

# ANTREX Electronics

Electronic Components Sourcing Information

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## Product Reference Information

**Part Number:** B88069X5683K203  
**Manufacturer:** TDK  
**Package:** Tape & Reel (TR)  
**Availability:** Please confirm with sales

### Product Page:

<https://antrexco.com/product/details/tdk/b88069x5683k203.html>

### Request a Quote:

[Submit RFQ for this part](#)



Scan for product page

## Contact Information

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WhatsApp: +86-186-8066-5326

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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.

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## Surge arrester

### 2-electrode arrester

|                       |                        |
|-----------------------|------------------------|
| <b>Series/Type:</b>   | <b>G31-A140X</b>       |
| <b>Ordering code:</b> | <b>B88069X5683K203</b> |
| Date:                 | 2021-06-04             |
| Version:              | 02                     |

## Surge arrester

B88069X5683K203

## 2-electrode arrester

G31-A140X

### Features

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

### Applications

- Ethernet, PoE, xDSL
- Cable modem, splitter, line cards
- CCTV
- Applications with limited space

### Electrical specifications

|                                                |              |    |
|------------------------------------------------|--------------|----|
| DC spark-over voltage <sup>1) 2)</sup>         | 140          | V  |
| Tolerance                                      | ±20          | %  |
| Min.                                           | 112          | V  |
| Max.                                           | 168          | V  |
| Impulse spark-over voltage                     |              |    |
| at 100 V/μs - for 99% of measured values       | < 500        | V  |
| - typical values of distribution               | < 450        | V  |
| at 1 kV/μs - for 99% of measured values        | < 700        | V  |
| - typical values of distribution               | < 650        | V  |
| Service life <sup>3)</sup>                     |              |    |
| 300 operations 8/20 μs                         | 100          | A  |
| 10 operations [5× (+) & 5× (-)] 8/20 μs        | 1            | kA |
| 1 operation 8/20 μs                            | 2            | kA |
| 200 operations contact discharge <sup>4)</sup> | 500          | A  |
| Insulation resistance at 100 V <sub>DC</sub>   | > 1          | GΩ |
| Capacitance at 1 MHz                           | < 0.5        | pF |
| Arc voltage at 1 A                             | ~ 10         | V  |
| Glow to arc transition current                 | < 1.0        | A  |
| Glow voltage                                   | ~ 60         | V  |
| Weight                                         | ~ 0.2        | g  |
| Operation and storage temperature              | -40 ... +125 | °C |
| Climatic category (IEC 60068-1)                | 40/125/21    |    |
| Marking                                        | without      |    |

