

Subminiature Fuse, 6.4 mm, Quick-Acting F, Telecom



UL 248-14 · 125VAC · 125VDC · Quick-Acting F



### Description

- Directly solderable on printed circuit boards

### Standards

- IEC 60127-3/1
- 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

- UL File Number: E41599
- CSA File Number: 51172

### Applications

- xDSL and ADSL linecards and modems

### References

[Packaging Details](#)

Corresponding Fuseholder FME; FMR; FMS (125V)

### Weblinks

[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

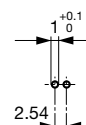
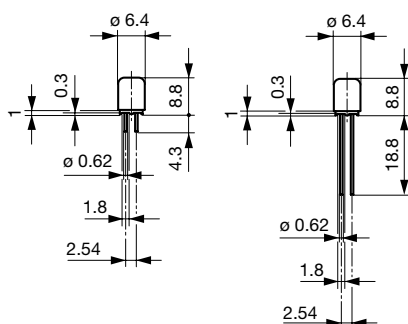
### Technical Data

|                              |                                                                                                                                             |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Voltage                | 125VAC, 125VDC                                                                                                                              |
| Rated current                | 0.25 - 3.15A                                                                                                                                |
| Breaking Capacity            | 100A                                                                                                                                        |
| Characteristic               | Quick-Acting F                                                                                                                              |
| Mounting                     | PCB,THT                                                                                                                                     |
| Admissible Ambient Air Temp. | -25 °C to 85 °C                                                                                                                             |
| Climatic Category            | 25/085/21 acc. to IEC 60068-1                                                                                                               |
| Material: Housing            | Thermoplastic, UL 94V-0                                                                                                                     |
| Material: Terminals          | Tin-Plated Copper                                                                                                                           |
| Unit Weight                  | 0.34 g                                                                                                                                      |
| Storage Conditions           | 0 °C to 40 °C, max. 70% r.h.                                                                                                                |
| Product Marking              |  Type, Current, Rated voltage, Characteristic, Approvals |

|                              |                                                                 |
|------------------------------|-----------------------------------------------------------------|
| Soldering Methods            | Wave, Iron                                                      |
| Solderability                | 235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta                  |
| Resistance to Soldering Heat | 260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb                 |
| Current Carrying Capacity    | acc. to EIA/IS-722, Test 4.3.3                                  |
| Life Test                    | MIL-STD-202, Method 108A (1000h @ 0.42*In @ 70 °C)              |
| Terminal Strength            | MIL-STD-202, Method 211A Deflection of board 1 mm for 1 minute  |
| Case Resistance              | acc. to EIA/IS-722, Test 4.7 >100 MΩ (between leads and body)   |
| Mechanical Shock             | MIL-STD-202, Method 213B (Shock 50g, 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                 | UL 94V-0 (acc. to EIA/IS-722, Test 4.12)                        |

