

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: B88069X4231S102
Manufacturer: TDK
Package: Strip
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/tdk/b88069x4231s102.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:	EM3000XS
Ordering code:	B88069X4231****
Date:	2026-04-01
Version:	08

Surge arrester

B88069X4231****

2-electrode arrester

EM3000XS

Features

- Small size
- Fast response time
- Stable performance over service life
- Low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- Modem
- XDSL-splitter
- Station protection
- Consumer electronics
- Tuner

Electrical specifications

DC spark-over voltage ^{1) 2)}	3000	V
Tolerance	±20	%
Min.	2400	V
Max.	3600	V
Impulse spark-over voltage		
at 100 V/μs - for 99% of measured values	< 3800	V
- typical values of distribution	< 3600	V
at 1 kV/μs - for 99% of measured values	< 3900	V
- typical values of distribution	< 3700	V
Service life		
10 operations 50 Hz; 1 s	1	A
300 operations 8/20 μs	100	A
10 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	1500	V
Glow to arc transition current	< 0.3	A
Glow voltage at 0.1 A	~ 170	V
AC withstand voltage (1 min) ³⁾	1500	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

B88069X4231****

2-electrode arrester

EM3000XS

Marking, blue positive

TDK EM 3000 YY

EM - Series

3000 - Nominal voltage

YY - Year of production

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 ≤ 55% and atmospheric pressure 860 ... 1100mbar.

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

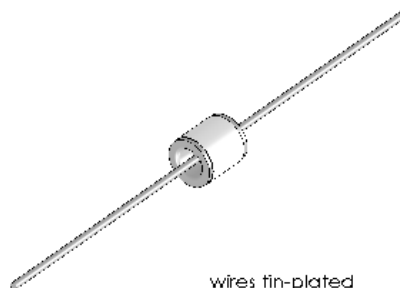
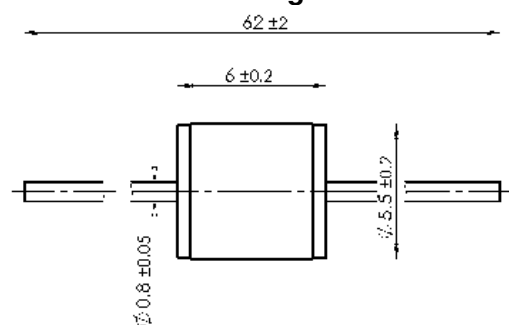
Surge arrester

B88069X4231****

2-electrode arrester

EM3000XS

Dimensional drawing in mm

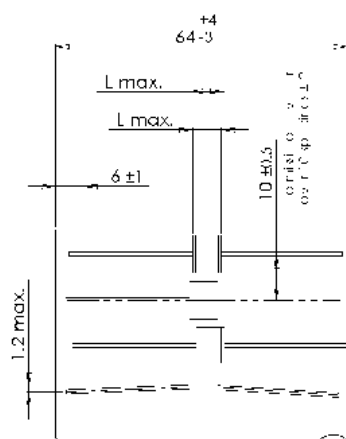


wires tin-plated

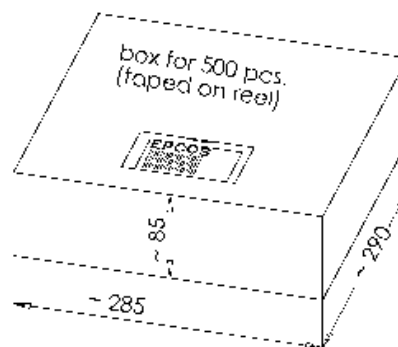
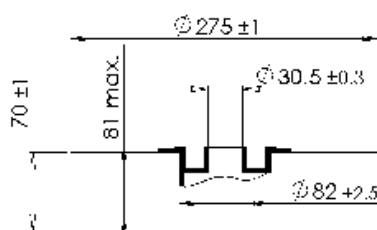
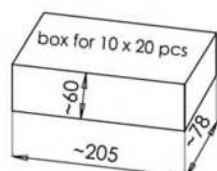
Ordering codes and packing advices

B88069X4231**S202** = 200 pcs. on 10 taped stripes

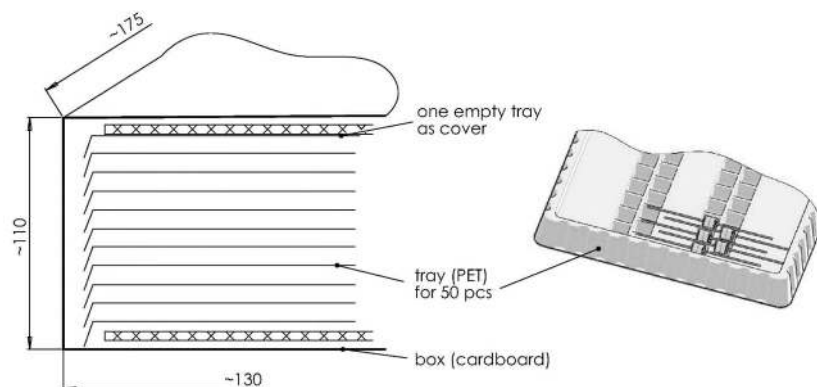
B88069X4231**T502** = 500 pcs. on tape & reel



tape acc. to IEC 60286-1

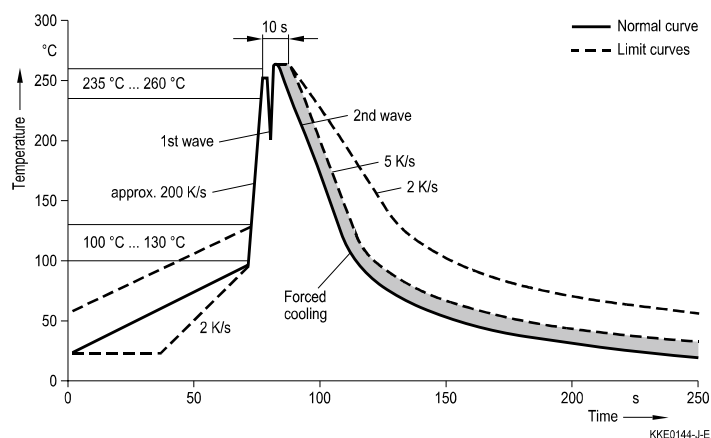


B88069X4231**B502** = 500 pcs. on trays



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.
- 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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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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