

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: B88069X2563T502
Manufacturer: TDK
Package: Tape & Reel (TR)
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/tdk/b88069x2563t502.html>

Request a Quote:

[Submit RFQ for this part](#)



Scan for product page

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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:	EHV63-H40
Ordering code:	B88069X2563****
Date:	2026-04-01
Version:	04

Surge arrester

B88069X2563****

2-electrode arrester

EHV63-H40

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
- RoHS-compatible

Applications

Automotive:

- On-board chargers
- Vehicle charging stations

Others:

- LED lighting
- Power supply
- Photovoltaic
- Air conditioning

Electrical specifications

DC spark-over voltage ^{1) 2)}	4000	V
Tolerance	±20	%
Min.	3200	V
Max.	4800	V
Impulse spark-over voltage		
at 100 V/μs - for 99% of measured values	< 5000	V
- typical values of distribution	< 4600	V
at 1 kV/μs - for 99% of measured values	< 5400	V
- typical values of distribution	< 4800	V
at 5 kV/μs - for 99% of measured values	< 5600	V
- typical values of distribution	< 5000	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 at 100 V _{DC}	> 1	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 50	V
Glow to arc transition current	< 0.3	A
Glow voltage at 0.1 A	~ 250	V
AC withstand voltage (1 min) ³⁾	2000	V
Weight	~ 1	g
Operation and storage temperature	-40 ... +125	°C
Recommended storage		
- temperature	+5 ... +35	°C
- humidity	45 ... 80	%
- period	≤ 2	years
Climatic category (IEC 60068-1)	40/125/21	

Continued on next page

Surge arrester

B88069X2563****

2-electrode arrester

EHV63-H40

Marking, blue positive

TDK 4000 WWY

4000 - Nominal voltage
WW - Calendar week of production
Y - Year of production (last digit)

Certifications

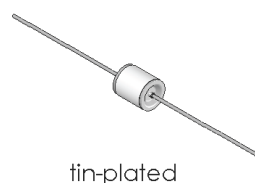
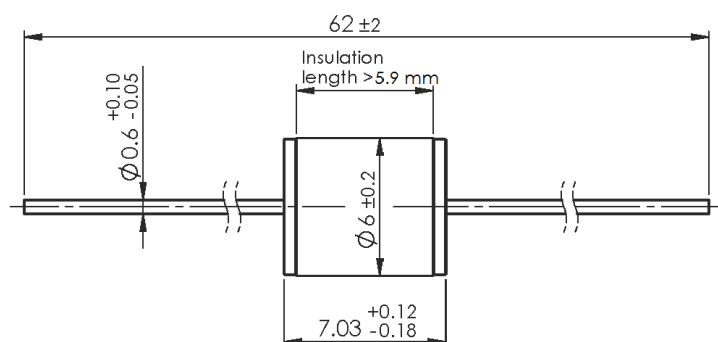
UL 1449 (E319264)



- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test conditions in acc. with MIL-STD-202G at 25 ± 5 °C, relative humidity of $\leq 55\%$ and atmospheric pressure 860 ... 1100mbar.

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

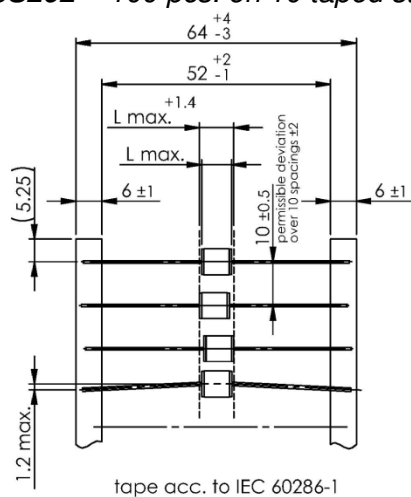
Dimensional drawing in mm



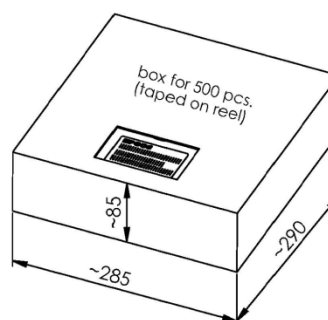
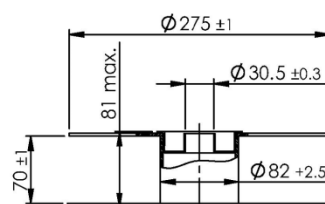
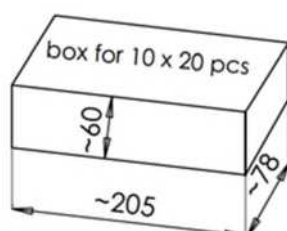
Ordering codes and packing advices

B88069X2563**S202** = 100 pcs. on 10 taped stripes

B88069X2563**T502** = 500 pcs. on tape & reel

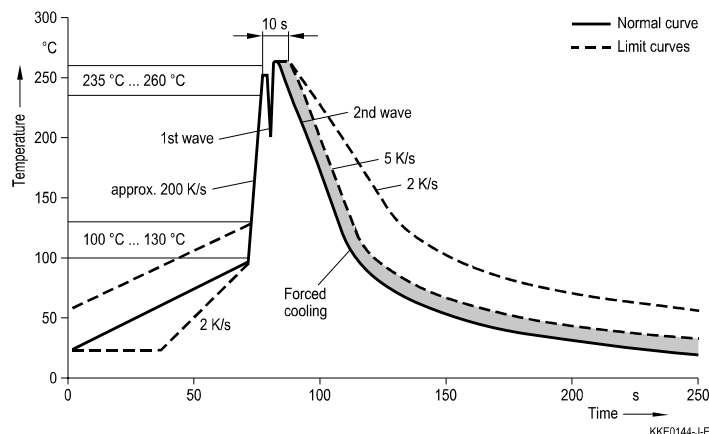


tape acc. to IEC 60286-1



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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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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Important notes

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