### Dimension

6.4 mm

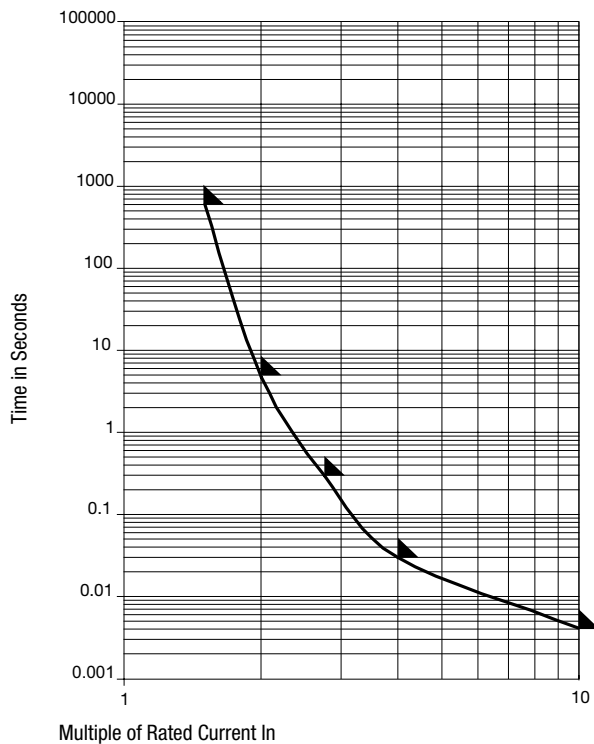


Drilling diagram

## Pre-Arcing Time

| Rated Current $I_n$ | 1.5 x $I_n$ max. | 2.0 x $I_n$ max. | 2.75 x $I_n$ max. | 4.0 x $I_n$ max. | 10.0 x $I_n$ max. |
|---------------------|------------------|------------------|-------------------|------------------|-------------------|
| 0.25 A - 3.15 A     | 10 min           | 5 s              | 300 ms            | 30 ms            | 4 ms              |

## [Kennlinien]



## Variants

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Voltage Drop 1.0 $I_n$ typ. [mV] | Power Dissipation 1.0 $I_n$ typ. [mW] | Melting $I^2t$ 10.0 $I_n$ typ. [A <sup>2</sup> s] | GR-1089-CORE [A] | UL60950 | ITU - Lightning Surge [A] | ITU - Power Induc- | ITU - Power Contact [A] | S | L | T | Order Number |
|-------------------|---------------------|---------------------|----------------------------------|---------------------------------------|---------------------------------------------------|------------------|---------|---------------------------|--------------------|-------------------------|---|---|---|--------------|
| 0.25              | 125                 | 125                 | 620                              | 100                                   | 0.0055                                            | < 1.5            | ●       | 4.5                       | ●                  | 300.0                   | ● |   |   | 2030.0013    |
| 0.315             | 125                 | 125                 | 680                              | 200                                   | 0.025                                             | < 1.5            | ●       | 5.6                       | ●                  | 300.0                   | ● |   |   | 2030.0014    |
| 0.4               | 125                 | 125                 | 180                              | 100                                   | 0.013                                             | 1.6              | ●       | 5.9                       | ●                  | 300.0                   | ● |   |   | 2030.0015    |
| 0.5               | 125                 | 125                 | 180                              | 100                                   | 0.02                                              | 2.4              | ●       | 6.4                       | ●                  | 300.0                   | ● |   |   | 2030.0016    |
| 0.63              | 125                 | 125                 | 180                              | 100                                   | 0.045                                             | 2.7              | ●       | 7.2                       | ●                  | 300.0                   | ● |   |   | 2030.0017    |
| 0.71              | 125                 | 125                 | 140                              | 100                                   | 0.045                                             | 2.9              | ●       | 7.8                       | ●                  | 300.0                   | ● |   |   | 2030.0018    |
| 0.75              | 125                 | 125                 | 170                              | 100                                   | 0.02                                              | 3.0              | ●       | 8.5                       | ●                  | 300.0                   | ● |   |   | 2030.0019    |
| 0.8               | 125                 | 125                 | 150                              | 100                                   | 0.04                                              | 5.0              | ●       | 11                        | ●                  | 300.0                   | ● |   |   | 2030.0020    |
| 1                 | 125                 | 125                 | 150                              | 100                                   | 0.07                                              | 6.0              | ●       | 16                        | ●                  | 300.0                   | ● |   |   | 2030.0021    |
| 1.25              | 125                 | 125                 | 150                              | 200                                   | 0.12                                              | 9.3              | ●       | 21                        | ●                  | 300.0                   | ● |   |   | 2030.0022    |
| 1.6               | 125                 | 125                 | 150                              | 200                                   | 0.29                                              | > 14.0           | ●       | 35                        | ●                  | 300.0                   | ● |   |   | 2030.0023    |
| 2                 | 125                 | 125                 | 130                              | 200                                   | 0.43                                              | > 14.0           | ●       | 38                        | ●                  | 300.0                   | ● |   |   | 2030.0024    |
| 2.5               | 125                 | 125                 | 120                              | 300                                   | 0.6                                               | > 14.0           | ●       | 57                        | ●                  | 300.0                   | ● |   |   | 2030.0025    |
| 3.15              | 125                 | 125                 | 120                              | 400                                   | 1.11                                              | > 14.0           | ●       | 65                        | ●                  | 300.0                   | ● |   |   | 2030.0026    |
| 0.25              | 125                 | 125                 | 620                              | 100                                   | 0.0055                                            | < 1.5            | ●       | 4.5                       | ●                  | 300.0                   |   | ● |   | 2030.0243    |
| 0.315             | 125                 | 125                 | 680                              | 200                                   | 0.025                                             | < 1.5            | ●       | 5.6                       | ●                  | 300.0                   |   | ● |   | 2030.0244    |
| 0.4               | 125                 | 125                 | 180                              | 100                                   | 0.013                                             | 1.6              | ●       | 5.9                       | ●                  | 300.0                   |   | ● |   | 2030.0245    |
| 0.5               | 125                 | 125                 | 180                              | 100                                   | 0.02                                              | 2.4              | ●       | 6.4                       | ●                  | 300.0                   |   | ● |   | 2030.0246    |
| 0.63              | 125                 | 125                 | 180                              | 100                                   | 0.045                                             | 2.7              | ●       | 7.2                       | ●                  | 300.0                   |   | ● |   | 2030.0247    |
| 0.71              | 125                 | 125                 | 140                              | 100                                   | 0.045                                             | 2.9              | ●       | 7.8                       | ●                  | 300.0                   |   | ● |   | 2030.0248    |
| 0.75              | 125                 | 125                 | 170                              | 100                                   | 0.02                                              | 3.0              | ●       | 8.5                       | ●                  | 300.0                   |   | ● |   | 2030.0249    |

