

# ANTREX Electronics

Electronic Components Sourcing Information

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## Product Reference Information

**Part Number:** B88069X6181T103  
**Manufacturer:** TDK  
**Package:** Tape & Reel (TR)  
**Availability:** Please confirm with sales

### Product Page:

<https://antrexco.com/product/details/tdk/b88069x6181t103.html>

### Request a Quote:

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## Contact Information

Email: [info@antrexco.com](mailto: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.

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## Surge arrester

2-electrode arrester

**Series/Type:** ES600XSN  
**Ordering code:** B88069X6181xxxx <sup>a)</sup>  
**Version/Date:** Issue 01 / 2006-08-31

| Features                                                                                                                                                                                                                                           | Applications                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Extremely small size</li> <li>Extremely fast response time</li> <li>Stable performance over life</li> <li>Extremely low capacitance</li> <li>High insulation resistance</li> <li>RoHS-compatible</li> </ul> | <ul style="list-style-type: none"> <li>Modem</li> <li>Consumer electronics</li> <li>Tuner</li> </ul> |

**Electrical specifications**

|                                                   |                                                                                                                                          |    |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----|
| DC spark-over voltage <sup>1) 2) 3)</sup>         | 510 ... 750                                                                                                                              | V  |
| Impulse spark-over voltage                        |                                                                                                                                          |    |
| at 100 V/μs   - for 99 % of measured values       | < 800                                                                                                                                    | V  |
| - typical values of distribution                  | < 750                                                                                                                                    | V  |
| at 1 kV/μs    - for 99 % of measured values       | < 900                                                                                                                                    | V  |
| - typical values of distribution                  | < 800                                                                                                                                    | V  |
| Single impulse discharge current   (wave 8/20 μs) | 2.0                                                                                                                                      | kA |
| Insulation resistance at 100 V <sub>dc</sub>      | > 1                                                                                                                                      | GΩ |
| Capacitance at 1 MHz                              | < 1                                                                                                                                      | pF |
| Weight                                            | ~ 0.5                                                                                                                                    | g  |
| Operation and storage temperature                 | -40 ... +90                                                                                                                              | °C |
| Climatic category (IEC 60068-1)                   | 40/ 90/ 21                                                                                                                               |    |
| Marking, red positive                             | <b>EPCOSES 600 YY O</b><br>ES       - Series<br>600      - Nominal voltage<br>YY      - Year of production<br>O        - Non radioactive |    |

<sup>a)</sup> xxxx = T103 (1000 pcs. on SMD-tape)  
C253 (2500 pcs in container)

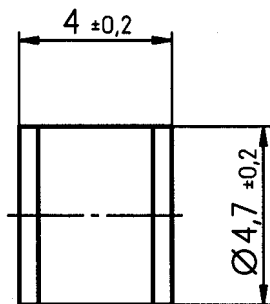
<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

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

<sup>3)</sup> The first DC spark-over value immediately after changing polarity shall not be considered.

Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

### Dimensional drawing

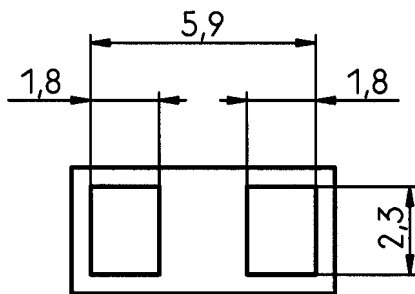


tin-plated

*Not to scale*

*Dimensions in mm*

*Non controlled document*



empfohlene Lötfläche/  
recommended pad outline

### Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

## Important notes

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