



## Surge arrester

High voltage surge absorber

**Series/Type:** HSA-252-6T7  
**Ordering code:** B88069X3193\*\*\*\*  
Date: 2018-09-06  
Version: 07

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**Features**

- Small size for compact circuit design
- Very fast response time
- Extremely low capacitance
- High insulation resistance
- High surge withstand capability
- Allows voltage withstand test up to 85% RH
- Bi-polar design
- RoHS-compatible

**Applications**
Consumer electronics:

- Refrigerator
- Washing machine
- Air condition


Telecom:

- xDSL modem
- Splitter
- VoIP line cards

Others:

- Switching power supply
- Inverter

**Electrical specifications**

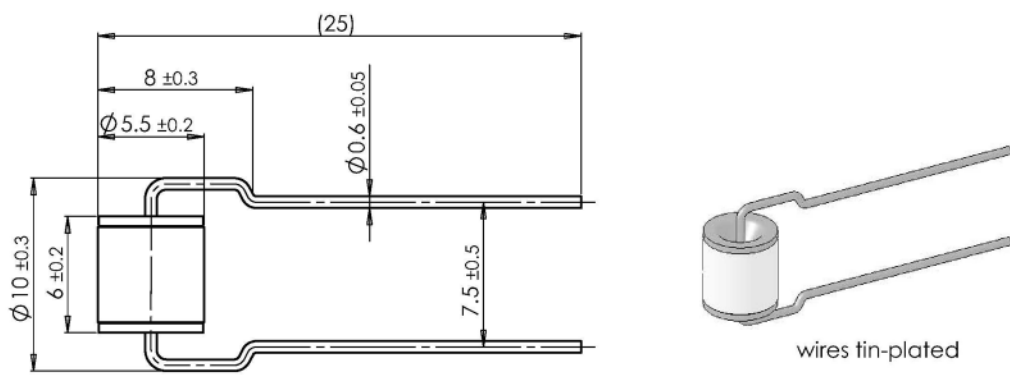
|  |  |   |
|--|--|---|
| Nominal DC spark-over voltage <sup>1) 2)</sup> | 2500   | V   |
| Tolerance                                      | ±20  | %   |
| Min.   | 2000   | V   |
| Max.   | 3000   | V   |
| Impulse life test                              |  |   |
| 300 operations      8/20 µs                    | 100  | A   |
| Peak surge current                             |  |   |
| 1 operation      8/20 µs                       | 3.5  | kA  |
| Insulation resistance at 100 V <sub>DC</sub>   | > 1  | GΩ  |
| Capacitance at 1 MHz                           | < 1  | pF  |
| AC withstand voltage <sup>3)</sup>             |  |   |
| 3 s  | 1250   | V   |
| 1 s  | 1300   | V   |
| Operation and storage temperature              | -40 ... +125   | °C  |
| Marking, green positive                        | <b>EPCOS HSA 252 YY</b><br>HSA    - Series<br>252    - Nominal voltage (2500 V)<br>YY     - Year of production |   |
| Certifications                                 | UL 1449 (E319264)  |  |

1) At delivery AQL 0.65 level II, DIN ISO 2859

2) In ionized mode

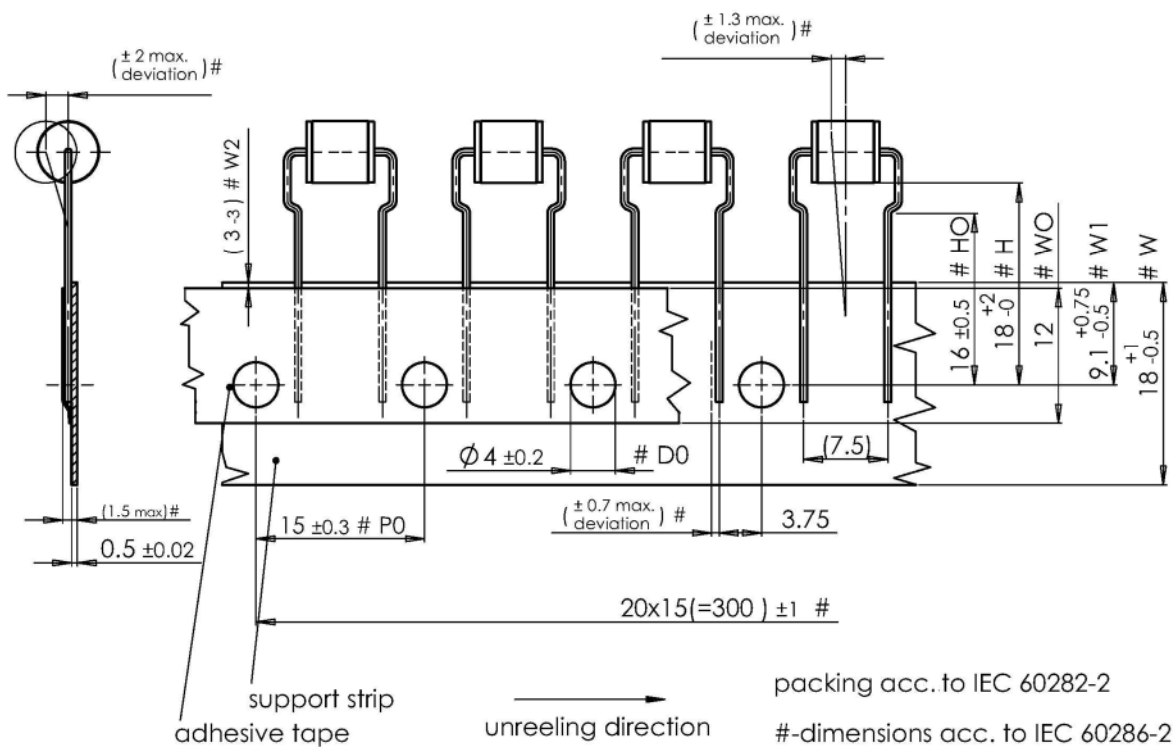
3) Withstand test in acc. to MIL-STD-202G.

