



## Surge arrester

3-electrode arrester

**Series/Type:** T90-A350XFSMD  
**Ordering code:** B88069X9131T902  
**Version/Date:** Issue 04 / 2013-03-27

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**Features**

- Very small size
- Fast response time
- High current rating
- Stable performance over life
- Low capacitance
- High insulation resistance
- Excellent SMD handling
- Reliable failsafe device
- RoHS-compatible

**Applications**

- Modem
- Data lines

**Electrical specifications**

DC spark-over voltage <sup>1) 2) 3)</sup>		350 ± 20	V %
Impulse spark-over voltage <sup>3)</sup>			
at 100 V/μs	- for 99% of measured values - typical values of distribution	< 850 < 750	V V
at 1 kV/μs	- for 99% of measured values - typical values of distribution	< 1000 < 850	V V
Service life			
10 operations	50 Hz; 1 s <sup>4)</sup>	10	A
1 operation	50 Hz; 0.18 s (9 cycles) <sup>4)</sup>	10	A
10 operations [5× (+) & 5× (-)]	8/20 μs <sup>4)</sup>	10	kA
1 operation	10/350 μs <sup>4)</sup>	2	kA
300 operations (+/- alternating)	10/1000 μs <sup>4)</sup>	200	A
Insulation resistance at 100 V <sub>DC</sub> <sup>3)</sup>		> 1	GΩ
Capacitance at 1 MHz <sup>3)</sup>		< 1.5	pF
Transverse delay time <sup>5)</sup>		< 0.2	μs
Arc voltage at 1 A		~ 10	V
Glow to arc transition current		~ 1	A
Glow voltage		~ 60	V
Weight		~ 0.8	g
Storage temperature		-40 ... +90	°C
Climatic category (IEC 60068-1)		40/ 90/ 21	
Marking, blue negative		<b>EPCOS</b> <b>350 YY O</b> 350 - Nominal voltage YY - Year of production O - Non radioactive	

Remarks on next page

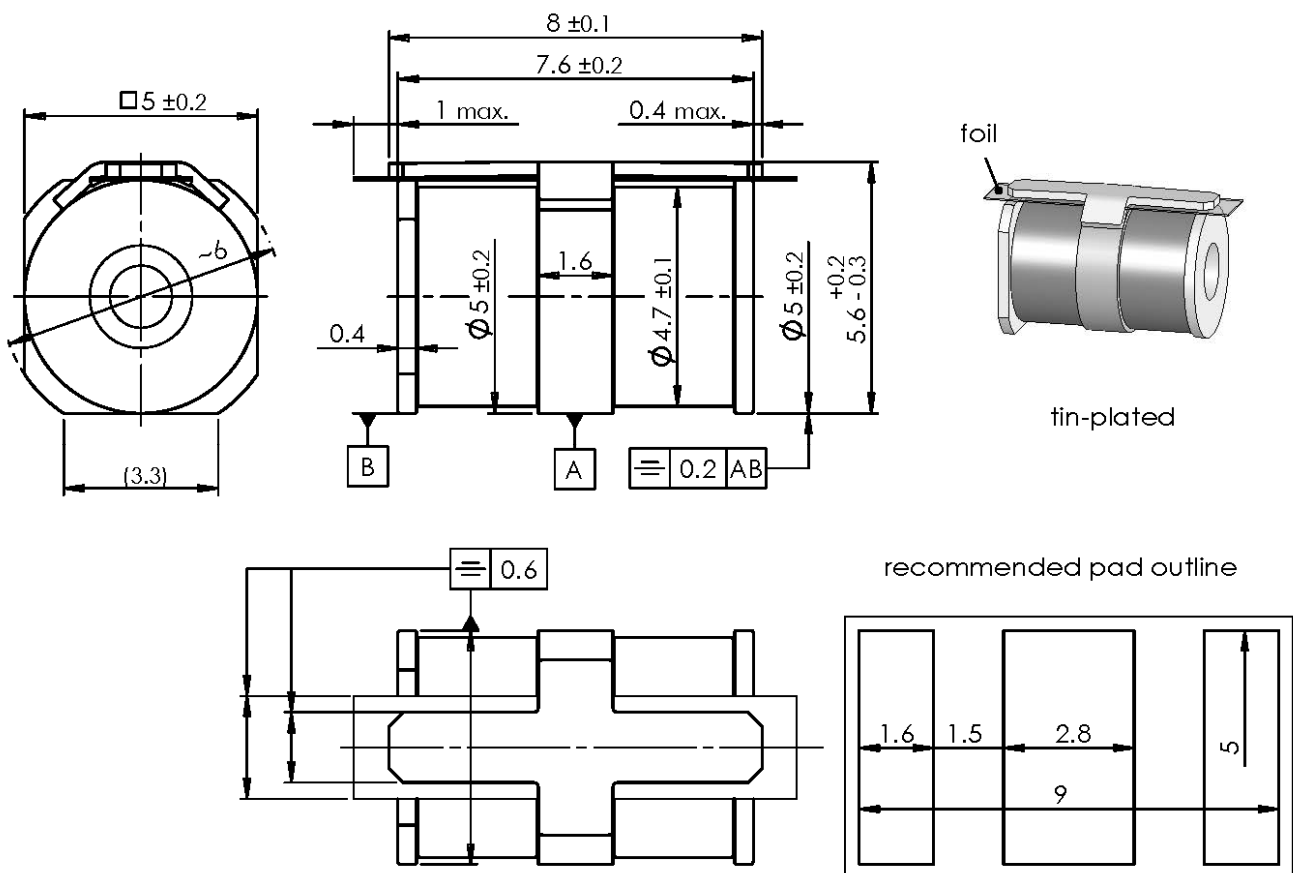
- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Tip or ring electrode to center electrode
- 4) Total current through center electrode, half value through tip respectively ring electrode.
- 5) Test according to ITU-T Rec. K.12

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

The arrester failsafe mechanism contains an insulating foil with a melting temperature of 260 °C.