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Voltage Drop 1.0 In typ. [mV] | Power Dissipation 1.0 I <sub>n</sub> typ. [mW] | Melting I <sup>2</sup> t 10.0 Intyp. [A²s] | GR-1089-CORE [A] | UL60950 | ITU - Lightning Surge [A] | ITU - Power Induc- | ITU - Power Contact [A] | S | L | T | Order Number |
|-------------------|---------------------|---------------------|-------------------------------|------------------------------------------------|--------------------------------------------|------------------|---------|---------------------------|--------------------|-------------------------|---|---|---|--------------|
| 0.8               | 125                 | 125                 | 150                           | 100                                            | 0.04                                       | 5.0              | ●       | 11                        | ●                  | 300.0                   | ● |   |   | 2030.0250    |
| 1                 | 125                 | 125                 | 150                           | 100                                            | 0.07                                       | 6.0              | ●       | 16                        | ●                  | 300.0                   | ● |   |   | 2030.0251    |
| 1.25              | 125                 | 125                 | 150                           | 200                                            | 0.12                                       | 9.3              | ●       | 21                        | ●                  | 300.0                   | ● |   |   | 2030.0252    |
| 1.6               | 125                 | 125                 | 150                           | 200                                            | 0.29                                       | > 14.0           | ●       | 35                        | ●                  | 300.0                   | ● |   |   | 2030.0253    |
| 2                 | 125                 | 125                 | 130                           | 200                                            | 0.43                                       | > 14.0           | ●       | 38                        | ●                  | 300.0                   | ● |   |   | 2030.0254    |
| 2.5               | 125                 | 125                 | 120                           | 300                                            | 0.6                                        | > 14.0           | ●       | 57                        | ●                  | 300.0                   | ● |   |   | 2030.0255    |
| 3.15              | 125                 | 125                 | 120                           | 400                                            | 1.11                                       | > 14.0           | ●       | 65                        | ●                  | 300.0                   | ● |   |   | 2030.0256    |

Availability for all products can be searched real-time: <http://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

|                       |     |                              |
|-----------------------|-----|------------------------------|
| <b>Packaging Unit</b> | S = | Plastic Bag (100 pcs.)       |
|                       | L = | Bulk (100 pcs.)              |
|                       | T = | Taped 36 cm Reel (1000 pcs.) |