

Subminiature Fuse, 11.5 x 5 mm, Quick-Acting F



Subminiature fuse quick-acting F
from front side
Short terminal



Subminiature fuse 11.5 x 5 mm, quick-acting F
Terminal long
PCB Mounting

IEC 60127-4 · 250VAC · Quick-Acting F

See below:

[Approvals and Compliances](#)

Description

- Subminiature fuse quick-acting F

Applications

- Primary Protection on PCB

References


[Packaging Details](#)

Corresponding Fuseholder [231819](#)

Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Packaging details](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

Technical Data

| | |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Voltage | 250VAC |
| Rated current | 0.16 - 10A |
| Breaking Capacity | 100A |
| Characteristic | Quick-Acting F |
| Mounting | PCB,THT |
| 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 |
| Unit Weight | 0.72 g |
| Storage Conditions | 0 °C to 60 °C, max. 70% r.h. |
| Product Marking |  Rated current, Rated Voltage, Characteristic, Breaking Capacity, Certification marks |

| | |
|------------------------------|-----------------------------------------------------------|
| Soldering Methods | Wave Soldering Profile |
| Solderability | 235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1 |
| Resistance to Soldering Heat | 260 °C / 5 sec acc. to IEC 60068-2-20, Test Tb, method 1A |
| Resistance to Vibration | acc. to IEC 60068-2-6, test Fc |

Approvals and Compliances


Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Approvals




The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: FRT 250F

| Approval Logo | Certificates | Certification Body | Description |
|-------------------------------------------------------------------------------------|------------------------------|--------------------|------------------------|
|  | UL Approvals | UL | UL File Number: E41599 |

Product standards

Product standards that are referenced

| Organization | Design | Standard | Description |
|----------------------------------------------------------------------------------|-----------------------|--------------------|------------------------------------------------------------------------------------------------|
|  | Designed according to | IEC 60127-4/1 | Miniature fuses. Part 4. Universal modular fuse-links for through-hole and surface mount types |
|  | Designed according to | UL 248-14 | Low voltage fuses - Part 14: Additional fuses |
|  | Designed according to | CSA22.2 No. 248.14 | Low-Voltage Fuses - Part 14: Supplemental Fuses |





Application standards

Application standards where the product can be used

| Organization | Design | Standard | Description |
|----------------------------------------------------------------------------------|--------------------------------|--------------|-------------------------------------------------------------------------------------------------|
|  | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment. |

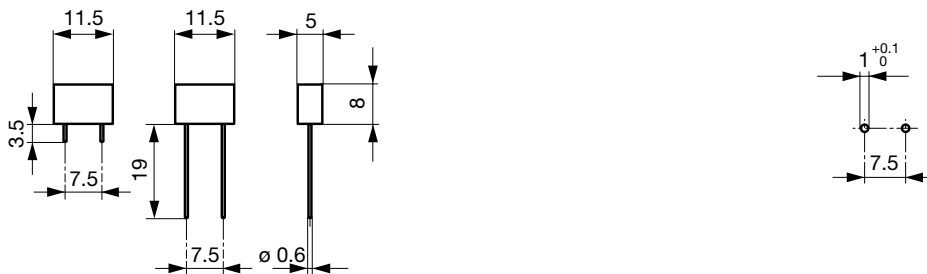
Compliances

The product complies with following Guide Lines

| Identification | Details | Initiator | Description |
|-----------------------------------------------------------------------------------|----------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
|  | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/836 |
|  | China RoHS | SCHURTER AG | The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS. |
|  | REACH | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force. |

Dimension [mm]

