Surge arrester

2-electrode arrester

Series/Type:	**EM1000X**
Ordering code:	**B88069X4651xxxx** [a)]
Version/Date:	Issue 02 / 2007-01-12

EPCOS AG is a TDK Group Company.

Surge arrester	B88069X4651xxxx [a]
2-electrode arrester	**EM1000X**

Features	Applications
▪ Very small size ▪ Fast response time ▪ Stable performance over life ▪ Extremely low capacitance ▪ High insulation resistance ▪ RoHS-compatible	▪ AC power line devices ▪ Consumer electronics ▪ Power supply ▪ Modem

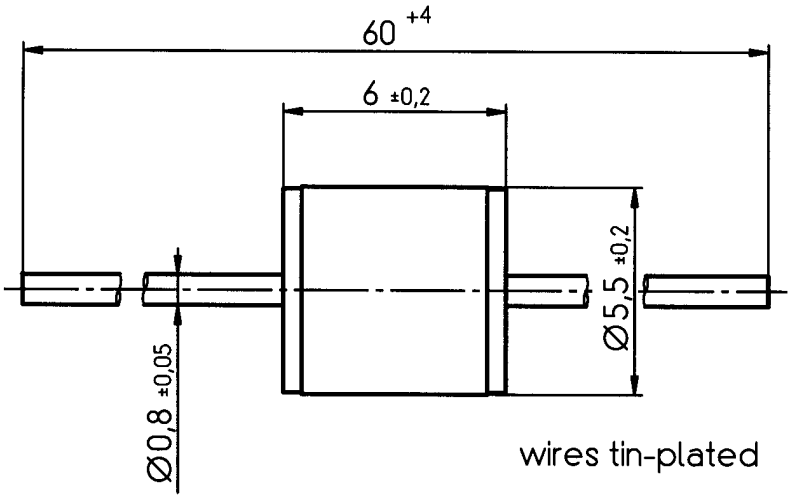
Electrical specifications

DC spark-over voltage [1) 2)]	1000 ± 20	V %
Impulse spark-over voltage		
at 100 V/µs - for 99% of measured values	< 1700	V
- typical values of distribution	< 1600	V
at 1 kV/µs - for 99% of measured values	< 1900	V
- typical values of distribution	< 1800	V
Service life		
10 operations 50 Hz, 1 s	2	A
3 operations 8/20 µs	2	kA
1 operation 8/20 µs	2.5	kA
300 operations 10/1000 µs	100	A
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	~ 11 ~ 0.5 ~ 80	V A V
Weight	~ 1	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/21	
Marking, red positive	**EPCOS EM 1000 YY O** EM - Series 1000 - Nominal voltage YY - Year of production O - Non radioactive	

[a] xxxx = S102 (100 pcs on 5 taped stripes)
= T502 (500 pcs on tape and reel)

[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

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.

Important notes

The following applies to all products named in this publication:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application.** As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.
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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.
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