Surge arrester

3-electrode arrester

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

Surge arrester — B88069X7041T902

3-electrode arrester — T90-A420XSMD

Preliminary data

Features	Applications
▪ Very small size ▪ Fast response time ▪ High current rating ▪ Stable performance over life ▪ Extremely low capacitance ▪ High insulation resistance ▪ Excellent SMD handling ▪ RoHS-compatible	▪ Line protection ▪ Station protection ▪ Base stations

Electrical specifications

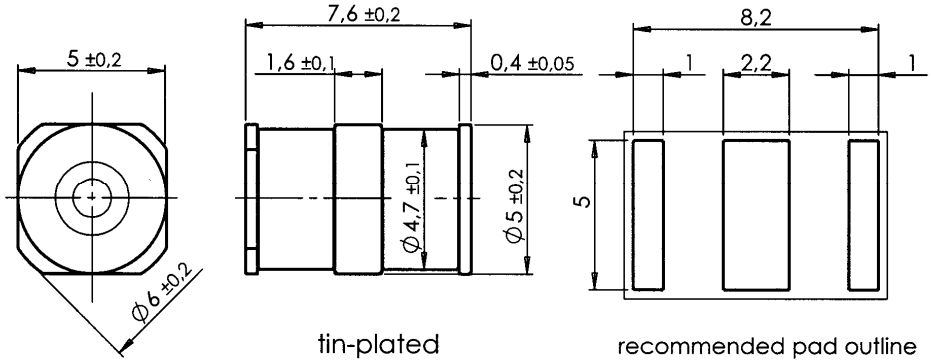
DC spark-over voltage [1) 2) 4)]		357 … 525	V
DC spark-over voltage [2) 6)]		357 … 1000	V
Impulse spark-over voltage			
at 100 V/µs	- for 99 % of measured values [4)]	< 850	V
	- typical values of distribution [4)]	< 750	V
at 1 kV/µs	- for 99 % of measured values [4)]	< 1000	V
	- typical values of distribution [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	

Preliminary data

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



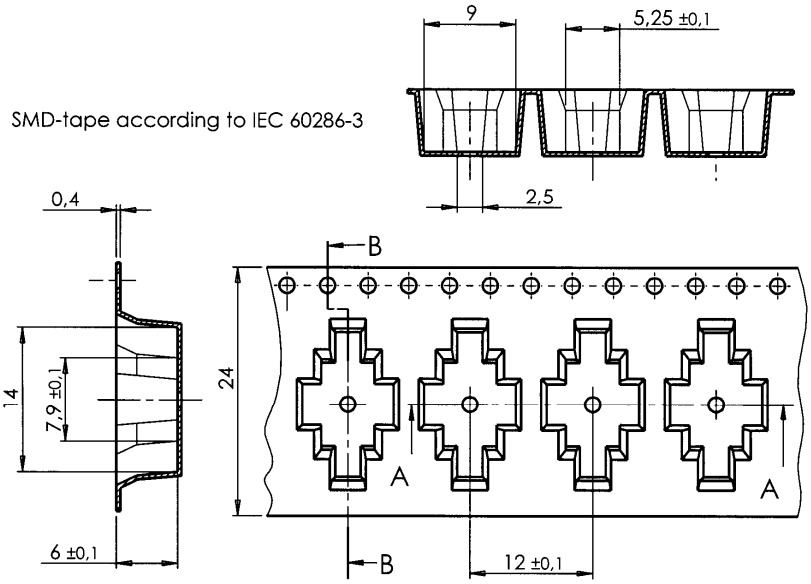
Not to scale

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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