Surge arrester

3-electrode arrester

Series/Type: **T33-A230X**
Ordering code: **B88069X9800B502**
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Features	Applications
▪ Very small size ▪ Extremely fast response time ▪ High current rating ▪ Stable performance over life ▪ Extremely low capacitance ▪ High insulation resistance ▪ RoHS-compatible	▪ Line protection ▪ Station protection ▪ Base stations

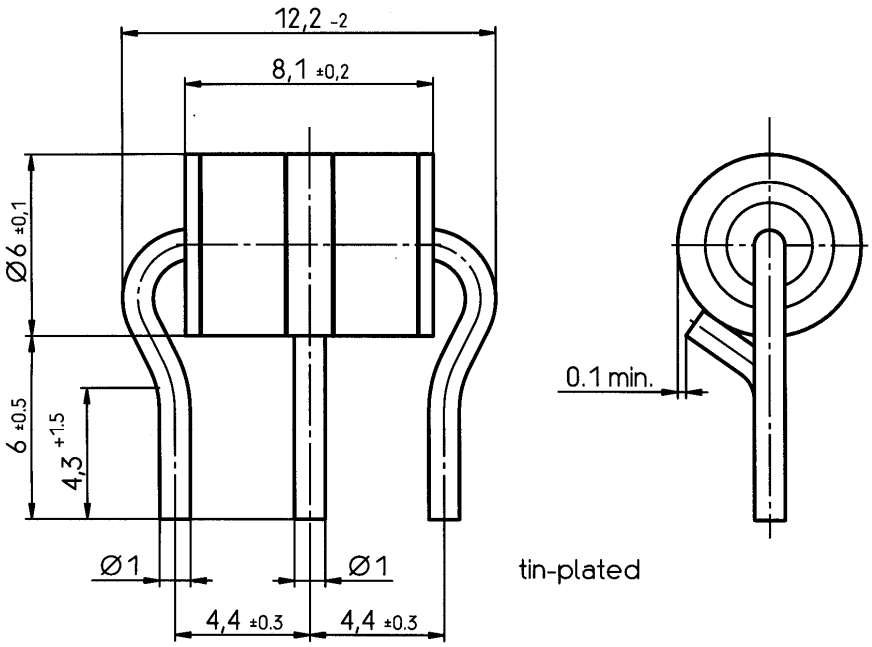
Electrical specifications

DC spark-over voltage [1) 2) 4)]		230 ± 20	V %
Impulse spark-over voltage [4)]			
at 100 V/µs	- for 99 % of measured values	< 400	V
	- typical values of distribution	< 350	V
at 1 kV/µs	- for 99 % of measured values	< 450	V
	- typical values of distribution	< 420	V
Service life			
10 operations	50 Hz; 1 s [5)]	10	A
1 operation	50 Hz; 0.18 s (9 cycles) [5)]	30	A
10 operations [5x (+) & 5x (-)]	8/20 µs [5)]	10	kA
1 operation	8/20 µs [5)]	10	kA
1 operation	10/350 µs [5)]	2	kA
Insulation resistance at 100 V_{dc} [4)]		> 10	GΩ
Capacitance at 1 MHz [4)]		< 1.5	pF
Transverse delay time [3)]		< 0.2	µs
Arc voltage at 1 A		~ 30	V
Glow to arc transition current		~ 1	A
Glow voltage		~ 200	V
Weight		~ 1.4	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
3) Test according to ITU-T Rec. K.12
4) Tip or ring electrode to center electrode
5) 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

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.

Important notes

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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