



Surge arrester

2-electrode arrester

Series/Type: ES400XSMD
Ordering code: B88069X5591T902
Version/Date: Issue 03 / 2010-02-10

Features

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

Applications

- Modem
- Consumer electronics
- Tuner

Electrical specifications

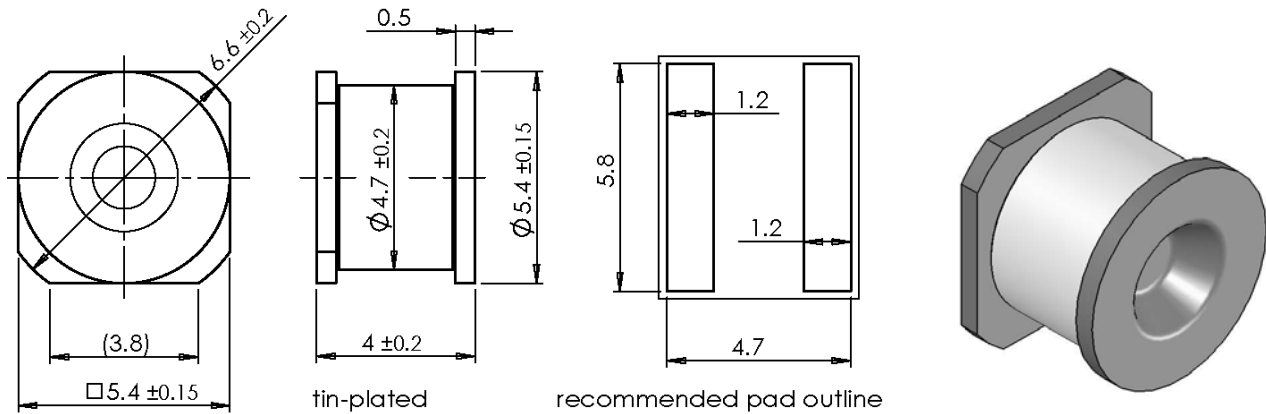
| | | | |
|--|--|---|--------|
| DC spark-over voltage ¹⁾²⁾ | | 400 ± 15 | V % |
| Impulse spark-over voltage | | | |
| at 100 V/μs | - for 99% of measured values - typical values of distribution | < 800 < 750 | V V |
| at 1 kV/μs | - for 99% of measured values - typical values of distribution | < 1000 < 850 | V V |
| Service life | | | |
| 10 operations | 50 Hz; 1 s | 2.5 | A |
| 10 operations | 8/20 μs | 2.5 | kA |
| 1 operation | 8/20 μs | 5 | kA |
| 300 operations (150x (+) & 150x (-)) | 10/1000 μs | 10 | A |
| 100 operations (50x (+) & 50x (-)) | 10/1000 μs | 50 | A |
| Insulation resistance at 100 V _{dc} | | > 1 | GΩ |
| Capacitance at 1 MHz | | < 1 | pF |
| Arc voltage at 1 A | | ~ 11 | V |
| Glow to arc transition current | | < 0.5 | A |
| Glow voltage | | ~ 80 | V |
| Weight | | ~ 1 | g |
| Operation and storage temperature | | -40 ... +90 | °C |
| Climatic category (IEC 60068-1) | | 40/ 90/ 21 | |
| Marking, red negative | | EPCOSES 400 YY O ES - Series 400 - Nominal voltage YY - Year of production O - Non radioactive | |

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 DIN 57845/VDE0845

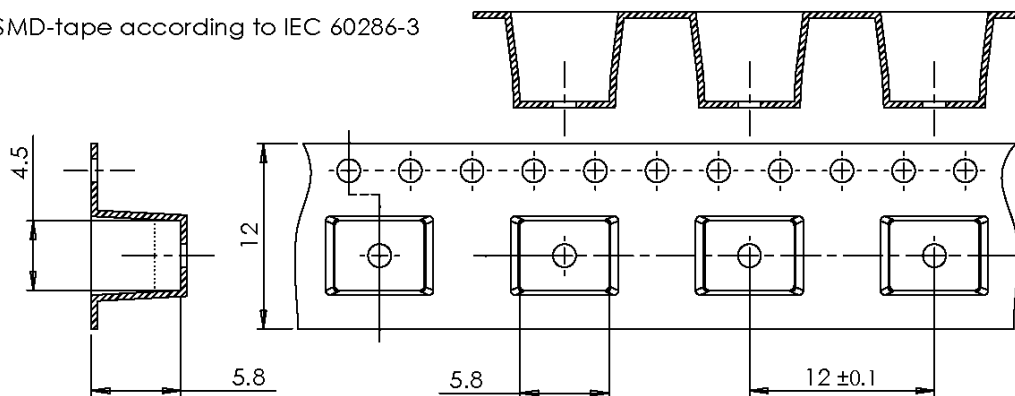
Dimensional drawing in mm



Packing advice

T902 = tape and reel with 900 pcs.

SMD-tape according to IEC 60286-3



Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- If the contacts of the surge arresters are defective, current stress can lead to the formation of sparks and loud noises (bang).
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In case of overload, the lead contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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