



## Surge arrester

### 2-electrode arrester

**Series/Type:** A71-H45X  
**Ordering code:** B88069X2590\*\*\*\*  
**Date:** 2017-04-24  
**Version:** 10

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**Features**

- Standard size
- Fast response time
- Stable performance over life
- Low capacitance
- High insulation resistance
- RoHS-compatible

**Applications**

- Modem
- Power supply
- Consumer electronics

**Electrical specifications**

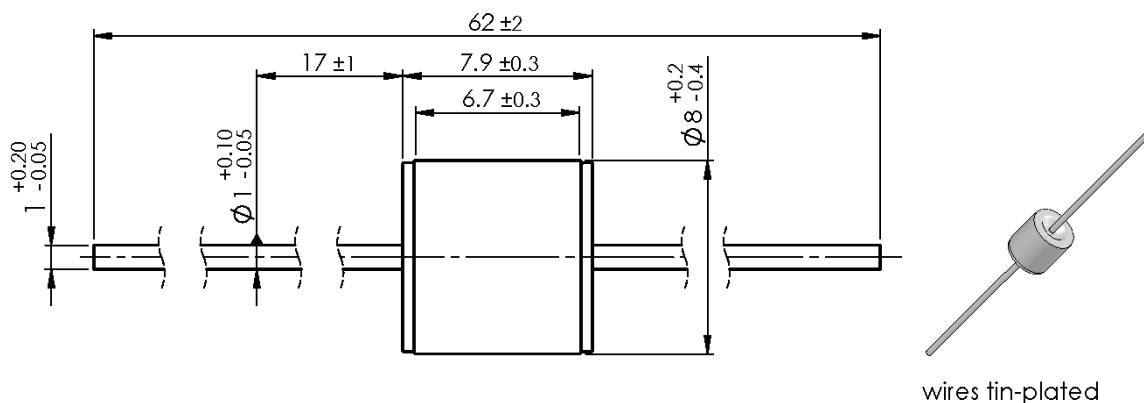
DC spark-over voltage <sup>1) 2)</sup>	4500	V
Tolerance	±20	%
Min.	3600	V
Max.	5400	V
Impulse spark-over voltage		
at 100 V/μs - for 99% of measured values	< 5800	V
- typical values of distribution	< 5700	V
at 1 kV/μs - for 99% of measured values	< 6000	V
- typical values of distribution	< 5800	V
Service life		
10 operations    50 Hz, 1 s	10	A
1 operations    50 Hz, 0.18 s (9 cycles)	20	A
10 operations    8/20 μs	10	kA
1 operation     8/20 μs	15	kA
Insulation resistance at 100 V <sub>DC</sub>	> 10	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 20	V
Glow to arc transition current	< 1	A
Glow voltage	~ 180	V
Weight	~ 2	g
Operation and storage temperature	-40 ... +125	°C
Climatic category (IEC 60068-1)	40/125/21	
Marking, green positive	<b>EPCOS 4500 YY O</b> 4500 - Nominal voltage YY - Year of production O - Non radioactive	
Certifications	UL 1449 (E319264)	

<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

<sup>2)</sup> In ionized mode

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

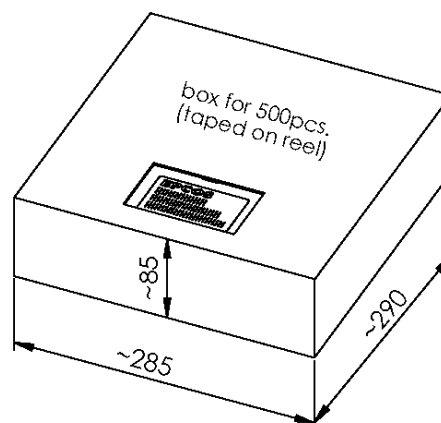
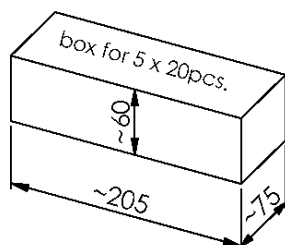
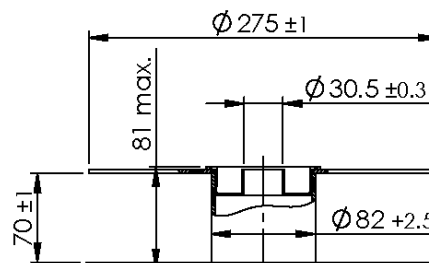
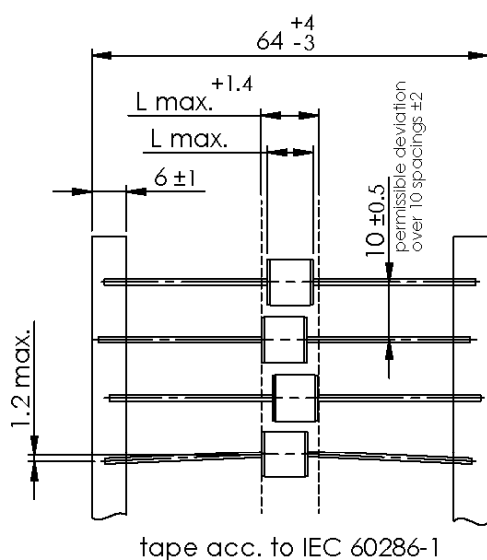
Dimensional drawing in mm



Ordering code and packing advice

B88069X2590S102 = 100 pcs. on 5 taped stripes

B88069X2590T502 = 500 pcs. on tape & reel



## Soldering parameter

### Wave soldering



Wave profile features	Pb-free assembly
Solder	Sn 95.5 / Ag 3.8 / Cu 0.7
Solder bath temperature	263 (±3) °C
Dwell time	< 3 s

Soldering profile applied to a single soldering process.

## Cautions and warnings

- Do not operate surge arresters in power supply networks, whose maximum operating voltage exceeds the minimum spark-over voltage of the surge arresters.
- Electromagnetic fields and ionizing radiation may affect the electrical characteristics of the arrester. The impact of such effects (inductive and capacitive field distortion from adjacent components) must be avoided by appropriate circuit design measures.
- Surge arresters may become hot in the event of longer periods of current stress (burn risk). In the event of overload the connectors may fail or the component may be destroyed.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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Release 2018-10