



Surge arrester

3-electrode arrester

Series/Type: TG30-A90XSMD
Ordering code: B88069X9991T203
Version/Date: Issue 03 / 2011-11-23

Features

- Extremely small size
- Very fast response time
- Stable performance over life
- Very low capacitance
- High insulation resistance
- Excellent SMD handling
- RoHS-compatible

Applications

- ESD protection
- Applications with limited space

Electrical specifications

DC spark-over voltage ^{1) 2) 4)}	90 ± 30	V %
Impulse spark-over voltage ⁴⁾		
at 100 V/μs - for 99 % of measured values - typical values of distribution	< 450 < 350	V V
at 1 kV/μs - for 99 % of measured values - typical values of distribution	< 650 < 550	V V
Service life		
10 operations 50 Hz, 1 s ⁵⁾	2	A
300 operations 8/20 μs ⁶⁾	100	A
10 operations [5x (+) & 5x (-)] 8/20 μs ⁵⁾	2	kA
10 operations [5x (+) & 5x (-)] 5/320 μs ^{7) 8)}	150	A
300 operations ((+/-) alternating polarity) 10/1000 μs ⁵⁾	20	A
Insulation resistance at 50 V _{DC} ⁴⁾	> 1	GΩ
Capacitance at 1 MHz ⁴⁾	< 1.0	pF
Arc voltage at 1 A	~ 10	V
Glow to arc transition current	~ 1	A
Glow voltage	~ 60	V
Weight	~ 0.4	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking	without	

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 electrodes

⁵⁾ Total current through center electrodes, half value through tip respectively ring electrode.

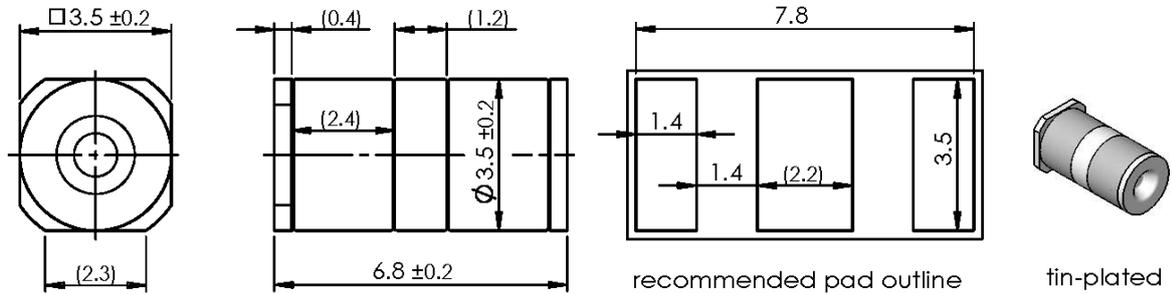
⁶⁾ Tip to ring electrode

⁷⁾ Tip to center electrode additional ring to center electrode

⁸⁾ Test generator 6 kV, 10/700 μs, 40 Ω

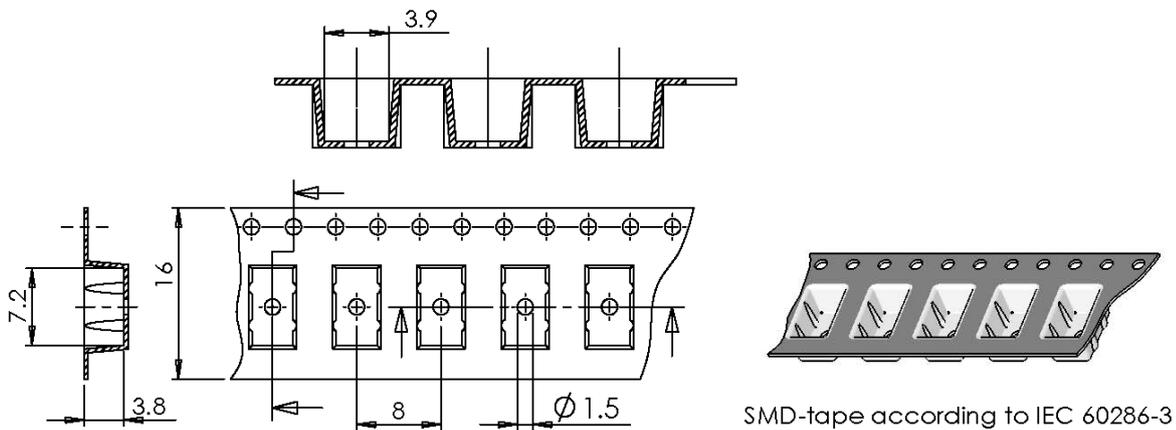
Terms in accordance with ITU-T Rec. K.12 and IEC 61663-2

Dimensional drawing in mm



Ordering code and packing advice

B88069X9991T203 = SMD-tape with 2000 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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