



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)}	357 ... 525	V
DC spark-over voltage ^{2) 6)}	357 ... 1000	V
Impulse spark-over voltage		
at 100 V/μs - for 99 % of measured values ⁴⁾	< 850	V
- typical values of distribution ⁴⁾	< 750	V
at 1 kV/μs - for 99 % of measured values ⁴⁾	< 1000	V
- typical values of distribution ⁴⁾	< 900	V
at 1 kV/μs - for 99 % of measured values ⁶⁾	< 1800	V
- typical values of distribution ⁶⁾	< 1600	V
Service life		
10 operations 50 Hz; 1 s ⁵⁾	5	A
1 operation 50 Hz; 0.18s ⁵⁾	10	A
10 operations [5x (+) & 5x (-)] 8/20 μs ⁵⁾	5	kA
1 operation 8/20 μs ⁵⁾	10	kA
1 operation 10/350 μs ⁵⁾	1	kA
300 operations 10/1000 μs ⁵⁾	200	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	~ 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	
Marking, blue negative	EPCOS 420 YY O 420 - Nominal voltage YY - Year of production O - Non radioactive	

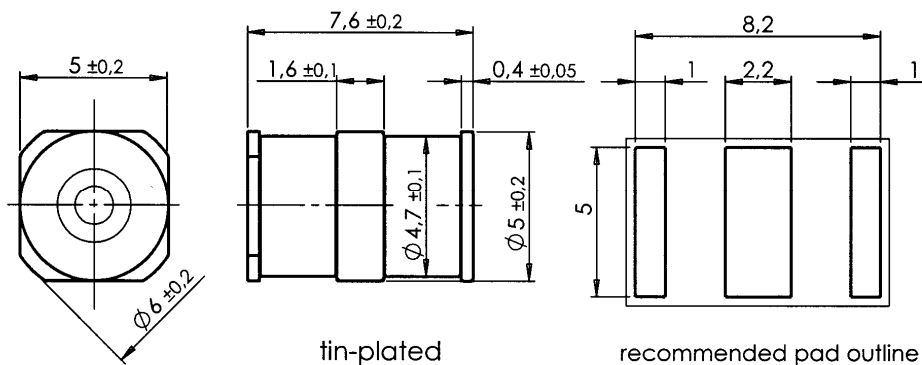
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- 1) At delivery AQL 0.65 level II, DIN ISO 2859
 - 2) In ionized mode
 - 3) Test according to ITU-T Rec. K.12
 - 4) Tip or ring electrode to center electrode
 - 5) Total current through center electrode, half value through tip respectively ring electrode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

Dimensional drawing



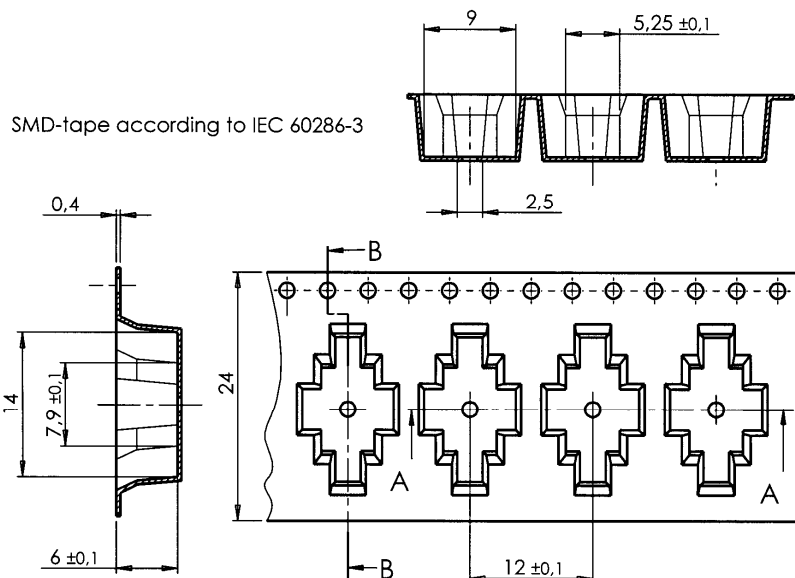
Not to scale

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.

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