Surge arrester

2-electrode arrester

Series/Type: EM600X
Ordering code: B88069X2593T502
Date: 2019-07-19
Version: 04
Features
- Small size
- Fast response time
- High current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

Applications
- Power supplies
- Antenna protection
- Air condition
- Modem
- Consumer electronics
- Dataline protection

Electrical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>600</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC spark-over voltage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolerance</td>
<td>±20</td>
<td>%</td>
</tr>
<tr>
<td>Min.</td>
<td>480</td>
<td>V</td>
</tr>
<tr>
<td>Max.</td>
<td>720</td>
<td>V</td>
</tr>
<tr>
<td>Impulse spark-over voltage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>at 100 V/µs - for 99% of measured values</td>
<td>&lt; 1100</td>
<td>V</td>
</tr>
<tr>
<td>- typical values of distribution</td>
<td>&lt; 950</td>
<td>V</td>
</tr>
<tr>
<td>at 1 kV/µs - for 99% of measured values</td>
<td>&lt; 1200</td>
<td>V</td>
</tr>
<tr>
<td>- typical values of distribution</td>
<td>&lt; 1000</td>
<td>V</td>
</tr>
</tbody>
</table>

Service life

| 10 operations | 50 Hz, 1 s | 2.5 | A |
| 1 operation   | 50 Hz, 0.18 s (9 cycles) | 5  | A |
| 10 operations | 8/20 µs    | 2.5 | kA|
| 1 operation   | 8/20 µs    | 5   | kA|

Insulation resistance at 100 V<sub>DC</sub>

< 1 GΩ

Capacitance at 1 MHz

< 1 pF

Arc voltage at 1 A

< 10 V

Glow to arc transition current

< 0.3 A

Glow voltage

< 60 V

Weight

~ 1 g

Operation and storage temperature

−40 ... +125 °C

Climatic category (IEC 60068-1)

40/125/21

Marking, red positive

EPCOS EM 600 YY O

EM - Series
600 - Nominal voltage
YY - Year of production
O - Non radioactive

Certifications

UL 1449 (E319264)

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.
Surge arrester  B88069X2593T502
2-electrode arrester  EM600X

Dimensional drawing in mm

Ordering codes and packing advices
B88069X2593T502 = 500 pcs. on tape and 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>

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