11.5 mm



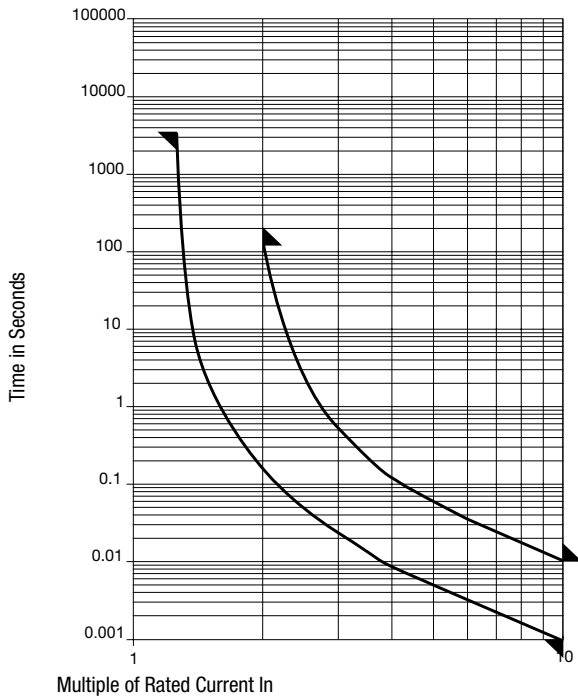
Drilling diagram

Pre-Arcing Time


Rated Current I_n 1.25 x I_n min. 2.0 x I_n max. 10.0 x I_n min. 10.0 x I_n max.


| | | | | |
|---------------|--------|-------|------|-------|
| 0.16 A - 10 A | 60 min | 120 s | 1 ms | 10 ms |
|---------------|--------|-------|------|-------|

Time-Current-Curves



All Variants


| Rated Current [A] | Rated Voltage [VAC] | Breaking Capacity | Voltage Drop 1.0 I _n typ. [mV] | Power Dissipation 1.25 I _n typ. [mW] | Melting I ² t 10.0 I _n typ. [A ² s] |  | S | L | T | Order Number |
|-------------------|---------------------|-------------------|-------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------|---|---|---|--------------|
| 0.16 | 250 | 1) | 345 | 110 | 0.006 | ● | ● | | | 7100.1057.13 |
| 0.2 | 250 | 1) | 300 | 190 | 0.01 | ● | ● | | | 7100.1058.13 |
| 0.25 | 250 | 1) | 260 | 210 | 0.028 | ● | ● | | | 7100.1059.13 |
| 0.315 | 250 | 1) | 270 | 240 | 0.04 | ● | ● | | | 7100.1060.13 |
| 0.4 | 250 | 1) | 260 | 310 | 0.088 | ● | ● | | | 7100.1061.13 |
| 0.5 | 250 | 1) | 115 | 110 | 0.058 | ● | ● | | | 7100.1062.13 |
| 0.63 | 250 | 1) | 100 | 120 | 0.1 | ● | ● | | | 7100.1063.13 |
| 0.8 | 250 | 1) | 95 | 150 | 0.21 | ● | ● | | | 7100.1064.13 |
| 1 | 250 | 2) | 155 | 300 | 0.18 | ● | ● | | | 7100.1065.13 |
| 1.25 | 250 | 2) | 150 | 360 | 0.28 | ● | ● | | | 7100.1066.13 |
| 1.6 | 250 | 2) | 115 | 340 | 0.61 | ● | ● | | | 7100.1067.13 |
| 2 | 250 | 2) | 112 | 450 | 1 | ● | ● | | | 7100.1068.13 |
| 2.5 | 250 | 3) | 100 | 500 | 1.2 | ● | ● | | | 7100.1069.13 |
| 3.15 | 250 | 3) | 90 | 520 | 2.4 | ● | ● | | | 7100.1070.13 |
| 4 | 250 | 3) | 95 | 850 | 4.1 | ● | ● | | | 7100.1071.13 |
| 5 | 250 | 3) | 90 | 800 | 7.2 | ● | ● | | | 7100.1072.13 |
| 6.3 | 250 | 4) | 85 | 960 | 15 | ● | ● | | | 7100.1073.13 |
| 8 | 250 | 4) | 80 | 1000 | 25 | ● | ● | | | 7100.1074.13 |
| 10 | 250 | 4) | 75 | 1450 | 50 | ● | ● | | | 7100.1075.13 |
| 0.16 | 250 | 1) | 345 | 110 | 0.006 | ● | | ● | ● | 7100.1157.13 |
| 0.16 | 250 | 1) | 345 | 110 | 0.006 | ● | | ● | ● | 7100.1157.95 |
| 0.16 | 250 | 1) | 345 | 110 | 0.006 | ● | | ● | ● | 7100.1157.96 |
| 0.2 | 250 | 1) | 300 | 190 | 0.01 | ● | | ● | ● | 7100.1158.13 |
| 0.2 | 250 | 1) | 300 | 190 | 0.01 | ● | | ● | ● | 7100.1158.95 |
| 0.2 | 250 | 1) | 300 | 190 | 0.01 | ● | | ● | ● | 7100.1158.96 |
| 0.25 | 250 | 1) | 260 | 210 | 0.028 | ● | | ● | ● | 7100.1159.13 |
| 0.25 | 250 | 1) | 260 | 210 | 0.028 | ● | | ● | ● | 7100.1159.95 |

