Surge arrester

2-electrode arrester

Series/Type:	**M50-A230XSMD**
Ordering code:	**B88069X5220T902**
Version/Date:	Issue 08 / 2007-04-18

EPCOS AG is a TDK Group Company.

Surge arrester **B88069X5220T902**

2-electrode arrester **M50-A230XSMD**

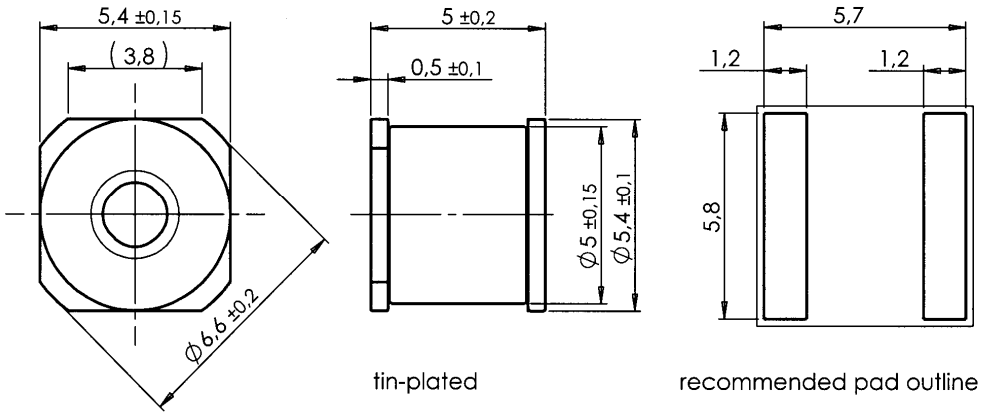
Features	Applications
▪ Very small size ▪ High current rating ▪ Very fast response time ▪ Stable performance over life ▪ Very low capacitance ▪ High insulation resistance ▪ Excellent SMD handling ▪ RoHS-compatible	▪ Branch exchange ▪ Line protection ▪ Subscriber protection ▪ Alarm system

Electrical specifications

DC spark-over voltage [1) 2)]	230 ± 20	V %
Impulse spark-over voltage		
at 100 V/µs - for 99 % of measured values	< 550	V
- typical values of distribution	< 500	V
at 1 kV/µs - for 99 % of measured values	< 650	V
- typical values of distribution	< 600	V
Service life		
10 operations 50 Hz, 1 s	5	A
1 operation 50 Hz, 0.18 s (9 cycles)	10	A
10 operations 8/20 µs	5	kA
1 operation 8/20 µs	10	kA
1 operation 10/350 µs	0.5	kA
Insulation resistance at 100 V_{dc}	> 1	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A Glow to arc transition current Glow voltage	~ 15 ~ 0.5 ~ 60	V A V
Weight	~ 1	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, blue negative	**EPCOS 230 YY O** 230 - 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



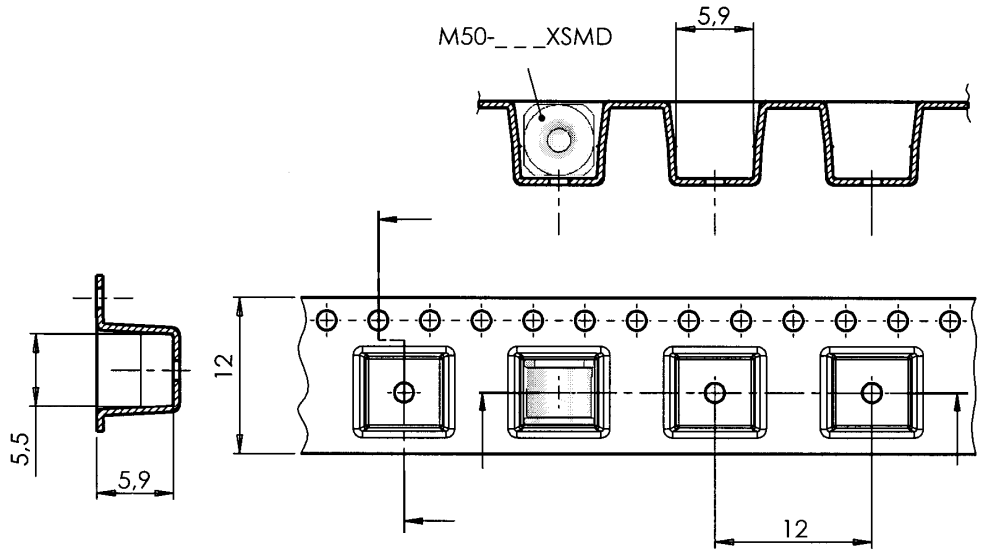
Not to scale

Dimensions in mm

Non controlled document

Packing advice

T902 = 900 pcs on SMD-tape



SMD-tape according to IEC 60286-3

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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The following applies to all products named in this publication:

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2. We also point out that **in individual cases, a malfunction of passive electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified.** In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of a passive electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of a passive electronic component.
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4. In order to satisfy certain technical requirements, **some of the products described in this publication may contain substances subject to restrictions in certain jurisdictions (e.g. because they are classed as "hazardous")**. Useful information on this will be found in our Material Data Sheets on the Internet (www.epcos.com/material). Should you have any more detailed questions, please contact our sales offices.
5. We constantly strive to improve our products. Consequently, **the products described in this publication may change from time to time**. The same is true of the corresponding product specifications. Please check therefore to what extent product descriptions and specifications contained in this publication are still applicable before or when you place an order.

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