

# Surge arrester

3-electrode arrester

 Series/Type:
 T90-A90XSMD

 Ordering code:
 B88069X2331T902

 Version/Date:
 Issue 04 / 2007-11-14

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Surge arrester B88069X2331T902

3-electrode arrester T90-A90XSMD

Features	Applications
<ul><li>Very small size</li></ul>	■ Modem
<ul> <li>Fast response time</li> </ul>	<ul><li>Data lines</li></ul>
<ul> <li>High current rating</li> </ul>	
<ul> <li>Stable performance over life</li> </ul>	
<ul> <li>Extremely low capacitance</li> </ul>	
<ul> <li>High insulation resistance</li> </ul>	
<ul> <li>Excellent SMD handling</li> </ul>	
<ul> <li>RoHS-compatible</li> </ul>	

## **Electrical specifications**

DC spark-over voltag	e <sup>1) 2) 4)</sup>	90 ± 20	V %	
Impulse spark-over vo at 100 V/µs	oltage <sup>4)</sup> - for 99 % of measured values - typical values of distribution	< 550 < 450	V	
at 1 kV/µs	<ul><li>for 99 % of measured values</li><li>typical values of distribution</li></ul>	< 700 < 600	V	
Service life				
10 operation	s 50 Hz; 1 s <sup>5)</sup>	5	A <sub>rms</sub>	
1 operation	50 Hz; 0.18 s (9 cycles) <sup>5)</sup>	10	$A_{rms}$	
10 operation	s 8/20 μs <sup>5)</sup>	5	kA	
1 operation	8/20 μs <sup>5)</sup>	10	kA	
1 operation	10/350 μs <sup>5)</sup>	1	kA	
Insulation resistance	at 50 V <sub>dc</sub> <sup>4)</sup>	> 1	$G\Omega$	
Capacitance at 1 MH	z <sup>4)</sup>	< 1.5	pF	
Transverse delay time	e <sup>3)</sup>	< 0.2	μs	
Arc voltage at 1 A Glow to arc transition current Glow voltage		~ 10 ~ 1 ~ 60	V A V	
Weight		~ 1.2	g	
Operation and storage temperature		-40 <b>+</b> 90	°C	
Climatic category (IEC 60068-1)		40/ 90/ 21	40/ 90/ 21	
Marking, blue negative  EPCOS 90 YY O 90 - Nominal voltage YY - Year of producti O - Non radioactive		uction		

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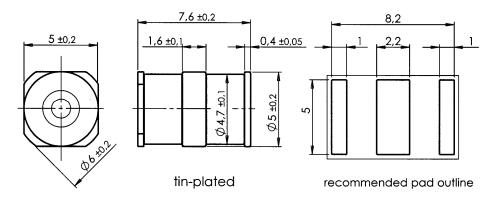
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- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- Tip or ring electrode to center electrode
- <sup>5)</sup> Total current through center electrode, half value through tip respectively ring electrode.

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

## **Dimensional drawing**



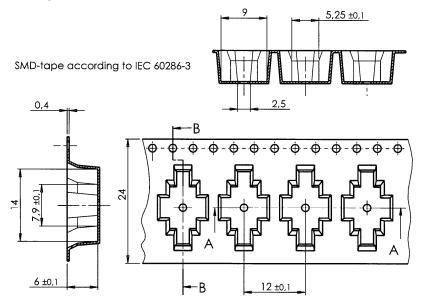
Not to scale

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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