Surge arrester

2-electrode arrester

Series/Type: EC145X
Ordering code: B88069X5970****
Version/Date: Issue 02 / 2015-01-13
Surge arrester

2-electrode arrester

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

Applications
- Branch exchange
- Line protection
- Subscriber protection
- Alarm system
- Tuner
- Antenna protection

Electrical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC spark-over voltage (1)</td>
<td>145 V ±20%</td>
</tr>
<tr>
<td>Impulse spark-over voltage at 100 V/µs</td>
<td>&lt; 500 V</td>
</tr>
<tr>
<td>Impulse spark-over voltage at 1 kV/µs</td>
<td>&lt; 450 V</td>
</tr>
<tr>
<td>Service life</td>
<td>5 A</td>
</tr>
<tr>
<td>Insulation resistance at 50 V_{DC}</td>
<td>&gt; 10 GΩ</td>
</tr>
<tr>
<td>Capacitance at 1 MHz</td>
<td>&lt; 1.5 pF</td>
</tr>
<tr>
<td>Arc voltage at 1 A</td>
<td>~ 12 V</td>
</tr>
<tr>
<td>Glow to arc transition current</td>
<td>&lt; 0.5 A</td>
</tr>
<tr>
<td>Glow voltage</td>
<td>~ 60 V</td>
</tr>
<tr>
<td>Weight</td>
<td>~ 1.5 g</td>
</tr>
<tr>
<td>Operation and storage temperature</td>
<td>-40 ... +90 °C</td>
</tr>
<tr>
<td>Climatic category (IEC 60068-1)</td>
<td>40/ 90/ 21</td>
</tr>
<tr>
<td>Marking, red positive</td>
<td>EPCOS EC 145 YY O</td>
</tr>
<tr>
<td>Certification</td>
<td>UL 497B (E163070)</td>
</tr>
</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; IEC 61663-2 and IEC 61643-311.
Dimensional drawing in mm

Ordering codes and packing advices

B88069X5970S102 = 100 pcs. on 5 taped stripes  
B88069X5970T502 = 500 pcs. on tape and reel
Soldering parameter

Wave soldering

![Soldering profile](image)

- Wave profile features: Pb-free assembly
- Solder: Sn 95.5 / Ag 3.8 / Cu 0.7
- Solder bath temperature: 263 (±3) °C
- Dwell time: < 3 s

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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