



Surge arrester

2-electrode arrester

Series/Type: ES400XSMD
Ordering code: B88069X5591T902
Version/Date: Issue 03 / 2010-02-10

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Features

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

Applications

- Modem
- Consumer electronics
- Tuner

Electrical specifications

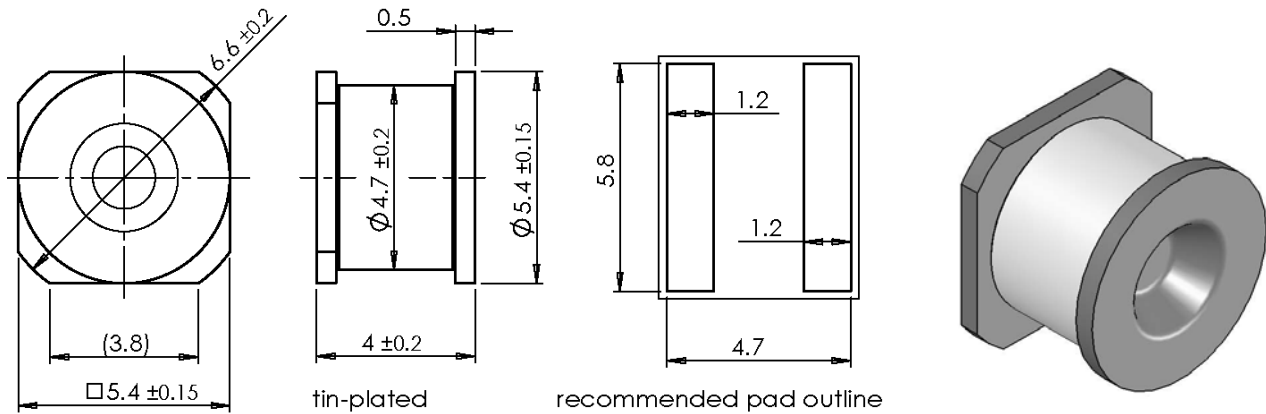
DC spark-over voltage ¹⁾²⁾		400 ± 15	V %
Impulse spark-over voltage			
at 100 V/μs	- for 99% of measured values - typical values of distribution	< 800 < 750	V V
at 1 kV/μs	- for 99% of measured values - typical values of distribution	< 1000 < 850	V V
Service life			
10 operations	50 Hz; 1 s	2.5	A
10 operations	8/20 μs	2.5	kA
1 operation	8/20 μs	5	kA
300 operations (150x (+) & 150x (-))	10/1000 μs	10	A
100 operations (50x (+) & 50x (-))	10/1000 μs	50	A
Insulation resistance at 100 V _{dc}		> 1	GΩ
Capacitance at 1 MHz		< 1	pF
Arc voltage at 1 A		~ 11	V
Glow to arc transition current		< 0.5	A
Glow voltage		~ 80	V
Weight		~ 1	g
Operation and storage temperature		-40 ... +90	°C
Climatic category (IEC 60068-1)		40/ 90/ 21	
Marking, red negative		EPCOSES 400 YY O ES - Series 400 - Nominal voltage YY - Year of production O - Non radioactive	

¹⁾ At delivery AQL 0.65 level II, DIN ISO 2859

²⁾ In ionized mode

Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

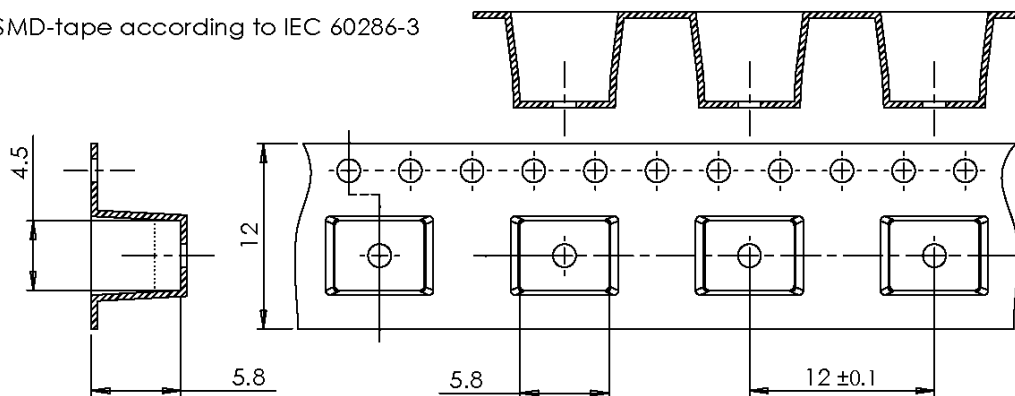
Dimensional drawing in mm



Packing advice

T902 = tape and reel with 900 pcs.

SMD-tape according to IEC 60286-3



Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- If the contacts of the surge arresters are defective, current stress can lead to the formation of sparks and loud noises (bang).
- 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 lead contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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