

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number:	B88069X6441T502
Manufacturer:	TDK
Package:	Tape & Reel (TR)
Availability:	Please confirm with sales

Product Page:

<https://antrexco.com/product/details/tdk/b88069x6441t502.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-A470X
Ordering code:	B88069X6441****
Date:	2026-04-01
Version:	03

Surge arrester

B88069X6441****

2-electrode arrester

A81-A470X

Features

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

Applications

- AC power line devices
- Consumer electronics
- Power supply

Electrical specifications

DC spark-over voltage ^{1) 2)}		470	V
Tolerance		±20	%
Min.		376	V
Max.		564	V
Impulse spark-over voltage			
at 100 V/μs - for 99% of measured values		< 1000	V
- typical values of distribution		< 850	V
at 1 kV/μs - for 99% of measured values		< 1100	V
- typical values of distribution		< 950	V
Service life			
10 operations	50 Hz, 1 s	20	A
1 operation	50 Hz, 0.18 s (9 cycles)	100	A
10 operations	8/20 μs	20	kA
1 operation	8/20 μs	25	kA
1 operation	10/350 μs	2.5	kA
Insulation resistance at 100 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		~ 2.5	g
Operation and storage temperature		-40 ... +125	°C
Climatic category (IEC 60068-1)		40/125/21	
Marking, blue negative		TDK 470 YY 470 - 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.

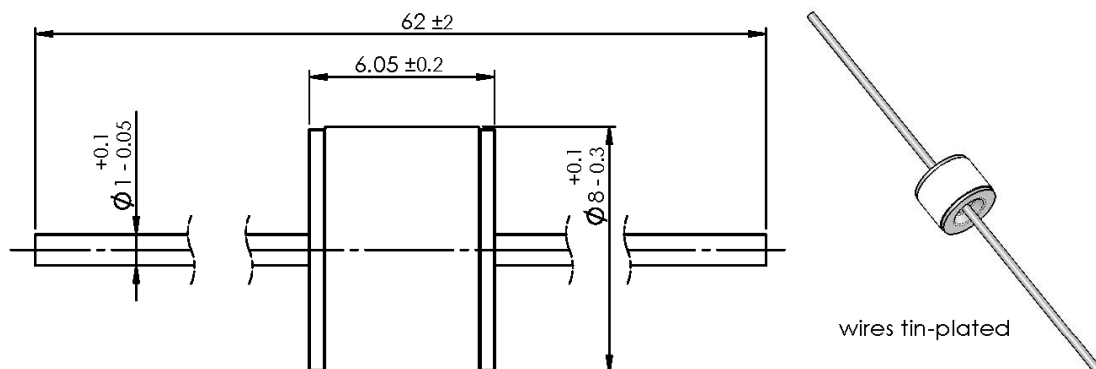
Surge arrester

B88069X6441****

2-electrode arrester

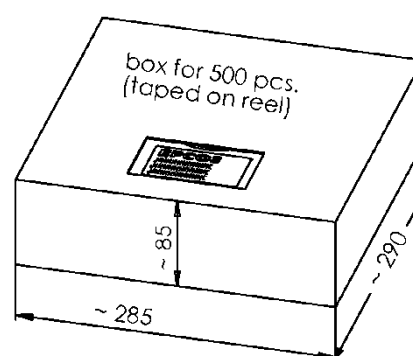
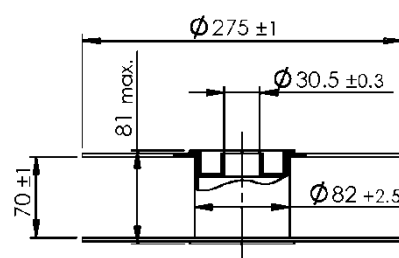
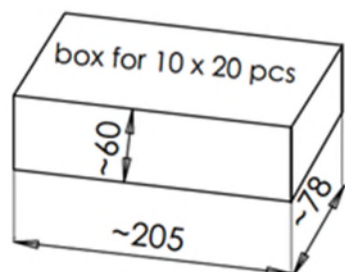
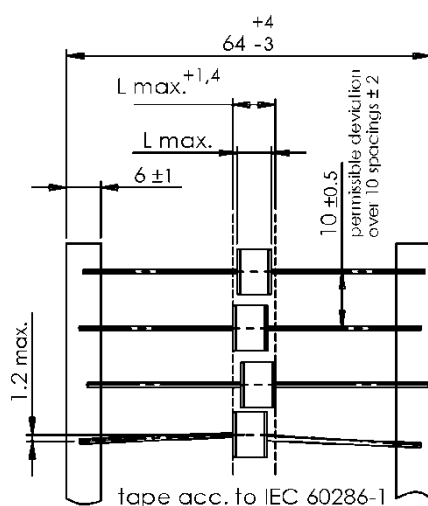
A81-A470X

Dimensional drawing in mm



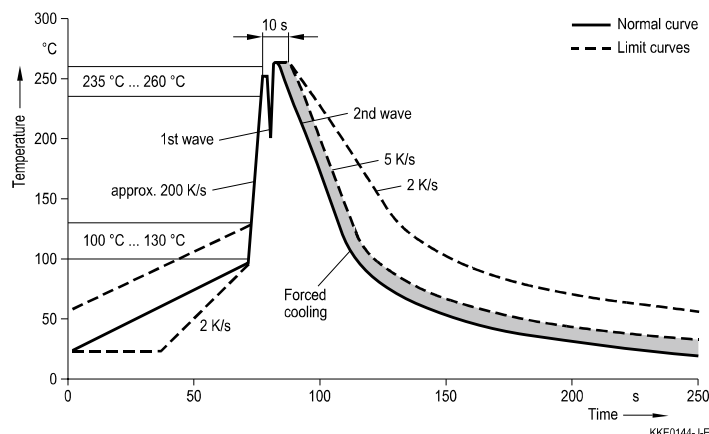
Ordering codes and packing advices

B88069X6441S202 = 200 pcs. on 10 taped stripes B88069X6441T502 = 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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