



## Surge arrester

### 3-electrode arrester

**Series/Type:** T90-A420XSMD  
**Ordering code:** B88069X7041T902  
**Version/Date:** Issue 02 / 2013-03-22

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**Features**

- Very small size
- Fast response time
- High current rating
- Stable performance over life
- Extremely low capacitance
- High insulation resistance
- Excellent SMD handling
- RoHS-compatible

**Applications**

- Line protection
- Station protection
- Base stations

**Electrical specifications**

DC spark-over voltage <sup>1) 2) 3)</sup>		357 ... 525	V
DC spark-over voltage <sup>2) 5)</sup>		357 ... 1000	V
Impulse spark-over voltage			
at 100 V/ $\mu$ s	- for 99% of measured values <sup>3)</sup> - typical values of distribution <sup>3)</sup>	< 850 < 750	V V
at 1 kV/ $\mu$ s	- for 99% of measured values <sup>3)</sup> - typical values of distribution <sup>3)</sup>	< 1000 < 900	V V
at 1 kV/ $\mu$ s	- for 99% of measured values <sup>5)</sup> - typical values of distribution <sup>5)</sup>	< 1800 < 1600	V V
Service life			
10 operations	50 Hz; 1 s <sup>4)</sup>	10	A
1 operation	50 Hz; 0.18s <sup>4)</sup>	10	A
10 operations [5x (+) & 5x (-)]	8/20 $\mu$ s <sup>4)</sup>	10	kA
1 operation	10/350 $\mu$ s <sup>4)</sup>	1	kA
300 operations	10/1000 $\mu$ s <sup>4)</sup>	200	A
Insulation resistance at 100 V <sub>DC</sub> <sup>3)</sup>		> 1	G $\Omega$
Capacitance at 1 MHz <sup>3)</sup>		< 1.5	pF
Transverse delay time <sup>6)</sup>		< 0.2	$\mu$ s
Arc voltage at 1 A		~ 10	V
Glow to arc transition current		~ 1	A
Glow voltage		~ 60	V
Weight		~ 0.8	g
Operation and storage temperature		-40 ... +90	°C
Climatic category (IEC 60068-1)		40/ 90/ 21	
Marking, blue negative		<b>EPCOS</b> <b>420 YY O</b> 420 - Nominal voltage YY - Year of production O - Non radioactive	

Remarks on next page

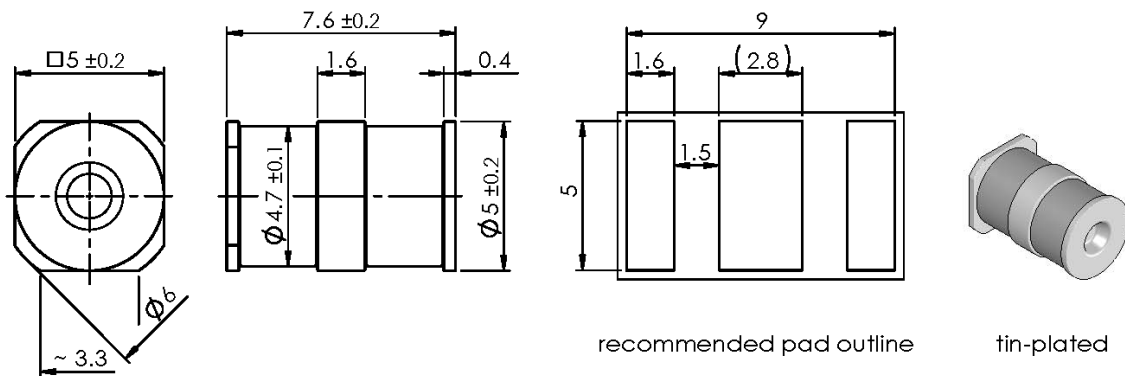
PPD AB PD / PPD AB PM

Issue 02 / 2013-03-22

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

Terms in accordance with ITU-T Rec. K.12; IEC 61663-2 and IEC 61643-311.

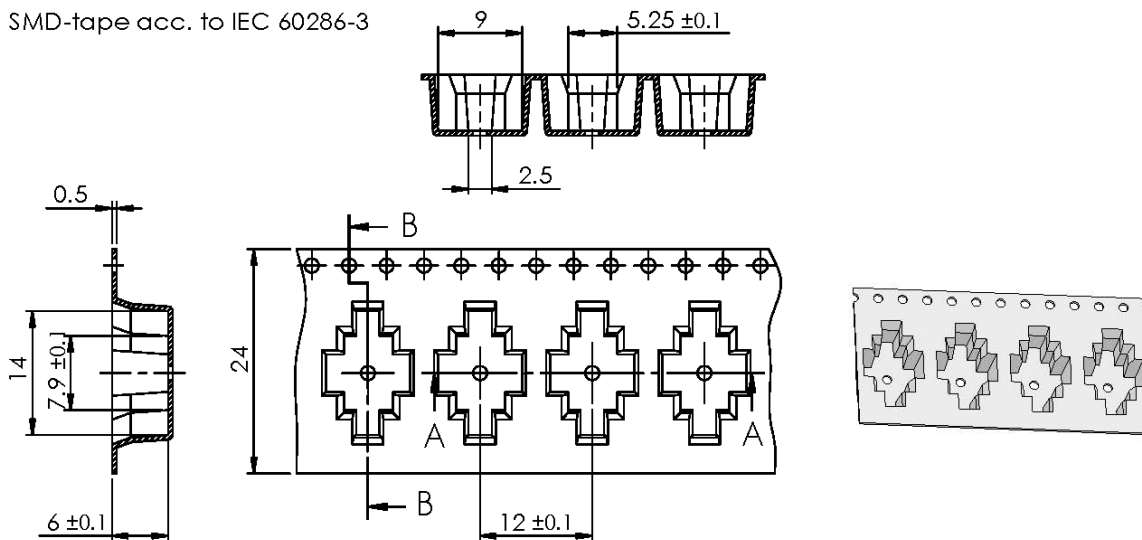
### Dimensional drawing in mm



### Ordering code and packing advice

**B88069X7041T902** = SMD-tape with 900 pcs.

SMD-tape acc. 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 lead contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)