

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

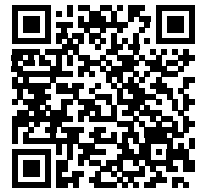
Part Number: B88069X4590C102
Manufacturer: TDK
Package: Bulk
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/tdk/b88069x4590c102.html>

Request a Quote:

[Submit RFQ for this part](#)



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Contact Information

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WhatsApp: +86-186-8066-5326

Website: <https://antrexco.com>

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:	M51-A600X
Ordering code:	B88069X4590C102
Date:	2026-04-01
Version:	06

Surge arrester

B88069X4590C102

2-electrode arrester

M51-A600X

Features

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

Applications

- Branch exchange
- Line protection
- Subscriber protection
- Alarm system
- Consumer electronic

Electrical specifications

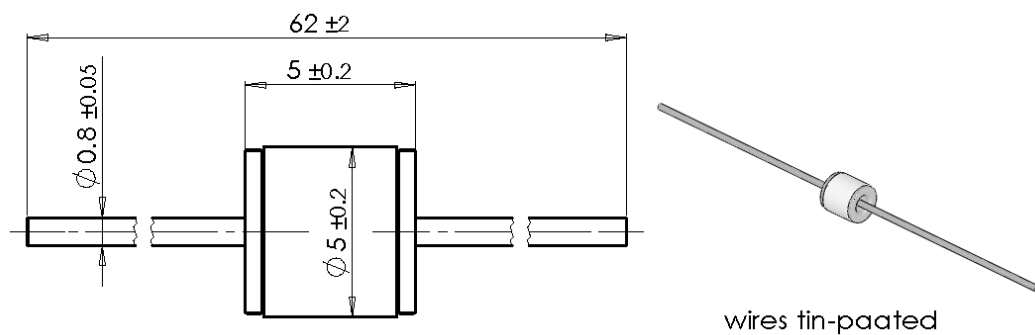
DC spark-over voltage ^{1) 2)}	570 ... 780	V
Impulse spark-over voltage		
at 100 V/μs - for 99% of measured values	< 1350	V
- typical values of distribution	< 1200	V
at 1 kV/μs - for 99% of measured values	< 1500	V
- typical values of distribution	< 1350	V
Service life		
10 operations 50 Hz, 1 s	5	A
1 operation 50 Hz, 0.18 s (9 cycles)	10	A
10 operations 8/20 μs	5	kA
1 operation 8/20 μs	10	kA
1 operation 10/350 μs	1	kA
Insulation resistance at 100 V _{DC}	> 1	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 15	V
Glow to arc transition current	< 0.5	A
Glow voltage	~ 60	V
Weight	~ 1	g
Operation and storage temperature	-40 ... +125	°C
Climatic category (IEC 60068-1)	40/125/21	
Marking, blue negative	TDK 600 YY 600 - Nominal voltage YY - Year of production	
Certifications	UL 497B (E163070)	

¹⁾ At delivery AQL 0.65 level II, DIN ISO 2859

²⁾ In ionized mode

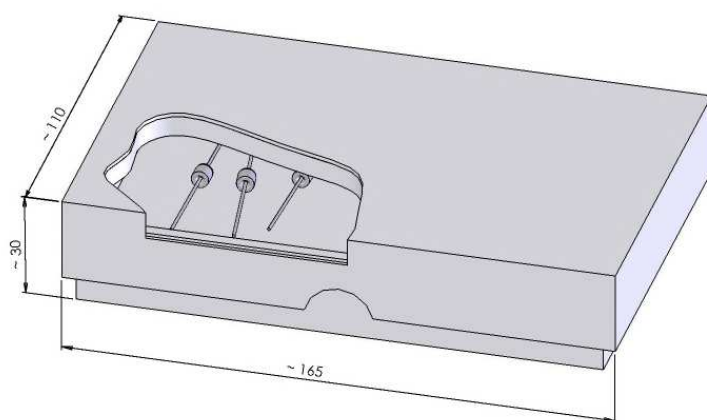
Terms in accordance with ITU-T Rec. K.12 and IEC 61643-311.

Dimensional drawing in mm



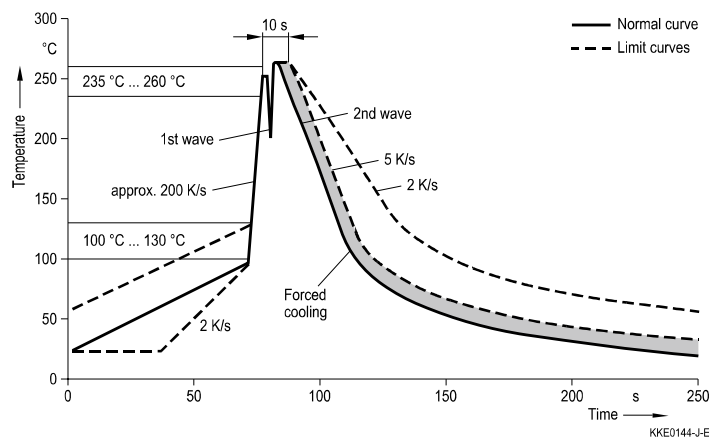
Ordering codes and packing advices

B88069X4590C102 = 100 pcs. in container



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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2. We also point out that **in individual cases, a malfunction of electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified**. In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of an electronic component.
3. **The warnings, cautions and product-specific notes must be observed.**
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Important notes

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