Surge arrester

2-electrode arrester

Series/Type: S30-A420X
Ordering code: B88069X9311T203
Version/Date: Issue 02 / 2013-09-17
Surge arrester B88069X9311T203

2-electrode arrester S30-A420X

Features
- Extremely small size
- Fast response time
- Stable performance over life
- Very low capacitance
- High insulation resistance
- Excellent SMD handling
- RoHS-compatible

Applications
- PCI cards
- Modem
- Splitter
- Line cards
- Applications with limited space

Important notes at the end of this document.

Features Applications
- DC spark-over voltage 1,2
  - at 100 V/µs - for 99% of measured values
  - typical values of distribution
  - at 1 kV/µs - for 99% of measured values
  - typical values of distribution

Electrical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC spark-over voltage 1,2</td>
<td>420 ± 25 V</td>
</tr>
<tr>
<td>Impulse spark-over voltage</td>
<td></td>
</tr>
<tr>
<td>at 100 V/µs - for 99% of measured values</td>
<td>&lt; 800 V</td>
</tr>
<tr>
<td>at 100 V/µs - typical values of distribution</td>
<td>&lt; 700 V</td>
</tr>
<tr>
<td>at 1 kV/µs - for 99% of measured values</td>
<td>&lt; 1000 V</td>
</tr>
<tr>
<td>at 1 kV/µs - typical values of distribution</td>
<td>&lt; 850 V</td>
</tr>
<tr>
<td>Service life 3</td>
<td></td>
</tr>
<tr>
<td>10 operations 50 Hz, 1 s</td>
<td>2.5 A</td>
</tr>
<tr>
<td>300 operations 8/20 µs</td>
<td>100 kA</td>
</tr>
<tr>
<td>10 operations [5x (+) &amp; 5x (-)]</td>
<td>2 A</td>
</tr>
<tr>
<td>100 operations [50x (+) &amp; 50x (-)] 10/1000 µs</td>
<td>10 A</td>
</tr>
<tr>
<td>Insulation resistance at 100 V&lt;sub&gt;DC&lt;/sub&gt;</td>
<td>&gt; 1 GΩ</td>
</tr>
<tr>
<td>Capacitance at 1 MHz</td>
<td>&lt; 0.8 pF</td>
</tr>
<tr>
<td>Arc voltage at 1 A</td>
<td>~ 10 V</td>
</tr>
<tr>
<td>Glow to arc transition current</td>
<td>&lt; 0.4 A</td>
</tr>
<tr>
<td>Glow voltage</td>
<td>~ 55 V</td>
</tr>
<tr>
<td>Weight</td>
<td>~ 0.2 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, black positive</td>
<td>▲LY</td>
</tr>
<tr>
<td>- Nominal voltage (L ≙ 420 V)</td>
<td></td>
</tr>
<tr>
<td>- Year of production (last digit)</td>
<td></td>
</tr>
</tbody>
</table>

1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode
3) Tests according to ITU-T Rec. K. 12 and UL 497B

**Surge arrester**

**B88069X9311T203**

**2-electrode arrester**

**S30-A420X**

### Dimensional drawing in mm

![Dimensional drawing in mm](image)

### Ordering code and packing advice

B88069X9311T203 = tape and reel with 2000 pcs

![Ordering code and packing advice](image)

### Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in the event of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In the event of overload, the lead contacts may fail or the component may be destroyed.
- Surge arresters must be handled with care and must not be dropped.
- Damaged surge arresters must not be re-used.

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