Surface Mount Fuse, 1.05 x 0.55 mm, Super-Quick-Acting FF, 32 VDC



UL 248-14 · 32 VDC · Super-Quick-Acting FF

See below:

Approvals and Compliances

Description

- UL characteristic
- Low melting I2t-values, fast interruption
- Marking optional
- Impermeable to potting compound

Unique Selling Proposition

- Space constrained applications

Applications

- Secondary Protection
- Circuits without inrush
- Semiconductor protection
- Digital Consumer Electronics

Weblinks

pdf data sheet, html datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product, Microsite

| Technical Data | |
|--------------------------|-------------------------------|
| Rated Voltage | 32VDC |
| Rated current | 0.25 - 5A |
| Breaking Capacity | 35 A |
| Characteristic | Super-Quick-Acting FF |
| Mounting | PCB,SMT |
| Admissible Ambient Temp. | -55 °C to 90 °C |
| Climatic Category | 55/125/21 acc. to IEC 60068-1 |
| Material: Housing | Thermoplastic |
| Material: Terminals | Gold-Plated Copper Alloy |
| Unit Weight | 0.004 g |
| Storage Conditions | 0°C to 60°C, max. 70% r.h. |
| Product Marking | see table of variants |
| | |

| Soldering Methods | Reflow |
|------------------------------|---|
| | Soldering Profile |
| Solderability | 245°C / 3 sec acc. to IEC 60068-2-58, |
| | Test Td |
| Resistance to Soldering Heat | 260 +0/-5 °C / 30 sec acc. to IPC/JE- |
| | DEC J-STD-020D, Level 1 |
| Moisture Sensitivity Level | MSL 1, J-STD-020 |
| Case Resistance | acc. to EIA/IS-722, Test 4.7 |
| | $>$ 100 M Ω (between leeds and body) |
| Flammability | min. UL 94V-1 |
| | (acc. to EIA/IS-722, Test 4.12) |
| Moisture Sensitivity Level | MIL-STD-202, Method 106 |
| | (50 cycles in a temp./mister chamber) |
| Resistance to Solvents | MIL-STD-202, Method 215 |
| Terminal Strength | MIL-STD-202, Method 211A |
| | (Deflection of board 1 mm for 1 minute) |
| | |

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: USF 0402

| Approval Logo | Certificates | Certification Body | Description |
|---------------|---------------|--------------------|----------------------------------|
| A | UL Approvals | UL | UR File Number: |
| (SP | CSA Approvals | CSA | CSA Certification Record: 248899 |

Product standards

Product standards that are referenced

| Organization | Design | Standard | Description |
|--------------|-----------------------|--------------------|---|
| (h) | Designed according to | UL 248-14 | Low voltage fuses - Part 14: Supplemental fuses |
| CSA Group | 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

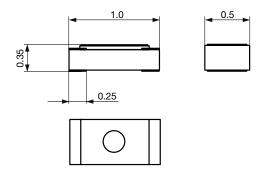
| Organization | Design | Standard | Description |
|--------------|--------------------------------|----------------|---|
| <u>IEC</u> | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |

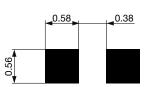
Compliances

The product complies with following Guide Lines

| Identification | Details | Initiator | Description |
|--------------------|--------------|-------------|---|
| RoHS | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
| Halogen Free #F | Halogen Free | SCHURTER AG | SCHURTER strives to offer our customers halogen free products. |
| REACH | 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. |

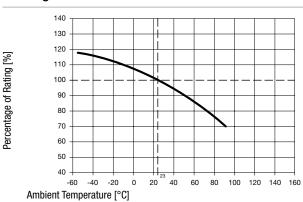
Dimension [mm]





Soldering pads

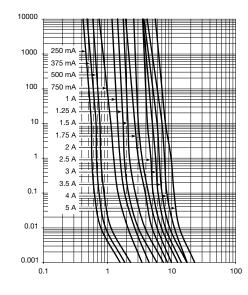
Derating Curves



Pre-Arcing Time

| Rated Current In | 1.0 x In min | 2.0 x In max | 3.0 x In max |
|------------------|--------------|--------------|--------------|
| 0.25 A | 4 h | - | 5 s |
| 0.375 A - 5 A | 4 h | 5 s | 0.2 s |

Time-Current-Curves



Current in Amperes

Variants

Time in Seconds

| Rated Cur- rent [A] | Rated Vol- tage [VDC] | Marking | Breaking Capacity | Power Dissipation 1.0 I _n typ. [mW] | Voltage Drop 1.0 I _n typ. [mV] | Cold Resistance typ. [mΩ] | Melting I ² t at 1 ms typ. [A ² s] | FU | Order Number |
|------------------------|--------------------------|---------|----------------------|--|---|---------------------------|---|-----------|--------------|
| 0.25 | 32 | X | 1) | 23 | 92 | 360 | 0.0025 | • • | 3414.0111.26 |
| 0.375 | 32 | | 1) | 32 | 85 | 193 | 0.0035 | • • | 3414.0112.26 |
| 0.5 | 32 | | 1) | 47 | 93 | 160 | 0.0053 | • • | 3414.0113.26 |
| 0.75 | 32 | | 1) | 76 | 102 | 105 | 0.012 | • • | 3414.0114.26 |
| 1 | 32 | | 1) | 87 | 88 | 73 | 0.02 | • • | 3414.0115.26 |
| 1.25 | 32 | | 1) | 120 | 96 | 60 | 0.035 | • • | 3414.0116.26 |
| 1.5 | 32 | | 1) | 130 | 87 | 47 | 0.056 | • • | 3414.0117.26 |
| 1.75 | 32 | | 1) | 142 | 81 | 39 | 0.075 | • • | 3414.0118.26 |
| 2 | 32 | | 1) | 141 | 71 | 30 | 0.1 | • • | 3414.0119.26 |
| 2.5 | 32 | | 1) | 138 | 55 | 20 | 0.156 | • • | 3414.0120.26 |
| 3 | 32 | | 1) | 187 | 61 | 17 | 0.2032 | • • | 3414.0121.26 |
| 3.5 | 32 | | 1) | 202 | 58 | 15 | 0.3017 | • • | 3414.0122.26 |
| 4 | 32 | | 1) | 228 | 57 | 10.5 | 0.3084 | • • | 3414.0123.26 |
| 5 | 32 | | 1) | 262 | 52 | 8.5 | 0.531 | • • | 3414.0124.26 |

1) 35 A @ 32 VDC

Availability for all products can be searched real-time: https://www.schurter.com/en/info-center/support-tools/stock-check-distributors

Packaging Unit acc. IEC 60286-3 Type 1b

.xx = .26

10000 pcs. in tape [W: 8mm and P1: 2mm] on reel [A: 18cm]