



Surge arrester

3-electrode arrester

Series/Type: T90-A230XSMD
Ordering code: B88069X6680T902
Version/Date: Issue 08 / 2007-11-14

Preliminary data

| Features | Applications |
|--|--|
| <ul style="list-style-type: none"> ▪ Very small size ▪ Fast response time ▪ High current rating ▪ Stable performance over life ▪ Extremely low capacitance ▪ High insulation resistance ▪ Excellent SMD handling ▪ RoHS-compatible | <ul style="list-style-type: none"> ▪ Line protection ▪ Station protection ▪ Base stations |

Electrical specifications

| | | |
|--|-------------|------------------|
| DC spark-over voltage ^{1) 2) 4)} | 230 ± 20 | V % |
| Impulse spark-over voltage ⁴⁾ | | |
| at 100 V/μs - for 99 % of measured values | < 580 | V |
| - typical values of distribution | < 460 | V |
| at 1 kV/μs - for 99 % of measured values | < 750 | V |
| - typical values of distribution | < 600 | V |
| Service life | | |
| 10 operations 50 Hz; 1 s ⁵⁾ | 5 | A _{rms} |
| 1 operation 50 Hz; 0.18 s (9 cycles) ⁵⁾ | 10 | A _{rms} |
| 10 operations 8/20 μs ⁵⁾ | 5 | kA |
| 1 operation 8/20 μs ⁵⁾ | 10 | kA |
| 5 operations 10/250 μs ⁵⁾ | 2 | kA |
| 2 operations 10/350 μs ⁵⁾ | 2.5 | kA |
| 300 operations 10/1000 μs ⁵⁾ | 200 | A |
| DC holdover voltage ³⁾ | | |
| at 52 V _{dc} / 260 Ω | < 150 | ms |
| at 80 V _{dc} / 330 Ω | < 150 | ms |
| at 135 V _{dc} / 1300 Ω | < 150 | ms |
| Insulation resistance at 100 V _{dc} ⁴⁾ | > 1 | GΩ |
| Capacitance at 1 MHz ⁴⁾ | < 1 | pF |
| Transverse delay time ⁴⁾ | < 0.2 | μs |
| Arc voltage at 1 A | ~ 10 | V |
| Glow to arc transition current | ~ 1 | A |
| Glow voltage | ~ 60 | V |
| Weight | ~ 0.8 | g |
| Operation and storage temperature | -40 ... +90 | °C |
| Climatic category (IEC 60068-1) | 40/ 90/ 21 | |

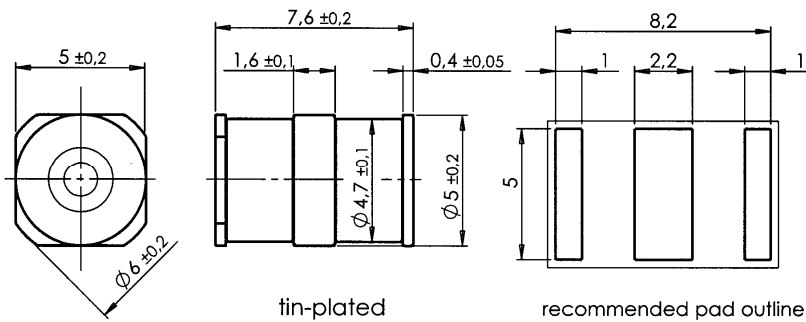
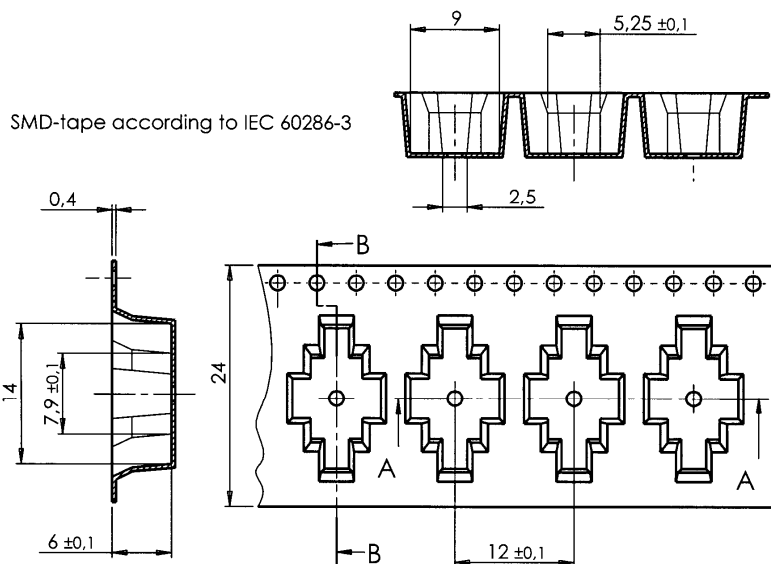
Preliminary data

Marking, blue negative

EPCOS
230 YY O

 230 - Nominal voltage
 YY - Year of production
 O - Non radioactive

- 1) At delivery AQL 0.65 level II, DIN ISO 2859
 - 2) In ionized mode
 - 3) Test according to ITU-T Rec. K.12
 - 4) Tip or ring electrode to center electrode
 - 5) Total current through center electrode, half value through tip respectively ring electrode
- Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

Dimensional drawing

Not to scale
Dimensions in mm
Non controlled document
Packing advice
T902 = SMD-tape with 900 pcs

Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- 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 head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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