

2-electrode arrester

| Series/Type:<br>Ordering code: | EHV63-H08<br>B88069X3563**** |
|--------------------------------|------------------------------|
| Date:                          | 2019-07-05                   |
| Version:                       | 03                           |

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# 2-electrode arrester

# Features

- Built to automotive standard (IATF 16949)
- Small size
- Fast response time
- High current capability
- Stable performance over service life
- Low capacitance and insertion loss
- High insulation resistance

Electrical specifications

RoHS-compatible

# Applications

- Automotive:
- On-board chargers
- Vehicle charging stations

<u>Others:</u>

- LED lighting
- Power supply
- Photovoltaic
- Air conditioning

| DC spark-over voltage          | 1) 2)  | 800       | V     |
|--------------------------------|--|-----------|-------|
| Tolerance                      |  | ±20       | %     |
| Min.                           |  | 640       | V     |
| Max.                           |  | 960       | V     |
| Impulse spark-over vo          | ltage  |           |       |
| at 100 V/µs                    | - for 99% of measured values                       | < 1000    | V     |
|                                | <ul> <li>typical values of distribution</li> </ul> | < 850     | V     |
| at 1 kV/µs                     | - for 99% of measured values                       | < 1050    | V     |
| - t                            | <ul> <li>typical values of distribution</li> </ul> | < 950     | V     |
| at 5 kV/µs                     | - for 99% of measured values                       | < 1250    | V     |
|                                | <ul> <li>typical values of distribution</li> </ul> | < 1150    | V     |
| Service life                   |  |           |       |
| 300 operations                 | 8/20 µs  | 100       | A     |
| 3 operations                   | 8/20 µs  | 3         | kA    |
| 1 operation                    | 8/20 μs  | 5         | kA    |
| Insulation resistance a        | t 100 V <sub>DC</sub>                              | > 1       | GΩ    |
| Capacitance at 1 MHz           |  | < 1       | pF    |
| Arc voltage at 1 A             |  | ~ 30      | V     |
| Glow to arc transition current |  | < 0.3     | A     |
| Glow voltage at 0.1 A          |  | ~ 150     | V     |
| DC withstand voltage (         | (1 min) <sup>3)</sup>                              | 500       | V     |
| Weight                         |  | ~ 1       | g     |
| Operation and storage          | temperature  | -40 +125  | °C    |
| Recommended storage            | e  |           |       |
| - temperature                  |  | +5 +35    | °C    |
| - humidity                     |  | 45 80     | %     |
| - period                       |  | ≤ 2       | years |
| Climatic category (IEC         | 60068-1)   | 40/125/21 |       |

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#### PPD AB PD / PPD AB PM

# B88069X3563\*\*\*\* EHV63-H08



#### 2-electrode arrester

B88069X3563\*\*\*\*

#### EHV63-H08

| Marking, green positive | EPCOS 800 WWY800- Nominal voltageWW- Calendar week of productionY- Year of production (last digit) |
|-------------------------|--|
| Certifications          | UL 1449 <sup>4)</sup> (E319264)  |

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

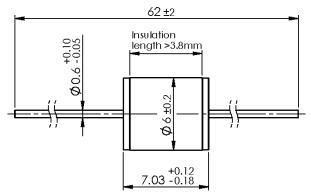
<sup>2)</sup> In ionized mode

<sup>3)</sup> Test conditions in acc. with MIL-STD-202G at 25 ±5 °C, relative humidity of ≤ 55% and atmospheric pressure 860 ... 1100mbar.

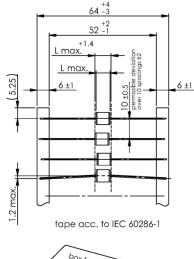
<sup>4)</sup> With varistor in series

Terms and current waveforms in accordance with: ITU-T Rec. K. 12; IEC 61643-21; 61643-311.

# Dimensional drawing in mm



# **Ordering codes and packing advices** *B88069X3563***S102** = 100 pcs. on 5 taped stripe





B88069X3563**T502** = 500 pcs. on tape & reel

a

wires tin-plated





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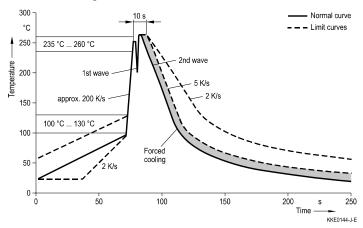


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# **Soldering parameter**

#### 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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