



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Surge arrester

2-electrode arrester

Series/Type: EM2500XS
Ordering code: B88069X2500****
Date: 2016-05-10
Version: 04

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Features

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

Applications

- AC power line devices
- Consumer electronics
- Power supply

Electrical specifications

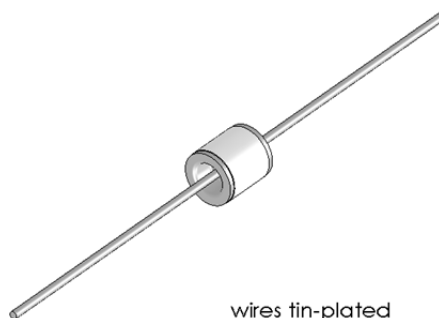
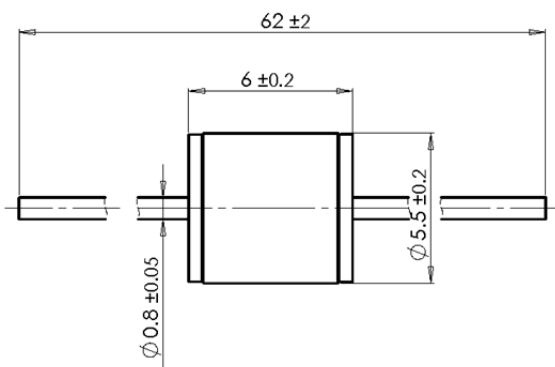
| | | |
|--|--|---|
| DC spark-over voltage ^{1) 2)} | 2500 | V |
| Tolerance | ±20 | % |
| Min. | 2000 | V |
| Max. | 3000 | V |
| Impulse spark-over voltage | | |
| at 100 V/μs - for 99 % of measured values | < 3200 | V |
| - typical values of distribution | < 3000 | V |
| at 1 kV/μs - for 99 % of measured values | < 3500 | V |
| - typical values of distribution | < 3200 | V |
| Service life | | |
| 10 operations 50 Hz; 1 s | 1 | A |
| 300 operations 8/20 μs | 100 | A |
| 10 operations 8/20 μs | 2 | kA |
| 1 operation 8/20 μs | 5 | kA |
| Insulation resistance at 100 V _{DC} | > 1 | GΩ |
| Capacitance at 1 MHz | < 1 | pF |
| Arc voltage at 1 A | ~ 35 | V |
| Glow to arc transition current | < 0.3 | A |
| Glow voltage at 0.1 A | ~ 170 | V |
| AC withstand voltage (1 s) | 1250 | V |
| Weight | ~ 1 | g |
| Operation temperature | -40 ... +125 | °C |
| Recommended storage | | |
| - temperature | +5 ... +35 | °C |
| - humidity | 45 ... 80 | % |
| - period | ≤ 2 | years |
| Climatic category (IEC 60068-1) | 40/125/21 | |
| Marking, red positive | EPCOS EM 2500 YY O EM - Series 2500 - Nominal voltage YY - Year of production O - Non radioactive | |
| Certifications | UL 1449 (E319264) |  |

Remarks on next page

- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode

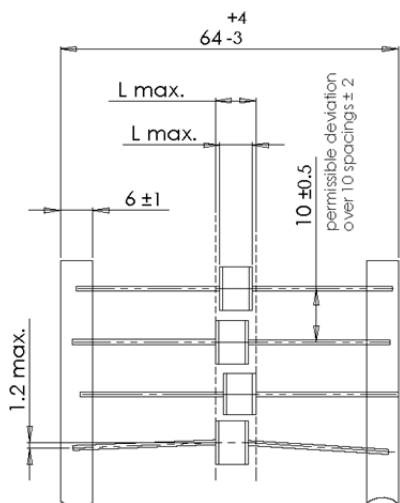
Terms in accordance with: ITU-T Rec. K. 12, 61643-311 and IEC 61663-2.

Dimensional drawing in mm

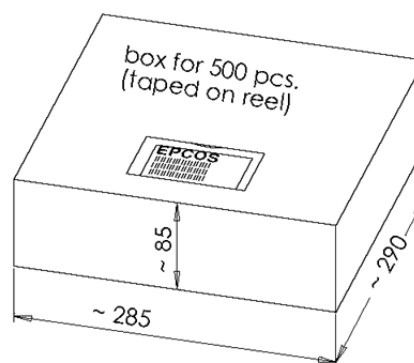
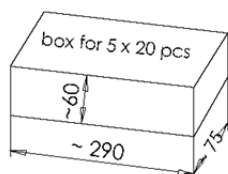
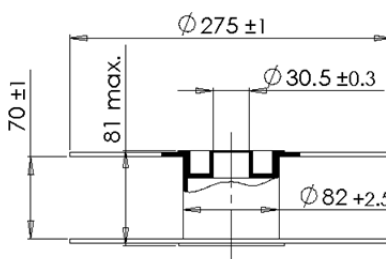


Ordering codes and packing advices

B88069X2500S102 = 100 pcs. on 5 taped stripes B88069X2500T502 = 500 pcs. on tape & reel

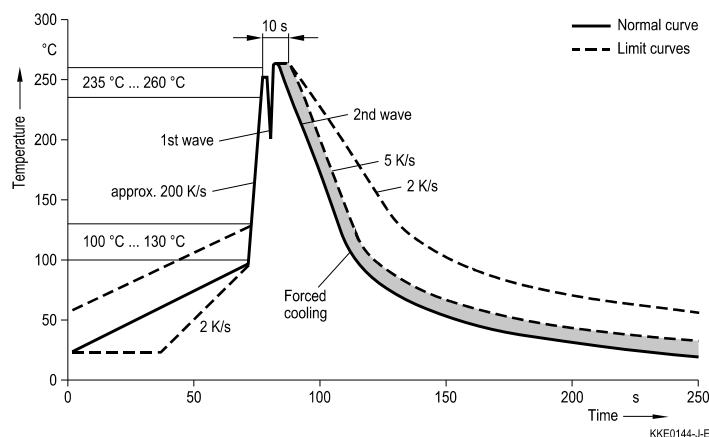


tape acc. to IEC 60286-1



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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