Surge arrester

2-electrode arrester

Series/Type:	**ES90XN**
Ordering code:	**B88069X4421T103**
Version/Date:	Issue 03 / 2010-04-21

EPCOS AG is a TDK Group Company.

Surge arrester — B88069X4421T103

2-electrode arrester — ES90XN

Features

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

Applications

- Modem
- XDSL-splitter
- Tuner
- Data lines
- Antenna

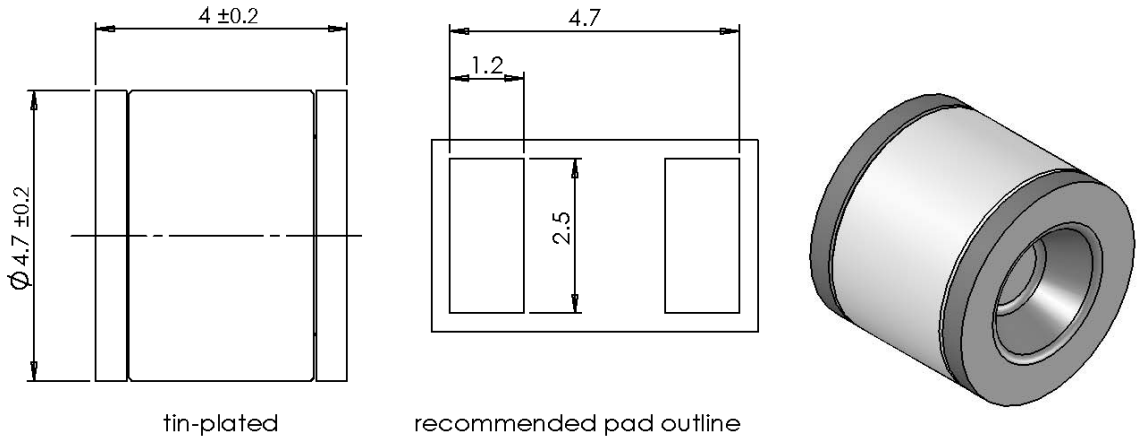
Electrical specifications

DC spark-over voltage [1) 2)]	90 ± 20	V %
Impulse spark-over voltage		
at 100 V/µs - for 99% of measured values	< 450	V
- typical values of distribution	< 300	V
at 1 kV/µs - for 99% of measured values	< 600	V
- typical values of distribution	< 550	V
Service life		
10 operations 50 Hz, 1 s	2.5	A
10 operations 8/20 µs	2.5	kA
10 operations [5 × (+) & 5× (–)] 10/250 µs	1	kA
2 operation [1 × (+) & 1× (–)] 10/250 µs	2	kA
50 operations [25 × (+) & 25× (–)] 10/1000 µs	100	A
Insulation resistance at 50 V_{dc}	> 1	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 10	V
Glow to arc transition current	< 0.5	A
Glow voltage	~ 40	V
Weight	~ 0.3	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, red positive	**EPCOS ES 90 YY O** ES - Series 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

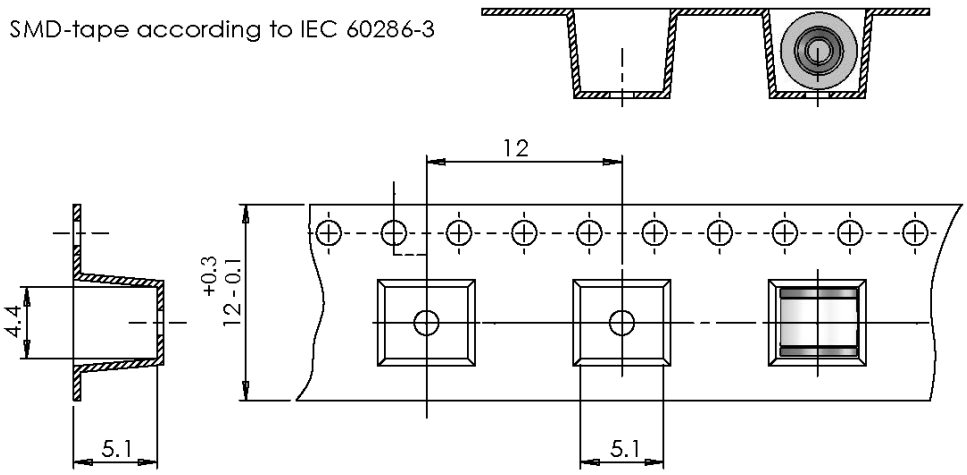
Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

Dimensional drawing in mm



Ordering code and packing advice

*B88069X....**T103** = tape and reel with 1000 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 lead contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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