Surge arrester

2-electrode arrester

Series/Type: ES90XPA
Ordering code: B88069X7621B502
Date: 2019-07-23
Version: 03
### Features
- Very small size
- Very fast response time
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

### Applications
- Modem
- XDSL-splitter
- Data lines
- Tuner
- Antenna

### Electrical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC spark-over voltage (V)</td>
<td>72</td>
<td>108</td>
</tr>
<tr>
<td>Impulse spark-over voltage (V)</td>
<td>450</td>
<td>600</td>
</tr>
<tr>
<td>Service life</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Insulation resistance at 50 V&lt;sub&gt;DC&lt;/sub&gt; (Ω)</td>
<td>&gt;1</td>
<td></td>
</tr>
<tr>
<td>Capacitance at 1 MHz (pF)</td>
<td>&lt;1</td>
<td></td>
</tr>
<tr>
<td>Arc voltage at 1 A (V)</td>
<td>~12</td>
<td></td>
</tr>
<tr>
<td>Glow to arc transition current (V)</td>
<td>&lt;0.5</td>
<td></td>
</tr>
<tr>
<td>Glow voltage (V)</td>
<td>~70</td>
<td></td>
</tr>
<tr>
<td>Weight (g)</td>
<td>~0.3</td>
<td></td>
</tr>
<tr>
<td>Operation and storage temperature (°C)</td>
<td>-40</td>
<td>+125</td>
</tr>
<tr>
<td>Climatic category (IEC 60068-1)</td>
<td>40/125/21</td>
<td></td>
</tr>
</tbody>
</table>

### Marking, red positive

- **ES** - Series
- **90** - Nominal voltage
- **YY** - Year of production
- **O** - Non radioactive

### Certification

- UL 497B (E163070)

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

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

Ordering codes and packing advices

B88069X7621B502 = 500 pcs. on trays

Soldering parameter
Wave soldering

Wave profile features | Pb-free assembly
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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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