| Rated Current [A] | Rated Voltage [VAC] | Breaking Capacity | Voltage Drop 1.0 I _n typ. [mV] | Power Dissipation 1.25 I _n typ. [mW] | Melting I ² t 10.0 I _n typ. [A ² s] |  | S | L | T | Order Number |
|-------------------|---------------------|-------------------|-------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|---|---|--------------|
| 0.315 | 250 | 1) | 270 | 240 | 0.04 | ● | ● | ● | ● | 7100.1160.13 |
| 0.315 | 250 | 1) | 270 | 240 | 0.04 | ● | ● | ● | ● | 7100.1160.95 |
| 0.315 | 250 | 1) | 270 | 240 | 0.04 | ● | ● | ● | ● | 7100.1160.96 |
| 0.4 | 250 | 1) | 260 | 310 | 0.088 | ● | ● | ● | ● | 7100.1161.13 |
| 0.4 | 250 | 1) | 260 | 310 | 0.088 | ● | ● | ● | ● | 7100.1161.95 |
| 0.4 | 250 | 1) | 260 | 310 | 0.088 | ● | ● | ● | ● | 7100.1161.96 |
| 0.5 | 250 | 1) | 115 | 110 | 0.058 | ● | ● | ● | ● | 7100.1162.13 |
| 0.5 | 250 | 1) | 115 | 110 | 0.058 | ● | ● | ● | ● | 7100.1162.95 |
| 0.5 | 250 | 1) | 115 | 110 | 0.058 | ● | ● | ● | ● | 7100.1162.96 |
| 0.63 | 250 | 1) | 100 | 120 | 0.1 | ● | ● | ● | ● | 7100.1163.13 |
| 0.63 | 250 | 1) | 100 | 120 | 0.1 | ● | ● | ● | ● | 7100.1163.95 |
| 0.63 | 250 | 1) | 100 | 120 | 0.1 | ● | ● | ● | ● | 7100.1163.96 |
| 0.8 | 250 | 1) | 95 | 150 | 0.21 | ● | ● | ● | ● | 7100.1164.13 |
| 0.8 | 250 | 1) | 95 | 150 | 0.21 | ● | ● | ● | ● | 7100.1164.95 |
| 0.8 | 250 | 1) | 95 | 150 | 0.21 | ● | ● | ● | ● | 7100.1164.96 |
| 0.25 | 250 | 1) | 260 | 210 | 0.028 | ● | ● | ● | ● | 7100.1159.96 |
| 1 | 250 | 2) | 155 | 300 | 0.18 | ● | ● | ● | ● | 7100.1165.13 |
| 1 | 250 | 2) | 155 | 300 | 0.18 | ● | ● | ● | ● | 7100.1165.95 |
| 1 | 250 | 2) | 155 | 300 | 0.18 | ● | ● | ● | ● | 7100.1165.96 |
| 1.25 | 250 | 2) | 150 | 360 | 0.28 | ● | ● | ● | ● | 7100.1166.13 |
| 1.25 | 250 | 2) | 150 | 360 | 0.28 | ● | ● | ● | ● | 7100.1166.95 |
| 1.25 | 250 | 2) | 150 | 360 | 0.28 | ● | ● | ● | ● | 7100.1166.96 |
| 1.6 | 250 | 2) | 115 | 340 | 0.61 | ● | ● | ● | ● | 7100.1167.13 |
| 1.6 | 250 | 2) | 115 | 340 | 0.61 | ● | ● | ● | ● | 7100.1167.95 |
| 1.6 | 250 | 2) | 115 | 340 | 0.61 | ● | ● | ● | ● | 7100.1167.96 |
| 2 | 250 | 2) | 112 | 450 | 1 | ● | ● | ● | ● | 7100.1168.13 |
| 2 | 250 | 2) | 112 | 450 | 1 | ● | ● | ● | ● | 7100.1168.95 |
| 2 | 250 | 2) | 112 | 450 | 1 | ● | ● | ● | ● | 7100.1168.96 |
| 2.5 | 250 | 3) | 100 | 500 | 1.2 | ● | ● | ● | ● | 7100.1169.13 |
