



Surge arrester

3-electrode arrester

Series/Type: T90-A90XSMD
Ordering code: B88069X2331T902
Version/Date: Issue 04 / 2007-11-14

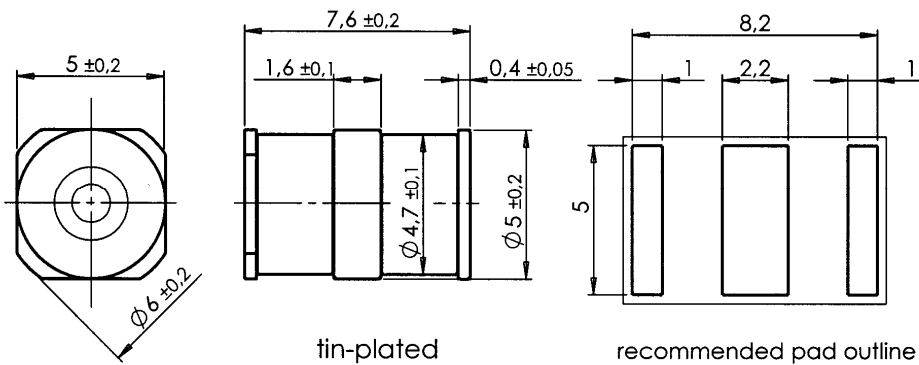
Features	Applications
<ul style="list-style-type: none"> ▪ Very small size ▪ Fast response time ▪ High current rating ▪ Stable performance over life ▪ Extremely low capacitance ▪ High insulation resistance ▪ Excellent SMD handling ▪ RoHS-compatible 	<ul style="list-style-type: none"> ▪ Modem ▪ Data lines

Electrical specifications

DC spark-over voltage ^{1) 2) 4)}	90 ± 20	V %
Impulse spark-over voltage ⁴⁾		
at 100 V/μs - for 99 % of measured values - typical values of distribution	< 550 < 450	V V
at 1 kV/μs - for 99 % of measured values - typical values of distribution	< 700 < 600	V 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
1 operation 10/350 μs ⁵⁾	1	kA
Insulation resistance at 50 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	~ 10	V
Glow to arc transition current	~ 1	A
Glow voltage	~ 60	V
Weight	~ 1.2	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, blue negative	EPCOS 90 YY O 90 - 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



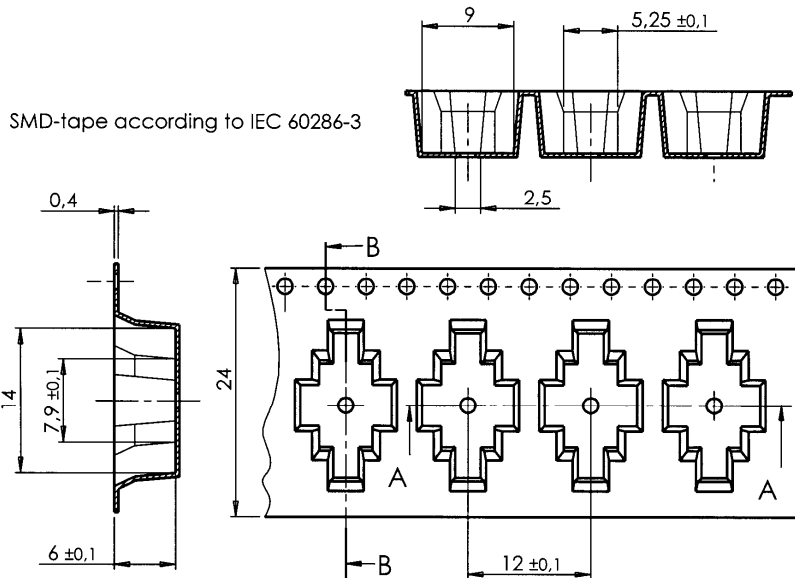
Not to scale

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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