Surge arrester

3-electrode arrester

Series/Type:	**T83-A420X**
Ordering code:	**B88069X7960B502**
Version/Date:	Issue 06 / 2008-07-21

EPCOS AG is a TDK Group Company.

Surge arrester **B88069X7960B502**

3-electrode arrester **T83-A420X**

Features	Applications
▪ Standard size ▪ Fast response time ▪ Very high current rating ▪ Stable performance over life ▪ Very low capacitance ▪ High insulation resistance ▪ RoHS-compatible	▪ Line protection ▪ Station protection ▪ Base stations

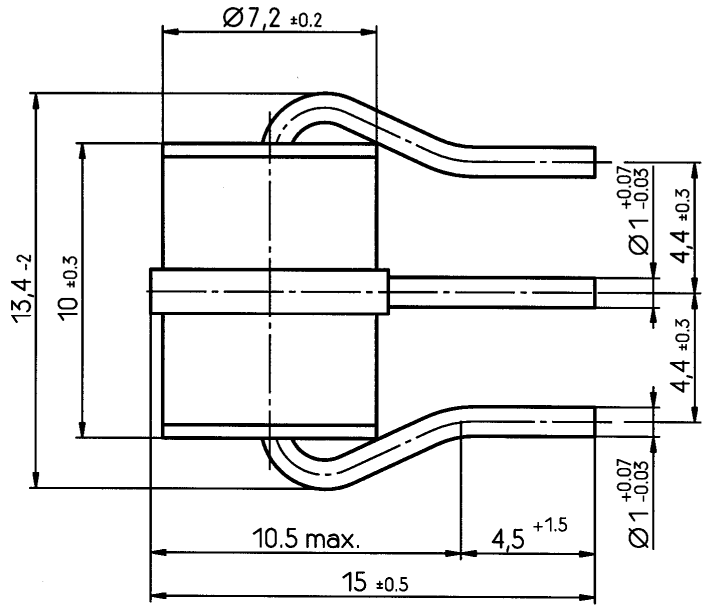
Electrical specifications

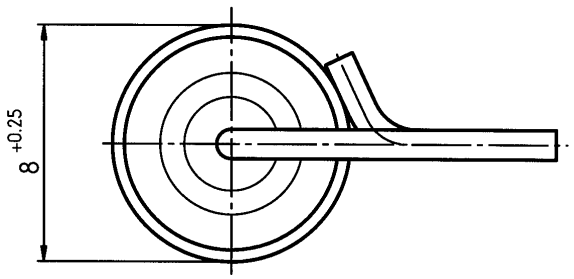
DC spark-over voltage [1) 2) 4)]		420 ± 20	V %
Impulse spark-over voltage [4)]			
at 100 V/µs	- for 99 % of measured values	< 850	V
	- typical values of distribution	< 700	V
at 1 kV/µs	- for 99 % of measured values	< 950	V
	- typical values of distribution	< 850	V
Service life			
10 operations	50 Hz, 1 s [5)]	10	A
1 operation	50 Hz, 0.18 s (9 cycles) [5)]	40	A
10 operations [5× (+) & 5× (–)]	8/20 µs [5)]	10	kA
1 operation	8/20 µs [5)]	30	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 Glow to arc transition current Glow voltage		~ 30 < 1 ~ 200	V A V
Weight		~ 2	g
Operation and storage temperature		-40 ... +90	°C
Climatic category (IEC 60068-1)		40/ 90/ 21	
Marking, red negative		**EPCOS** **420 YY M O** 420 - Nominal voltage YY - Year of production M - Month of production (1 ... 9 = Jan ... Sep; O ... D = Oct ... Dec) 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 lead contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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