

Surface Mount Fuse, 11 x 4.6 mm, Quick-Acting F, Telecom



IEC 60127-4 · 250 VAC · 250 VDC · Quick-Acting F

**Description**

- Directly solderable on printed circuit boards

**Standards**

- IEC 60127-4/2
- UL 248-14
- CSA C22.2 no. 248.14
- Telcordia GR-1089
- UL 60950 / IEC 60950
- ITU-T K.20 and K.21
- TIA-968-A

**Approvals**

- VDE License Number: 106328
- UL File Number: E41599

**Applications**

- xDSL and ADSL linecards and modems

**References**

[General Product Information](#)  
[Packaging Details](#)

**Weblinks**

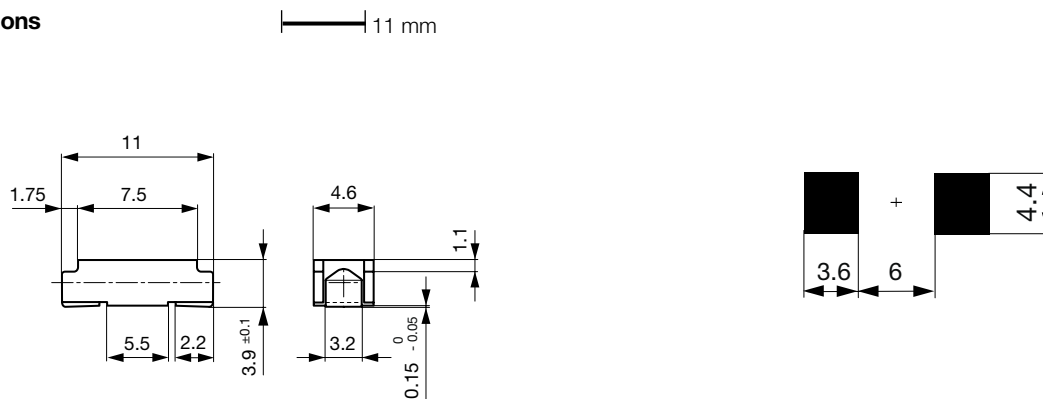
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [Distributor-Stock-Check](#),  
[Accessories](#), [Product Change Notification \(PCN\)](#)

**Technical Data**

|                              |                                                                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Voltage                | 250 VAC, 250 VDC                                                                                                                                |
| Rated Current                | 0.25 - 3.15 A                                                                                                                                   |
| Breaking Capacity            | 100 A                                                                                                                                           |
| Characteristic               | Quick-Acting F                                                                                                                                  |
| Mounting                     | PCB, SMT                                                                                                                                        |
| Admissible Ambient Air Temp. | -40 °C to 85 °C                                                                                                                                 |
| Climatic Category            | 40/085/21 acc. to IEC 60068-1                                                                                                                   |
| Material: Housing            | Thermoplastic, UL 94V-0                                                                                                                         |
| Material: Terminals          | Tin-Plated Copper Alloy                                                                                                                         |
| Unit Weight                  | 0.36 g                                                                                                                                          |
| Storage Conditions           | 0 °C to 60 °C, max. 70% r.h.                                                                                                                    |
| Product Marking              |  Type, Current, Characteristic, Breaking Capacity, Approvals |

|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| Soldering Methods            | Reflow, Wave                                                         |
| Solderability                | 245 °C / 3 sec acc. to IEC 60068-2-58, Test Td                       |
| Resistance to Soldering Heat | 260 °C / 10 sec acc. to IEC 60068-2-58, Test Td                      |
| Current Carrying Capacity    | acc. to EIA/IS-722, Test 4.3.3                                       |
| Load Humidity Test           | MIL-STD-202, Method 103B (1000h @ 0.1*ln @ 0.85 r.H. @ 85 °C)        |
| Moisture Resistance Test     | MIL-STD-202, Method 106E (50 cycles in a temp./mister chamber)       |
| Terminal Strength            | MIL-STD-202, Method 211A (Deflection of board 1 mm for 1 minute)     |
| Thermal Shock                | MIL-STD-202, Method 107D (200 air-to-air cycles from -55 to +125 °C) |
| Case Resistance              | acc. to EIA/IS-722, Test 4.7 >100 MΩ (between leads and body)        |
| Mechanical Shock             | MIL-STD-202, Method 213B (Shock 50gn, half sine wave, 11 ms)         |
| Vibration, High Frequency    | MIL-STD-202, Method 204D (Shock 20 gn, 20 min, 10-2 kHz, 12 cyc.)    |
| Resistance to Solvents       | MIL-STD-202, Method 215A                                             |
| Flammability                 | min. UL 94V-1 (acc. to EIA/IS-722, Test 4.12)                        |

