

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: B88069X1380T502
Manufacturer: TDK
Package: Tape & Reel (TR)
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/tdk/b88069x1380t502.html>

Request a Quote:

[Submit RFQ for this part](#)



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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:	A81-C90X
Ordering code:	B88069X1380****
Date:	2026-04-01
Version:	13

Surge arrester

B88069X1380****

2-electrode arrester

A81-C90X

Features

- Standard size
- Fast response time
- Very high current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- Tower mounted amplifier
- Consumer electronic
- Alarm systems

Electrical specifications

DC spark-over voltage ^{1) 2)}	90	V
Tolerance	±20	%
Min.	72	V
Max.	108	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 50 Hz, 1 s	20	A
20 operations [10× (+) & 10× (-)] 8/20 μs	20	kA
1 operation 8/20 μs	25	kA
1 operation 10/350 μs	5	kA
300 operations 10/1000 μs	100	A
Insulation resistance at 50 V _{DC}	> 10	GΩ
Capacitance at 1 MHz	< 1.5	pF
Arc voltage at 1 A	~ 10	V
Glow to arc transition current	< 0.5	A
Glow voltage	~ 60	V
Weight	~ 1.5	g
Operation and storage temperature	-40 ... +125	°C
Climatic category (IEC 60068-1)	40/125/21	
Marking, blue negative	TDK 90 YY 90 - 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 and IEC 61643-311.

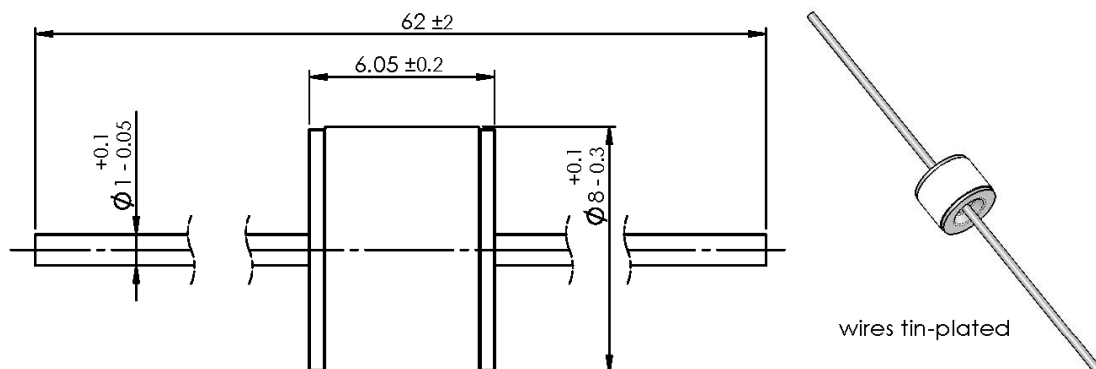
Surge arrester

B88069X1380****

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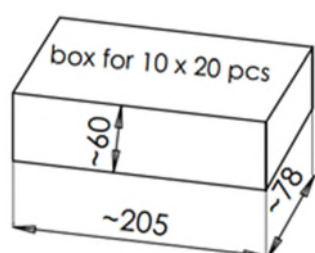
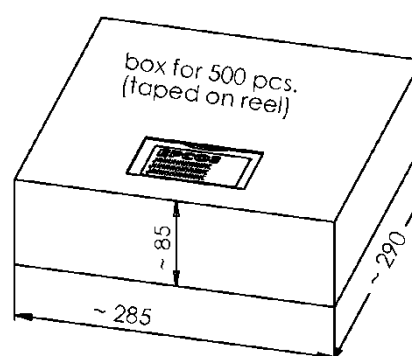
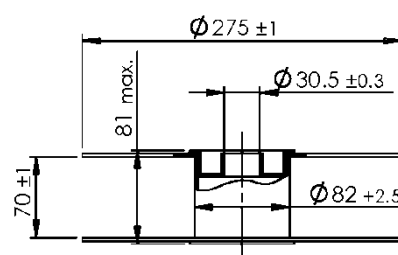
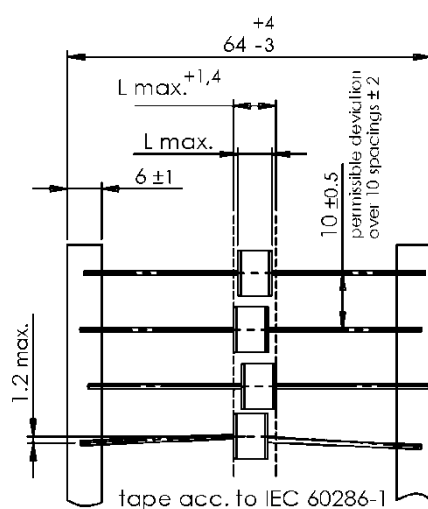
Dimensional drawing in mm



Ordering codes and packing advices

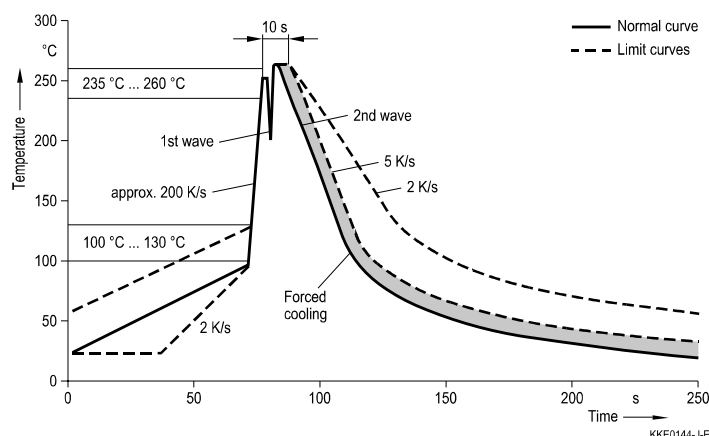
B88069X1380S202 = 200 pcs. on 10 taped stripes

B88069X1380T502 = 500 pcs. on tape & reel



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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Important notes

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