Arrester failsafe works at temperatures > 260 °C. The arrester has to be fixed mechanically, if the arrester is contacted by soldering and if the solder temperature is less than 260 °C.

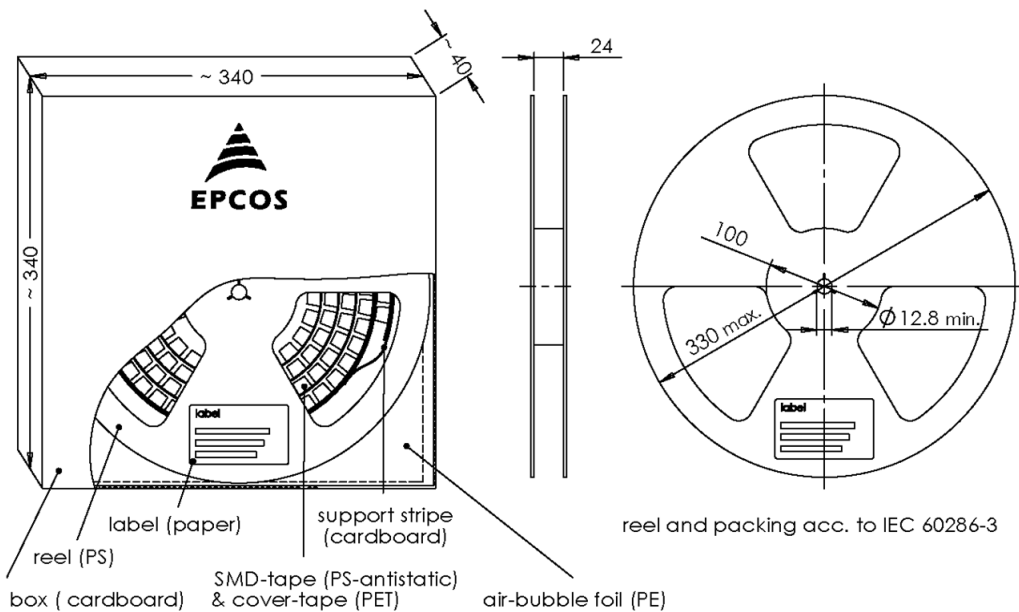
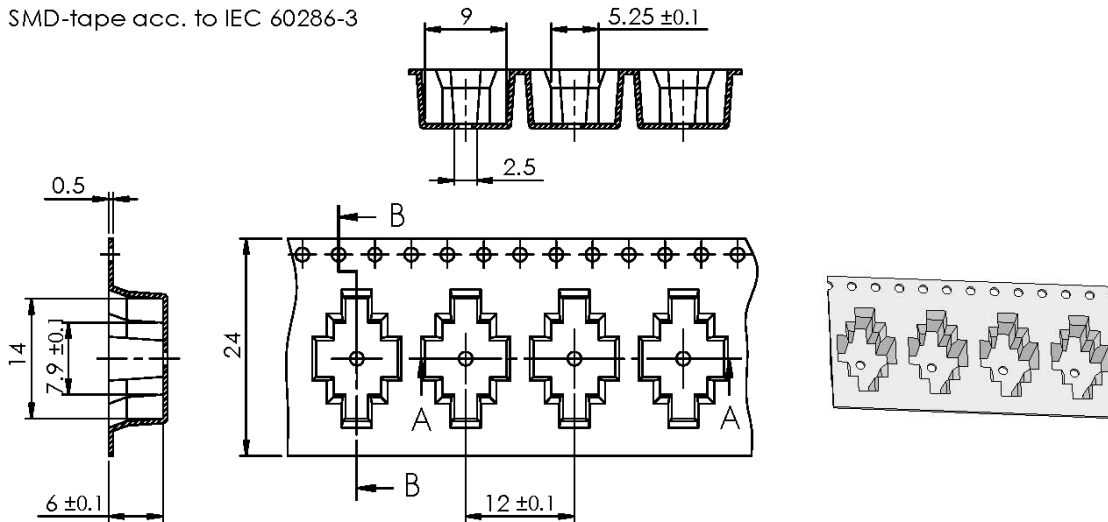
**Dimensional drawing in mm**



**Ordering code and packing advice**

**B88069X9131T902** = SMD-tape and reel with 900 pcs.

SMD-tape acc. to IEC 60286-3



reel and packing acc. to IEC 60286-3

**Cautions and warnings**

- The short-circuit spring does not trigger until 260 °C is reached depending on the material. Care must be taken to limit the thermal radiation onto adjacent parts to safe values.
- Depending on the incorporation position, the surge arrester may have to be additionally secured by mechanical means.
- 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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