td></td>
<td>1000 A</td>
<td></td>
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</tr>
<tr>
<td>1 operation</td>
<td>50 Hz, 0.18 s (9 cycles)</td>
<td></td>
<td>10 kA</td>
<td></td>
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</tr>
<tr>
<td>10 operations</td>
<td>8/20 µs</td>
<td></td>
<td>2.5 kA</td>
<td></td>
<td></td>
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<tr>
<td>400 operations</td>
<td>10/350 µs</td>
<td></td>
<td>500 A</td>
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<td></td>
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</tr>
<tr>
<td>1 operation</td>
<td>10/1000 µs</td>
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</tbody>
</table>

1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode

Terms in accordance with ITU-T Rec. K.12 and IEC 61643-311.
Dimensional drawing in mm

Ordering codes and packing advices

B88069X1543S102 = 100 pcs. on 5 taped stripes  
B88069X1543T502 = 500 pcs. on tape & reel
Soldering parameter

Wave soldering

Wave profile features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solder</td>
<td>Sn 95.5 / Ag 3.8 / Cu 0.7</td>
</tr>
<tr>
<td>Solder bath temperature</td>
<td>263 (±3) °C</td>
</tr>
<tr>
<td>Dwell time</td>
<td>&lt; 3 s</td>
</tr>
</tbody>
</table>

Soldering profile applied to a single soldering process.

Cautions and warnings

- Do not operate surge arresters in power supply networks, whose maximum operating voltage exceeds the minimum spark-over voltage of the surge arresters.
- Surge arresters may become hot in the event of longer periods of current stress (burn risk). In the event of overload the connectors may fail or the component may be destroyed.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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