## Dimensions



Soldering pads

## Pre-Arcing Time

| Rated Current I <sub>n</sub> | 1.25 x I <sub>n</sub><br>min. | 2.0 x I <sub>n</sub><br>max. | 10.0 x I <sub>n</sub><br>min. | 10.0 x I <sub>n</sub><br>max. |
|------------------------------|-------------------------------|------------------------------|-------------------------------|-------------------------------|
| 0.25 A - 3.15 A              | 60 min                        | 120 s                        | 1 ms                          | 10 ms                         |

## Variants

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Voltage Drop 1.0 I <sub>n</sub> typ. [mV] | Power Dissipation 1.25 I <sub>n</sub> typ. [mW] | Melting I <sup>2</sup> t 10.0 I <sub>n</sub> typ. [A <sup>2</sup> s] | GR-1089-CORE [A] | UL60950 | ITU - Lightning Surge [A] | ITU - Power Induc- | ITU - Power Contact [A] | Order Number |
|-------------------|---------------------|---------------------|-------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------|------------------|---------|---------------------------|--------------------|-------------------------|--------------|
| 0.25              | 250                 | 250                 | 1100                                      | 480                                             | 0.012                                                                | < 1.9            | ●       | 3.9                       |                    | 100.0                   | 2070.0010.xx |
| 0.315             | 250                 | 250                 | 1000                                      | 430                                             | 0.019                                                                | < 1.9            | ●       | 4.3                       | ●                  | 100.0                   | 2070.0011.xx |
| 0.4               | 250                 | 250                 | 230                                       | 190                                             | 0.02                                                                 | 3.1              | ●       | 5                         | ●                  | 100.0                   | 2070.0012.xx |
| 0.5               | 250                 | 250                 | 190                                       | 190                                             | 0.03                                                                 | 5.1              | ●       | 10                        | ●                  | 100.0                   | 2070.0013.xx |
| 0.63              | 250                 | 250                 | 170                                       | 230                                             | 0.07                                                                 | 9.2              |         | 16                        | ●                  | 100.0                   | 2070.0014.xx |
| 0.8               | 250                 | 250                 | 200                                       | 330                                             | 0.12                                                                 | 13.15            |         | 22                        | ●                  | 100.0                   | 2070.0015.xx |
| 1                 | 250                 | 250                 | 170                                       | 390                                             | 0.23                                                                 | 13.15            |         | 27                        | ●                  | 100.0                   | 2070.0016.xx |
| 1.25              | 250                 | 250                 | 150                                       | 390                                             | 0.47                                                                 | 13.15            |         | 43                        | ●                  | 100.0                   | 2070.0017.xx |
| 1.6               | 250                 | 250                 | 150                                       | 490                                             | 0.84                                                                 | 13.15            |         | 67                        | ●                  | 100.0                   | 2070.0018.xx |
| 2                 | 250                 | 250                 | 140                                       | 600                                             | 1.4                                                                  | 13.15            |         | 67                        | ●                  | 100.0                   | 2070.0019.xx |
| 2.5               | 250                 | 250                 | 130                                       | 670                                             | 2.6                                                                  | 13.15            |         | 67                        | ●                  | 100.0                   | 2070.0020.xx |
| 3.15              | 250                 | 250                 | 130                                       | 870                                             | 4.8                                                                  | 13.15            |         | 67                        | ●                  | 100.0                   | 2070.0021.xx |

1) 100 A @ 250 VAC/DC

## Packaging Unit

.xx = .11 Plastic Bag (100 pcs.)  
 .xx = .24 Blister Tape 33 cm Reel (2000 pcs.)

## [Kennlinien]

