



Surge arrester

3-electrode arrester

Series/Type: T90-A420XSMD
Ordering code: B88069X7041T902
Version/Date: Issue 01 / 2007-09-14

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Surge arrester
B88069X7041T902
3-electrode arrester
T90-A420XSMD

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)} DC spark-over voltage ^{2) 6)} | 357 ... 525 357 ... 1000 | V V |
| Impulse spark-over voltage at 100 V/μs - for 99 % of measured values ⁴⁾ - typical values of distribution ⁴⁾ | < 850 < 750 | V V |
| at 1 kV/μs - for 99 % of measured values ⁴⁾ - typical values of distribution ⁴⁾ | < 1000 < 900 | V V |
| at 1 kV/μs - for 99 % of measured values ⁶⁾ - typical values of distribution ⁶⁾ | < 1800 < 1600 | V V |
| Service life 10 operations 50 Hz; 1 s ⁵⁾ 1 operation 50 Hz; 0.18s ⁵⁾ 10 operations [5x (+) & 5x (-)] 8/20 μs ⁵⁾ 1 operation 8/20 μs ⁵⁾ 1 operation 10/350 μs ⁵⁾ 300 operations 10/1000 μs ⁵⁾ | 5 10 5 10 1 200 | A A kA kA kA A |
| Insulation resistance at 100 V _{dc} ⁴⁾ | > 1 | GΩ |
| Capacitance at 1 MHz ⁴⁾ | < 1.5 | pF |
| Transverse delay time ³⁾ | < 0.2 | μs |
| Arc voltage at 1 A Glow to arc transition current Glow voltage | ~ 10 ~ 1 ~ 60 | V A V |
| Weight | ~ 0.8 | g |
| Operation and storage temperature | -40 ... +90 | °C |
| Climatic category (IEC 60068-1) | 40/ 90/ 21 | |
| Marking, blue negative | EPCOS 420 YY O 420 - Nominal voltage YY - Year of production O - Non radioactive | |

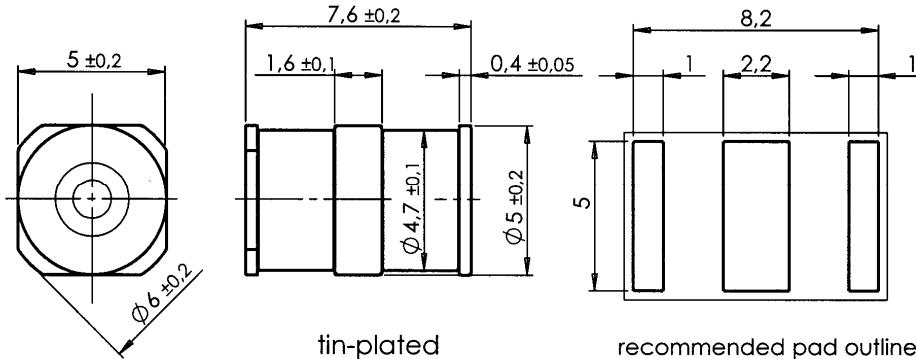
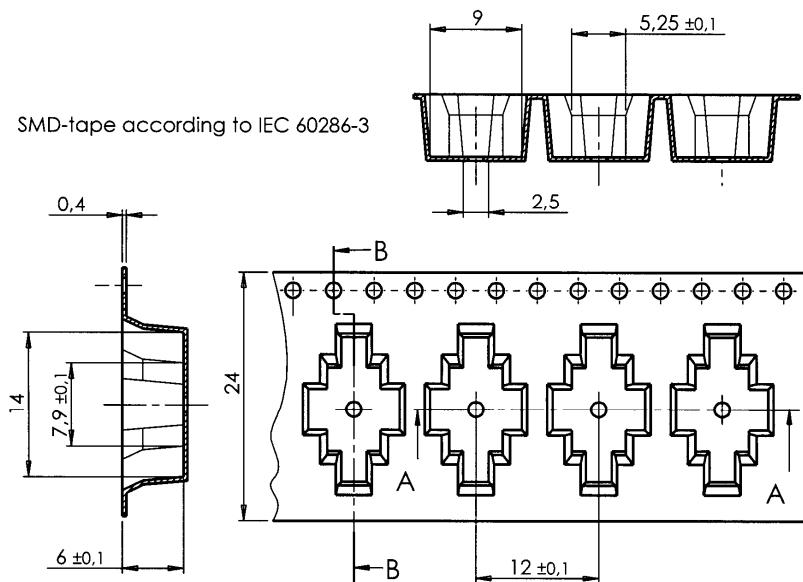
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Issue 01 / 2007-09-14

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- 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
- 6) Tip to 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.

KB AB E / KB AB PM

Issue 01 / 2007-09-14

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