| 2.5 | 250 | 3) | 100 | 500 | 1.2 | ● | ● | ● | ● | 7100.1169.95 |
| 2.5 | 250 | 3) | 100 | 500 | 1.2 | ● | ● | ● | ● | 7100.1169.96 |
| 3.15 | 250 | 3) | 90 | 520 | 2.4 | ● | ● | ● | ● | 7100.1170.13 |
| 3.15 | 250 | 3) | 90 | 520 | 2.4 | ● | ● | ● | ● | 7100.1170.95 |
| 3.15 | 250 | 3) | 90 | 520 | 2.4 | ● | ● | ● | ● | 7100.1170.96 |
| 4 | 250 | 3) | 95 | 850 | 4.1 | ● | ● | ● | ● | 7100.1171.13 |
| 4 | 250 | 3) | 95 | 850 | 4.1 | ● | ● | ● | ● | 7100.1171.95 |
| 4 | 250 | 3) | 95 | 850 | 4.1 | ● | ● | ● | ● | 7100.1171.96 |
| 5 | 250 | 3) | 90 | 800 | 7.2 | ● | ● | ● | ● | 7100.1172.13 |
| 5 | 250 | 3) | 90 | 800 | 7.2 | ● | ● | ● | ● | 7100.1172.95 |
| 5 | 250 | 3) | 90 | 800 | 7.2 | ● | ● | ● | ● | 7100.1172.96 |
| 6.3 | 250 | 4) | 85 | 960 | 15 | ● | ● | ● | ● | 7100.1173.13 |
| 6.3 | 250 | 4) | 85 | 960 | 15 | ● | ● | ● | ● | 7100.1173.95 |
| 6.3 | 250 | 4) | 85 | 960 | 15 | ● | ● | ● | ● | 7100.1173.96 |
| 8 | 250 | 4) | 80 | 1000 | 25 | ● | ● | ● | ● | 7100.1174.13 |
| 8 | 250 | 4) | 80 | 1000 | 25 | ● | ● | ● | ● | 7100.1174.95 |
| 8 | 250 | 4) | 80 | 1000 | 25 | ● | ● | ● | ● | 7100.1174.96 |
| 10 | 250 | 4) | 75 | 1450 | 50 | ● | ● | ● | ● | 7100.1175.13 |
| 10 | 250 | 4) | 75 | 1450 | 50 | ● | ● | ● | ● | 7100.1175.95 |
| 10 | 250 | 4) | 75 | 1450 | 50 | ● | ● | ● | ● | 7100.1175.96 |

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

1) UL: 35 A @ 250 VAC/DC / 10 kA @ 125 VAC, p.f. = 0.7 - 0.8

2) UL: 63 A @ 250 VAC/DC / 10 kA @ 125 VAC, p.f. = 0.7 - 0.8

| Rated Current [A] | Rated Voltage [VAC] | Breaking Capacity | Voltage Drop 1.0 I _n typ. [mV] | Power Dissipation 1.25 I _n typ. [mW] | Melting I ² t 10.0 I _n typ. [A ² s] |  | S | L | T | Order Number |
|-------------------|---------------------|-------------------|-------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|---|---|--------------|
|-------------------|---------------------|-------------------|-------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|---|---|--------------|

3) UL: 63 A @ 250 VAC/DC

4) UL: 63 A @ 250 VAC

| Packaging Unit | | |
|---------------------------------|------------------------------|--|
| .xx = .13 / S = Short Terminals | Plastic Bag (100 pcs.) | |
| .xx = .13 / L = Long Terminals | Plastic Bag (100 pcs.) | |
| .xx = .95 / T = Reeled | Taped 36 cm Reel (500 pcs.) | |
| .xx = .96 / T = Reeled | Taped 36 cm Reel (1000 pcs.) | |