<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

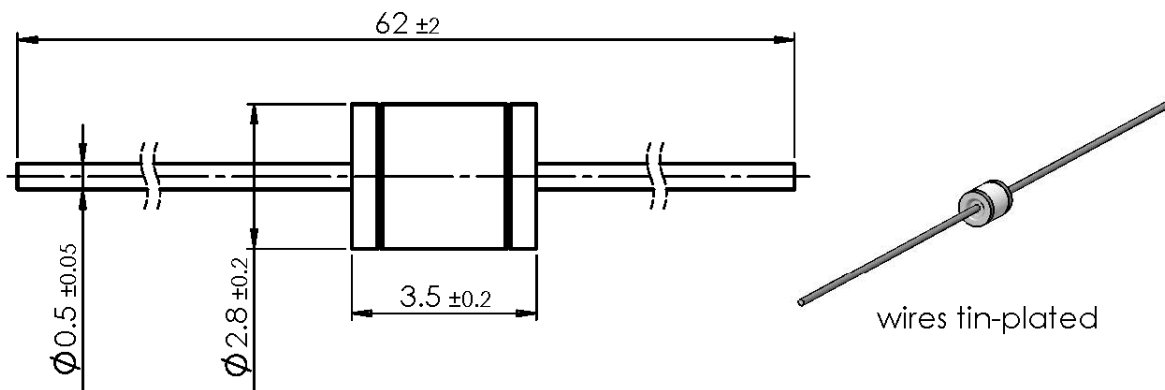
<sup>2)</sup> In ionized mode

<sup>3)</sup> Tests according to ITU-T Rec. K. 12 and UL 497B

<sup>4)</sup> Contact discharge parameters: 1500 pF, 10 kV, 20 Ω

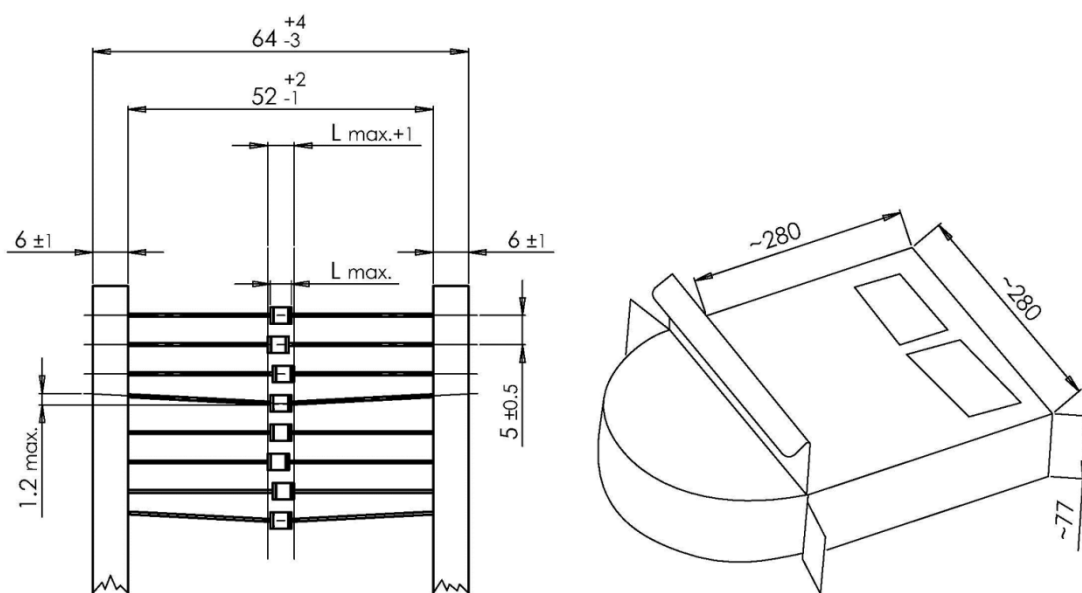
Terms in accordance with ITU-T Rec. K.12 and IEC 61643-311.

### Dimensional drawing in mm



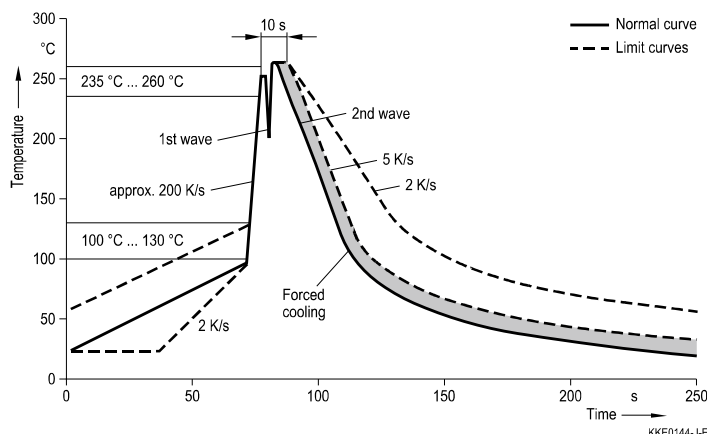
### Ordering codes and packing advices

B88069X5683K203 = 2000 pcs. on tape and 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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3. **The warnings, cautions and product-specific notes must be observed.**
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## Important notes

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Release 2020-06