

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: B88069X6090S102
Manufacturer: TDK
Package: Bulk
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/tdk/b88069x6090s102.html>

Request a Quote:

[Submit RFQ for this part](#)



Scan for product page

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:	EM420X
Ordering code:	B88069X6090****
Date:	2026-04-01
Version:	04

Surge arrester

B88069X6090****

2-electrode arrester

EM420X

Features

- Small size
- Fast response time
- High current handling capability
- Stable performance over service life
- Low capacitance and insertion loss
- High insulation resistance
- RoHS-compatible

Applications

- Power supplies
- Antenna protection
- Air condition
- Modem
- Consumer electronics
- Dataline protection

Electrical specifications

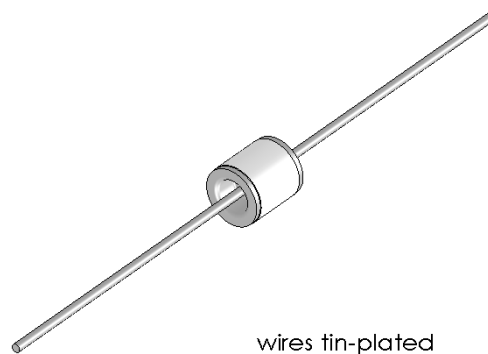
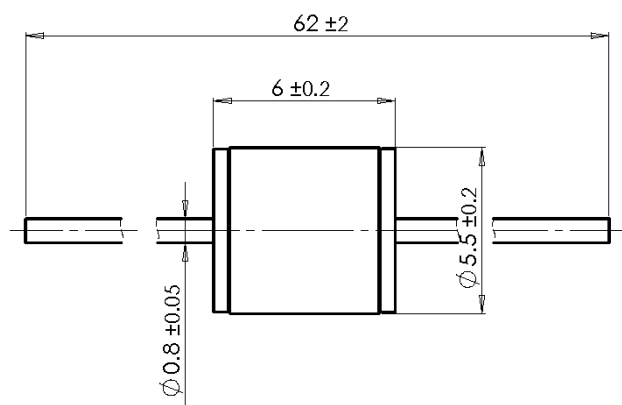
DC spark-over voltage ^{1) 2)}		420	V
Tolerance		±20	%
Min.		336	V
Max.		504	V
Impulse spark-over voltage			
at 100 V/μs	- for 99% of measured values	< 850	V
	- typical values of distribution	< 800	V
at 1 kV/μs	- for 99% of measured values	< 850	V
	- typical values of distribution	< 900	V
Service life			
10 operations	50 Hz, 1 s	2.5	A
1 operation	50 Hz, 0.18 s (9 cycles)	5	A
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		~ 10	V
Glow to arc transition current		< 0.3	A
Glow voltage		~ 60	V
Weight		~ 1	g
Operation and storage temperature		-40 ... +125	°C
Climatic category (IEC 60068-1)		40/125/21	
Marking, red positive		TDK EM 420 YY EM - Series 420 - Nominal voltage YY - Year of production	

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.

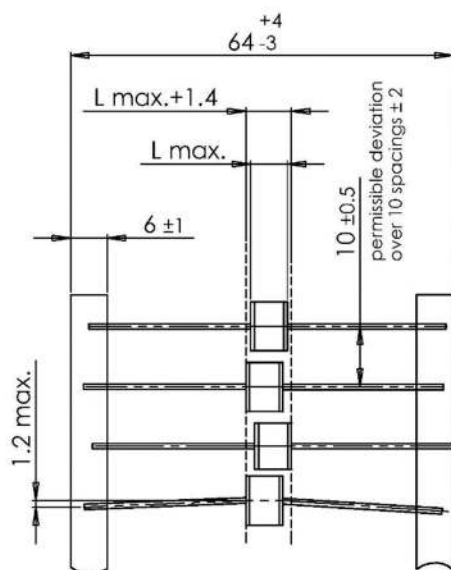
Dimensional drawing in mm



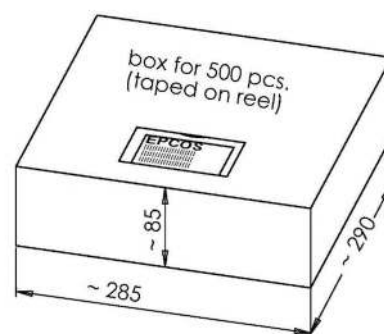
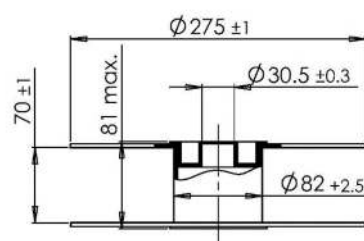
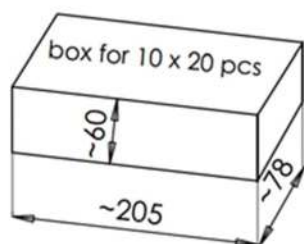
Ordering codes and packing advices

B88069X6090**S202** = 200 pcs. on 10 taped stripes

B88069X6090**T502** = 500 pcs. on tape and reel

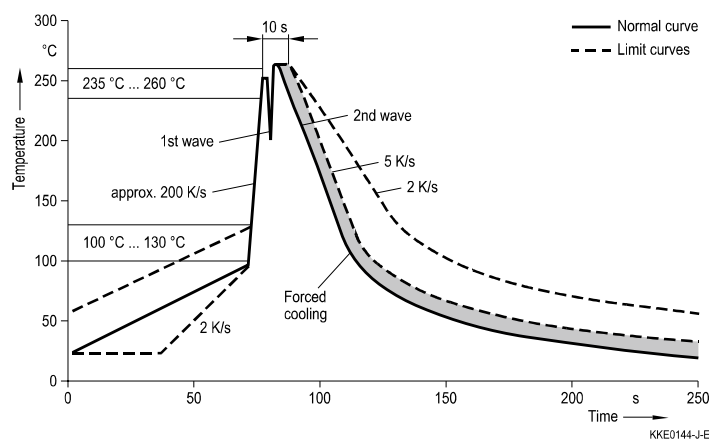


tape acc. to IEC 60286-1



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.
- 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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