

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: B88069X6940B302
Manufacturer: TDK
Package: Bulk
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/tdk/b88069x6940b302.html>

Request a Quote:

[Submit RFQ for this part](#)



Scan for product page

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Website: <https://antrexco.com>

Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.



Surge arrester

2-electrode arrester

Series/Type:	V13-A500XN
Ordering code:	B88069X6940B302
Date:	2026-04-01
Version:	15

Surge arrester

B88069X6940B302

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

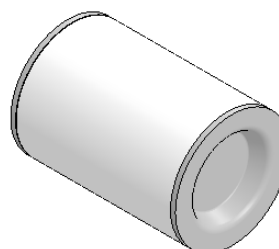
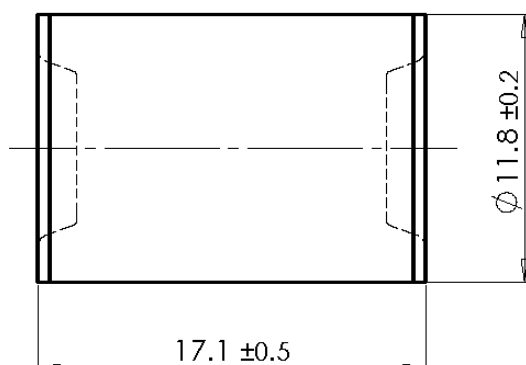
DC spark-over voltage ^{1) 2)}		500 ... 850	V
Front of wave spark-over voltage - at 1.2/50 μ s, 6 kV		< 1500	V
Breakdown time - typical values		< 100 < 20	ns ns
Insulation resistance at 100 V _{DC}		> 1	G Ω
Class I according to IEC 61643-11			
Max. continuous operating voltage at 50/60 Hz	U _C	255	V
Nominal discharge current 8/20 μ s	I _n	40	kA
Impulse current 10/350 μ s	I _{imp}	12.5	kA
Follow current at 50/60 Hz	I _f	100	A
Class II according to IEC 61643-11			
Max. continuous operating voltage at 50/60 Hz	U _C	255	V
Nominal discharge current 8/20 μ s	I _n	40	kA
Maximum discharge current 8/20 μ s	I _{max}	65	kA
Follow current at 50/60 Hz	I _f	100	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		TDK 500 YY N 500 - Nominal voltage YY - Year of production 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

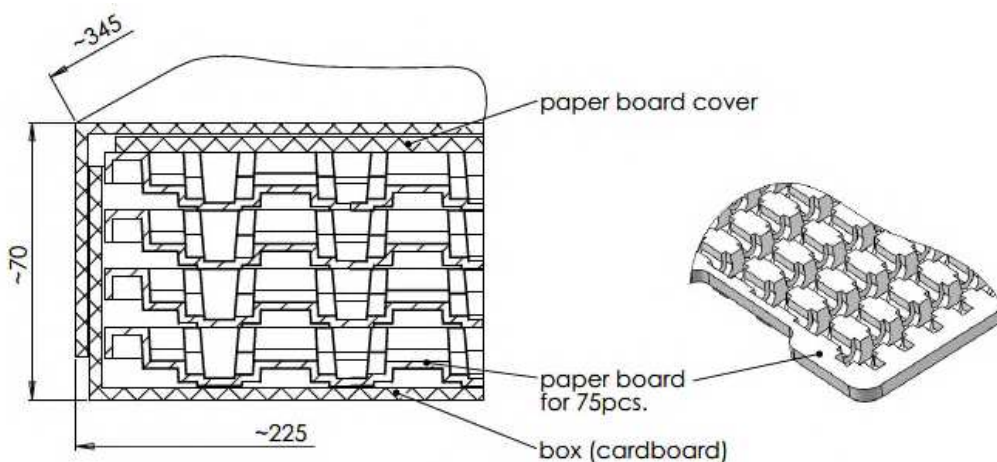
Dimensional drawing in mm



nickel-plated

Ordering code and packing advice

B88069X6940B302 = 300 pcs. on paper board



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.

Surge arrester**B88069X6940B302****2-electrode arrester****V13-A500XN****Display of ordering codes for TDK Electronics products**

The ordering code for one and the same product can be represented differently in data sheets, data books, other publications, on the company website, or in order-related documents such as shipping notes, order confirmations and product labels. **The varying representations of the ordering codes are due to different processes employed and do not affect the specifications of the respective products.** Detailed information can be found on the Internet under www.tdk-electronics.tdk.com/orderingcodes.

Important notes

The following applies to all products named in this publication:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application**. As a rule we are either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether a product with the properties described in the product specification is suitable for use in a particular customer application.
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.**
4. In order to satisfy certain technical requirements, **some of the products described in this publication may contain substances subject to restrictions in certain jurisdictions (e.g. because they are classed as hazardous)**. Useful information on this will be found in our Material Data Sheets on the Internet (www.tdk-electronics.tdk.com/material). Should you have any more detailed questions, please contact our sales offices.
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We also **reserve the right to discontinue production and delivery of products**. Consequently, we cannot guarantee that all products named in this publication will always be available. The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products.

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Important notes

8. The trade names EPCOS, CarXield, CeraCharge, CeraDiode, CeraLink, CeraPad, CeraPlas, CSMP, CTVS, DeltaCap, DigiSiMic, FilterCap, FormFit, InsuGate, LeaXield, MediPlas, MiniBlue, MiniCell, MKD, MKK, ModCap, MotorCap, PCC, PhaseCap, PhaseCube, PhaseMod, PhiCap, PiezoBrush, PlasmaBrush, PowerHap, PQSine, PQvar, SIFERRIT, SIFI, SIKOREL, SilverCap, SIMDAD, SiMic, SIMID, SineFormer, SIOV, SurfIND, ThermoFuse, WindCap, XieldCap are **trademarks registered or pending** in Europe and in other countries. Further information will be found on the Internet at www.tdk-electronics.tdk.com/trademarks.

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