



## Surge arrester

### 2-electrode arrester

|                       |                        |
|-----------------------|------------------------|
| <b>Series/Type:</b>   | <b>M51-A800XP</b>      |
| <b>Ordering code:</b> | <b>B88069X4781****</b> |
| Date:                 | 2019-04-18             |
| Version:              | 05                     |

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## Surge arrester

B88069X4781\*\*\*\*

## 2-electrode arrester

M51-A800XP

### Features

- Small size
- Very fast response time
- Stable performance over life
- High insulation resistance
- RoHS-compatible

### Applications

- AC power lines
- Class II (class C) - requirements

### Electrical specifications

|                                                              |                                                                                                  |    |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----|
| DC spark-over voltage <sup>1) 2)</sup>                       | > 600                                                                                            | V  |
| Impulse spark-over voltage                                   |                                                                                                  |    |
| - at 1 kV/μs - for 99% of measured values                    | < 1200                                                                                           | V  |
| - typical values of distribution                             | < 1100                                                                                           | V  |
| - at 5 kV/μs - for 99% of measured values                    | < 1500                                                                                           | V  |
| - typical values of distribution                             | < 1200                                                                                           | V  |
| - at 1.2/50 μs, 6 kV, for 99% of measured values             | < 1500                                                                                           | V  |
| Breakdown time                                               | < 100                                                                                            | ns |
| - typical values                                             | < 20                                                                                             | ns |
| Insulation resistance at 100 V <sub>DC</sub>                 | > 1                                                                                              | GΩ |
| Class II according to IEC 61643-11                           |                                                                                                  |    |
| Max. continuous operating voltage at 50/60 Hz U <sub>c</sub> | 255                                                                                              | V  |
| Nominal discharge current 8/20 μs I <sub>n</sub>             | 3                                                                                                | kA |
| Maximum discharge current 8/20 μs I <sub>max</sub>           | 3                                                                                                | kA |
| Follow current at 50/60 Hz I <sub>f</sub>                    | 5                                                                                                | A  |
| Weight                                                       | ~ 3                                                                                              | g  |
| Operation and storage temperature                            | -40 ... +125                                                                                     | °C |
| Climatic category (IEC 60068-1)                              | 40/125/21                                                                                        |    |
| Marking, blue positive                                       | <b>EPCOS 800 YY O</b><br>800 - Nominal voltage<br>YY - Year of production<br>O - Non radioactive |    |

<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.

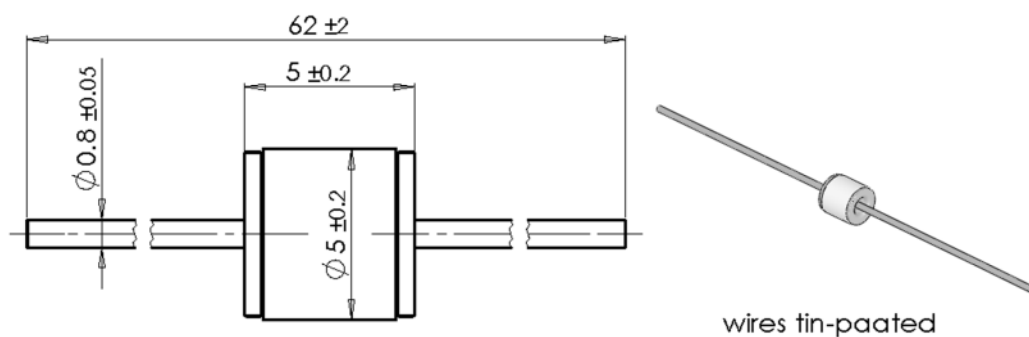
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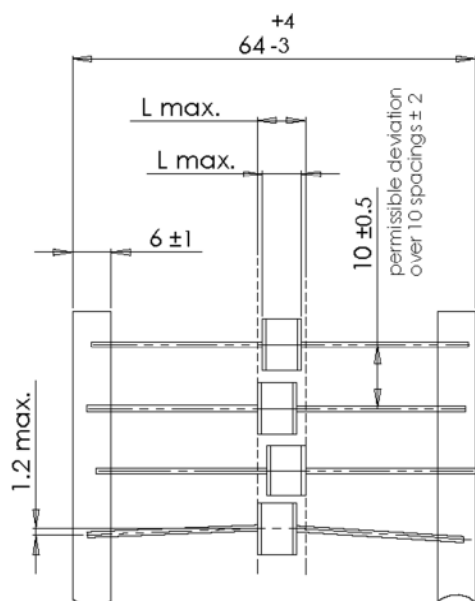
### Dimensional drawing in mm



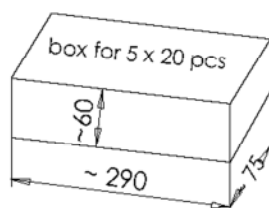
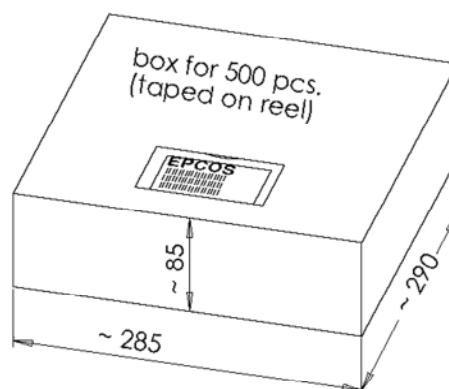
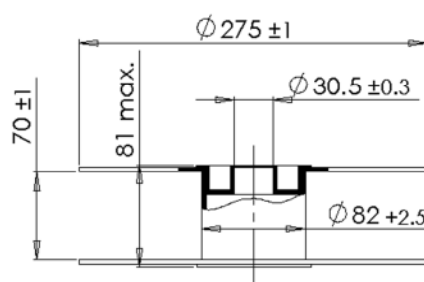
### Ordering codes and packing advices

B88069X4781S102 = 100 pcs. on 5 taped stripes

B88069X4781T502 = 500 pcs. on tape & reel

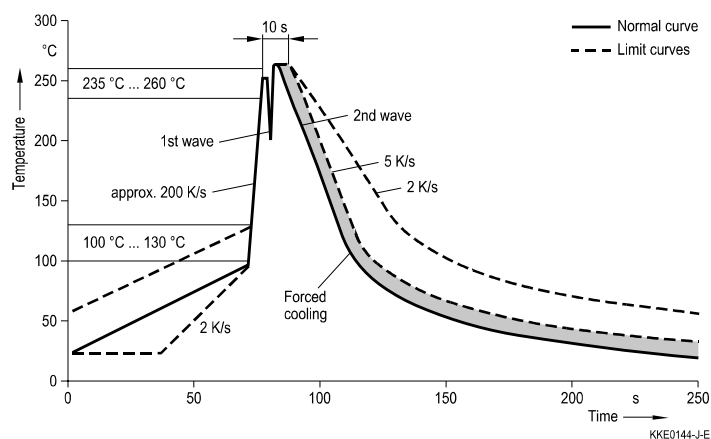


tape acc. to IEC 60286-1



## 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.
- 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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## Important notes

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