

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

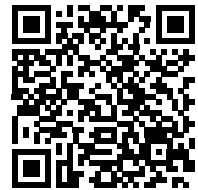
Part Number: B88069X2780S102
Manufacturer: TDK
Package: Strip
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/tdk/b88069x2780s102.html>

Request a Quote:

[Submit RFQ for this part](#)



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Contact Information

Email: info@antrexco.com

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:	EM500X
Ordering code:	B88069X2780S202
Date:	2026-04-01
Version:	05

Surge arrester

B88069X2780S202

2-electrode arrester

EM500X

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

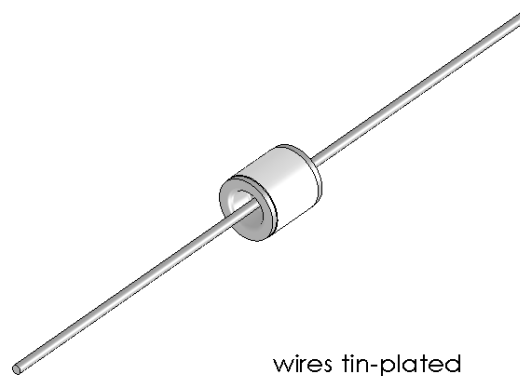
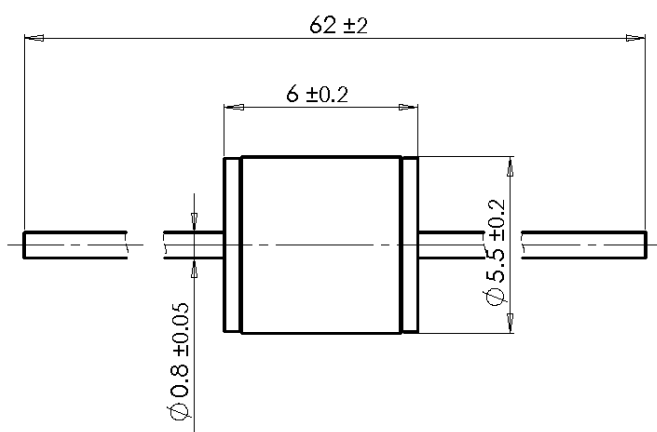
DC spark-over voltage ^{1) 2)}		500	V
Tolerance		±20	%
Min.		400	V
Max.		600	V
Impulse spark-over voltage			
at 100 V/μs - for 99% of measured values		< 950	V
- typical values of distribution		< 800	V
at 1 kV/μs - for 99% of measured values		< 1050	V
- typical values of distribution		< 900	V
Service life			
10 operations	50 Hz, 1 s	2.5	A
1 operation	50 Hz, 0.18 s (9 cycles)	5	A
10 operations [5× (+) & 5× (-)]	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 500 YY EM - Series 500 - Nominal voltage YY - Year of production	
Certifications		UL 497B (E163070) UL 1449 (E319264)	

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

²⁾ In ionized mode

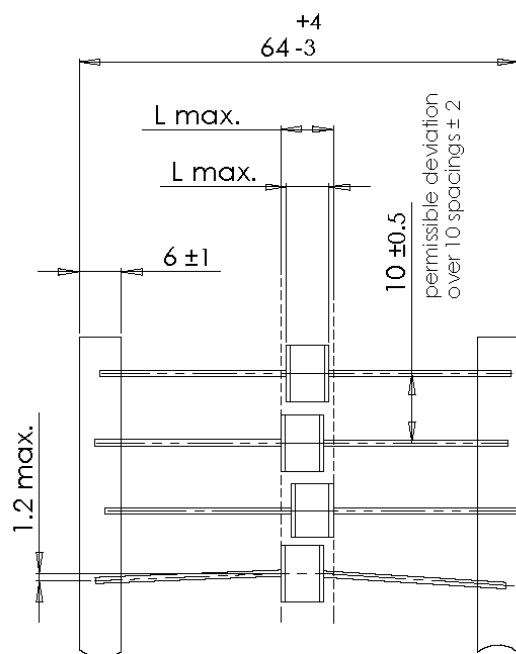
Terms in accordance with ITU-T Rec. K.12 and IEC 61643-311.

Dimensional drawing in mm

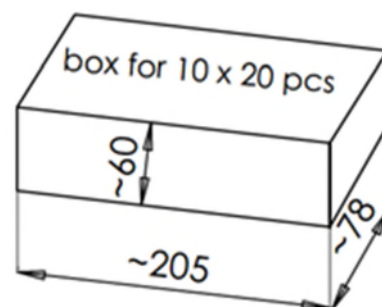


Ordering code and packing advice

B88069X2780S202 = 200 pcs. on 10 taped stripes

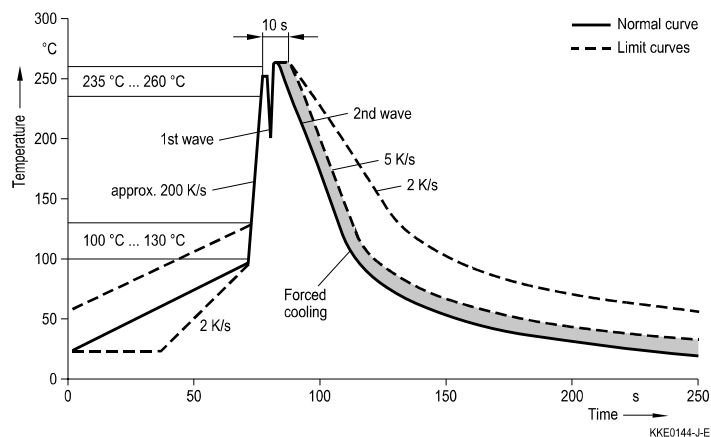


tape acc. to IEC 60286-1



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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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

8. The trade names EPCOS, CarXield, CeraCharge, CeraDiode, CeraLink, CeraPad, CeraPlas, CSMP, CTVS, DeltaCap, DigiSiMic, FilterCap, FormFit, InsuGate, LeaXield, MediPlas, MiniBlue, MiniCell, MKD, MKK, ModCap, MotorCap, PCC, PhaseCap, PhaseCube, PhaseMod, PhiCap, PiezoBrush, PlasmaBrush, PowerHap, PQSine, PQvar, SIFERRIT, SIFI, SIKOREL, SilverCap, SIMDAD, SiMic, SIMID, SineFormer, SIOV, SurfIND, ThermoFuse, WindCap, XieldCap are **trademarks registered or pending** in Europe and in other countries. Further information will be found on the Internet at www.tdk-electronics.tdk.com/trademarks.

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