Dimensional drawing in mm

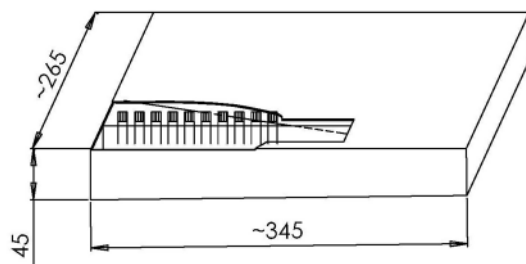
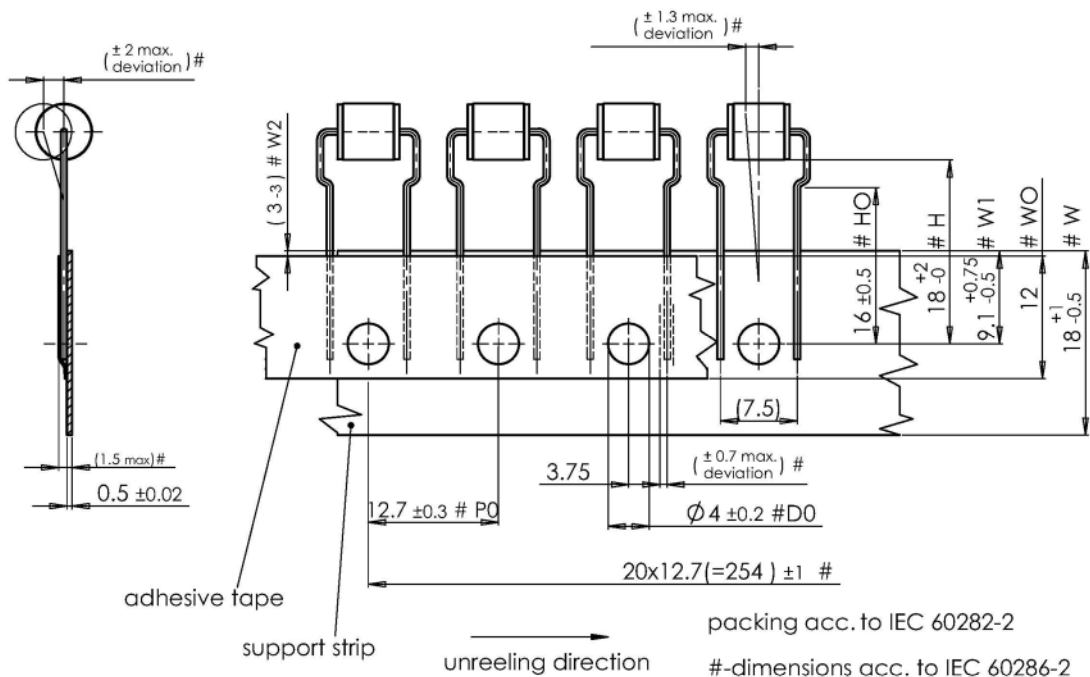


Ordering codes and packing advices

B88069X3193A802 = 800 pcs. in ammo pack

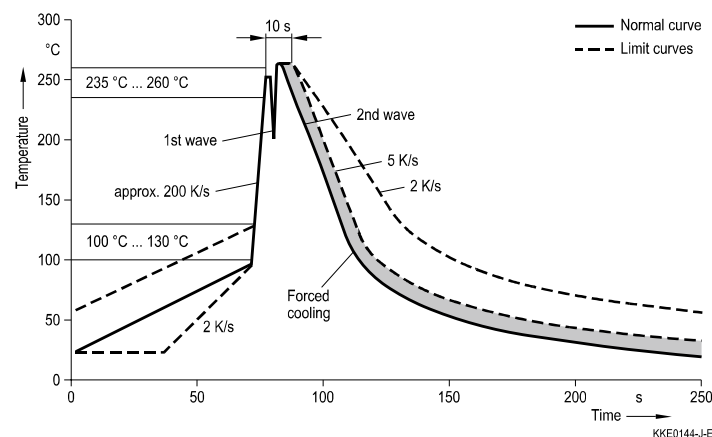


B88069X3193A103 = 1000 pcs. in ammo pack



## 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 absorber in power supply networks, whose maximum operating voltage exceeds the minimum spark-over voltage of the surge arresters.
- Surge absorber 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.
- 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 absorber must be handled with care and must not be dropped.
- Do not continue to use damaged surge absorber.

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## Important notes

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