



## Surge arrester

2-electrode arrester

**Series/Type:** V13-A500XN  
**Ordering code:** B88069X6940B152  
Date: 2019-07-31  
Version: 13


**Features**

- Standard size
- Maximum current rating
- Fast response time
- Stable performance over life
- High insulation resistance
- RoHS-compatible

**Applications**

- AC power line N-PE application
- Class I and class II– surge protection

**Electrical specifications**

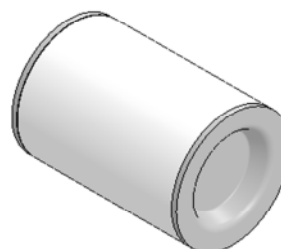
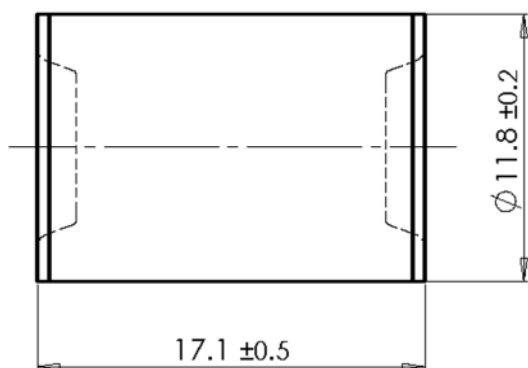
|  |                  |   |   |
|--|------------------|---|---|
| DC spark-over voltage <sup>1) 2)</sup>   |                  | 500 ... 850   | V   |
| Front of wave spark-over voltage<br>- at 1.2/50 $\mu$ s, 6 kV                  |                  | < 1500  | V   |
| Breakdown time<br>- typical values   |                  | < 100<br>< 20   | ns<br>ns  |
| Insulation resistance at 100 V <sub>DC</sub>                                   |                  | > 1   | G $\Omega$  |
| Class I according to IEC 61643-11  |                  |   |   |
| Max. continuous operating voltage at 50/60 Hz                                  | U <sub>c</sub>   | 255   | V   |
| Nominal discharge current 8/20 $\mu$ s   | I <sub>n</sub>   | 40  | kA  |
| Impulse current 10/350 $\mu$ s   | I <sub>imp</sub> | 12.5  | kA  |
| Follow current at 50/60 Hz   | I <sub>f</sub>   | 100   | A   |
| 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 $\mu$ s   | I <sub>n</sub>   | 40  | kA  |
| Maximum discharge current 8/20 $\mu$ s   | I <sub>max</sub> | 65  | kA  |
| Follow current at 50/60 Hz   | I <sub>f</sub>   | 100   | A   |
| AC discharge current (TOV <sup>3)</sup> at 1200 V)<br>1 operation 50 Hz, 0.2 s |                  | 300   | A   |
| Weight   |                  | ~ 6.5   | g   |
| Operation and storage temperature  |                  | -40 ... +125  | °C  |
| Climatic category (IEC 60068-1)  |                  | 40/125/21   |   |
| Marking, black positive  |                  | <b>EPCOS</b><br><b>500 YY ON</b><br>500 - Nominal voltage<br>YY - Year of production<br>O - Non radioactive<br>N - Series |   |
| Certification  |                  | UL 497B (E163070)   |  |

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

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

<sup>3)</sup> TOV – Temporary over voltage

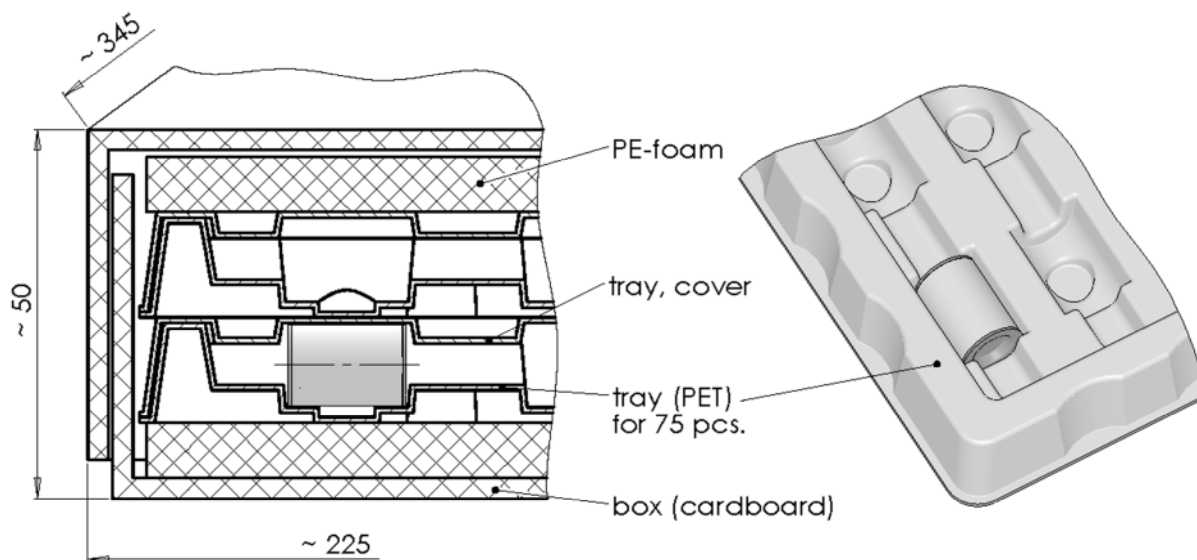
Dimensional drawing in mm



nickel-plated

Ordering code and packing advice

B88069X6940B152 = 150 pcs. on trays



### Cautions and warnings

- The follow current must be limited (see values on page 2) so that the arrester can be properly extinguished when the surge has decayed. The arrester might otherwise heat up and ignite adjacent components.
- 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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Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А