

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

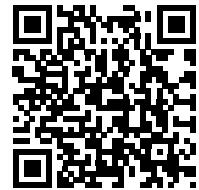
Part Number: B88069X4180B502
Manufacturer: TDK
Package: Tray
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/tdk/b88069x4180b502.html>

Request a Quote:

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Contact Information

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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:	ES300XP
Ordering code:	B88069X4180B502
Date:	2026-04-01
Version:	05

Surge arrester

B88069X4180B502

2-electrode arrester

ES300XP

Features

- Very small size
- Very fast response time
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- Modem
- XDSL-splitter
- Tuner

Electrical specifications

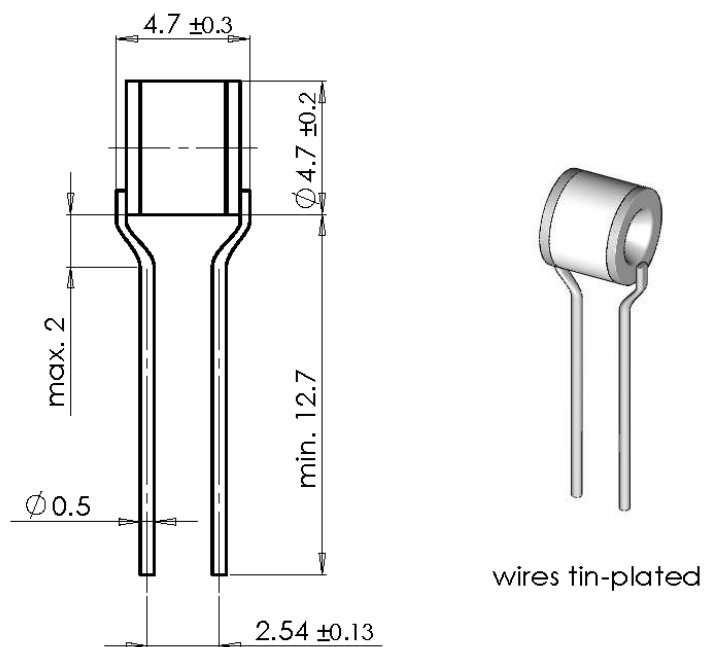
DC spark-over voltage ^{1) 2)}	300	V
Tolerance	±15	%
Min.	255	V
Max.	345	V
Impulse spark-over voltage		
at 100 V/μs - for 99% of measured values	< 500	V
- typical values of distribution	< 450	V
at 1 kV/μs - for 99% of measured values	< 600	V
- typical values of distribution	< 550	V
Service life		
10 operations 8/20 μs	2.5	kA
1 operation 8/20 μs	5	kA
Insulation resistance at 100 V _{DC}	> 1	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 11	V
Glow to arc transition current	< 0.5	A
Glow voltage	~ 130	V
Weight	~ 0.3	g
Operation and storage temperature	-40 ... +125	°C
Climatic category (IEC 60068-1)	40/125/21	
Marking, red positive	TDK ES 300 YY ES - Series 300 - Nominal voltage YY - Year of production	
Certification	UL 497B (E163070)	

¹⁾ At delivery AQL 0.65 level II, DIN ISO 2859

²⁾ In ionized mode

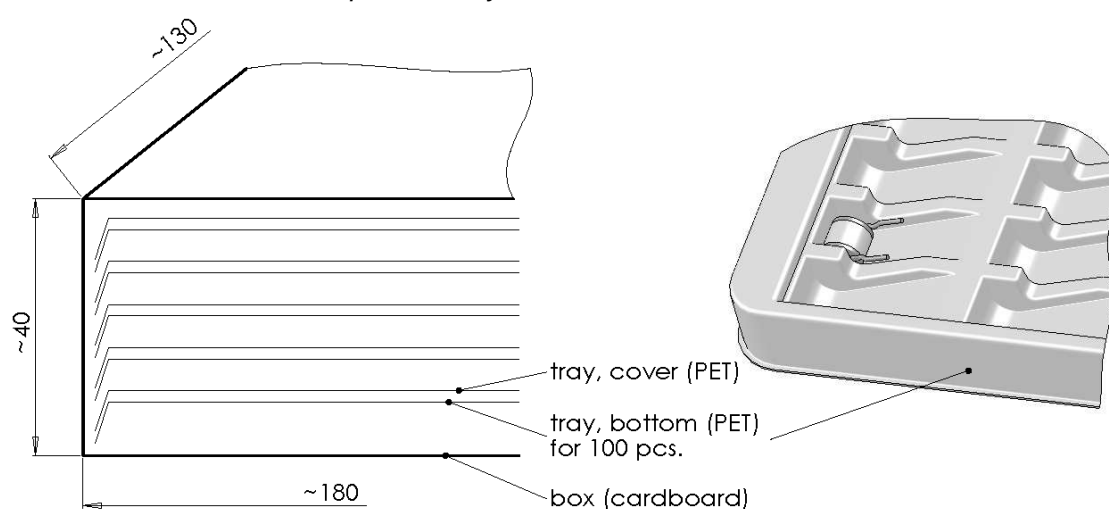
Terms in accordance with ITU-T Rec. K. 12; IEC 61643-311.

Dimensional drawing in mm



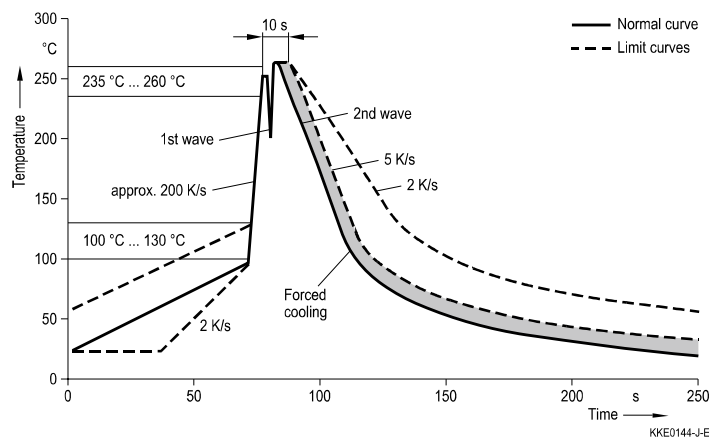
Ordering codes and packing advices

B88069X4180**B502** = 500 pcs. on trays



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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3. **The warnings, cautions and product-specific notes must be observed.**
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Important notes

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