Surge Arresters

Series/Type: V13-A500XN

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B88069X6940B152	B88069X6940B302	2025-01-24	2025-05-12	2025-05-12

Please contact your nearest TDK sales office if you need support in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.tdk-electronics.tdk.com/sales.

Surge arrester B88069X6940B152

2-electrode arrester V13-A500XN

Features

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

Applications

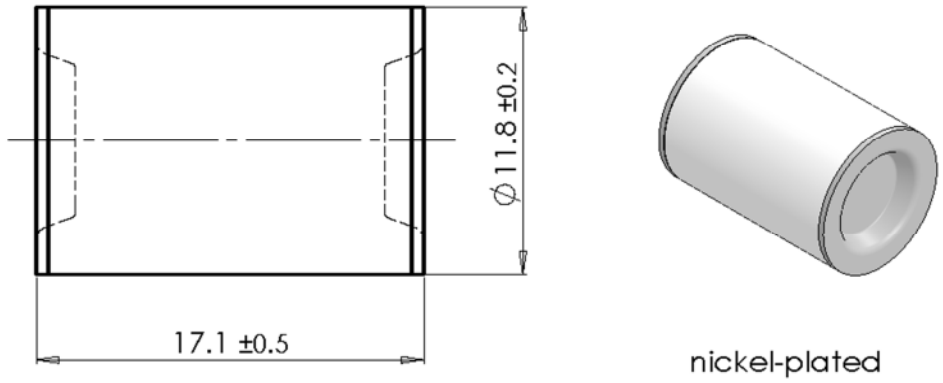
- AC power line N-PE application
- Class I and class II– surge protection

Electrical specifications

DC spark-over voltage [1) 2)]		500 … 850	V
Front of wave spark-over voltage - at 1.2/50 µs, 6 kV		< 1500	V
Breakdown time - typical values		< 100 < 20	ns ns
Insulation resistance at 100 V_{DC}		> 1	GΩ
Class I according to IEC 61643-11 Max. continuous operating voltage at 50/60 Hz Nominal discharge current 8/20 µs Impulse current 10/350 µs Follow current at 50/60 Hz	 U_c I_n I_{imp} I_f	 255 40 12.5 100	 V kA kA A
Class II according to IEC 61643-11 Max. continuous operating voltage at 50/60 Hz Nominal discharge current 8/20 µs Maximum discharge current 8/20 µs Follow current at 50/60 Hz	 U_c I_n I_{max} I_f	 255 40 65 100	 V kA kA A
AC discharge current (TOV [3)] at 1200 V) 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		**EPCOS** **500 YY ON** 500 - Nominal voltage YY - Year of production O - Non radioactive N - Series	
Certification		UL 497B (E163070)	

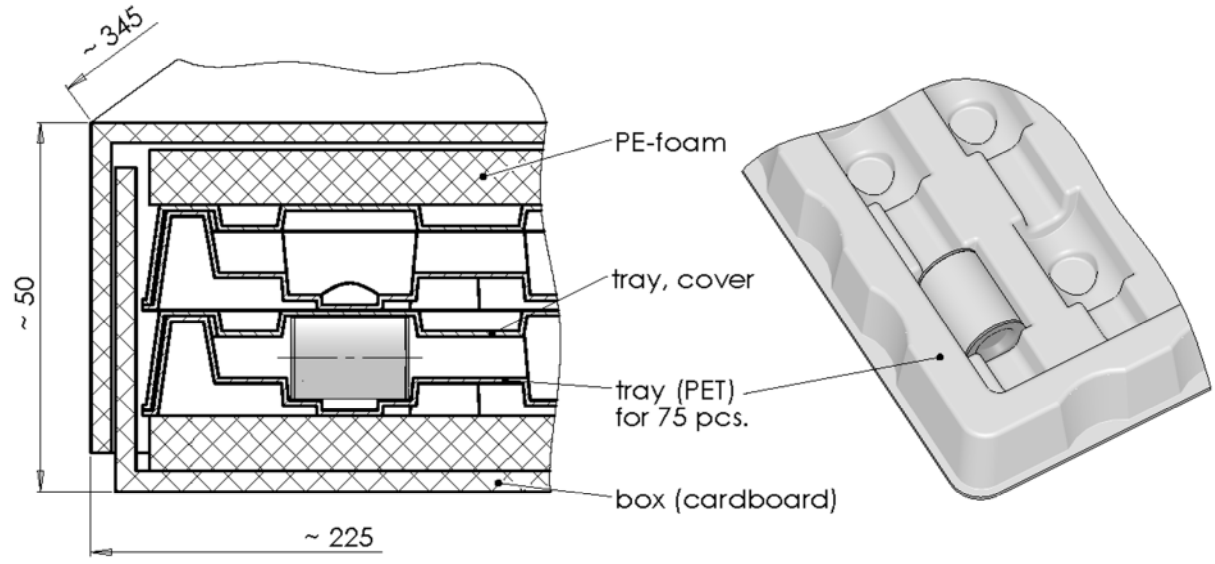
1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode
3) TOV – Temporary over voltage

Dimensional drawing in mm



Ordering code and packing advice

*B88069X6940**B152** = 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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2. We also point out that **in individual cases, a malfunction of electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified.** In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of an electronic component.
3. **The warnings, cautions and product-specific notes must be observed.**
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Important notes

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