# UST 1206

SMD Fuse, 3.2 x 1.6 mm, Time-Lag T, 32 VAC, 63 VDC

Exemplary part photo depending on part no.

UL 248-14 · 32 VAC · 63 VDC · Time-Lag T

See below:
**Approvals and Compliances**

## Description

- UL characteristic
- High melting I²t-values
- High current ratings up to 25 A
- Impermeable to potting compound

## Applications

- Secondary Protection DC and AC
- Circuits with inrush
- LCD Backlight DC-AC Inverter

## References

## Weblinks

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

## Technical Data

| | |
|---|---|
| Rated Voltage | 32 VAC, 63 VDC |
| Rated current | 7 - 25 A |
| Breaking Capacity | 100 A - 750 A |
| Characteristic | Time-Lag T |
| Mounting | PCB,SMT |
| Admissible Ambient Air Temp. | -55 °C to 90 °C |
| Climatic Category | 55/090/21 acc. to IEC 60068-1 |
| Material: Housing | Fiber-reinforced plastic, UL 94V-0 |
| Material: Terminals | Copper, Ni/Au-plated |
| Unit Weight | 0.006 g |
| Storage Conditions | 0 °C to 60 °C, max. 70% r.h. |
| Product Marking | Letter (see variants) |

| | |
|---|---|
| Soldering Methods | Reflow<br>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/JEDEC J-STD-020D, Level 1 |
| Moisture Sensitivity Level | MSL 1, J-STD-020 |
| Case Resistance | acc. to EIA/IS-722, Test 4.7 |
| Flammability | UL 94V-1 |
| Damp heat, steady state | MIL-STD-202, Method 103 |
| Moisture Resistance Test | MIL-STD-202, Method 106 |
| Thermal Shock | MIL-STD-202, Method 107 |
| Operational Life | MIL-STD-202, Method 108 Condition D |
| Vibration, High Frequency | MIL-STD-202, Method 204 Condition D |
| Mechanical Shock | MIL-STD-202, Method 213 Condition F |
| Resistance to Solvents | MIL-STD-202, Method 215 |
| Temperature Cycling | JESD22, Method JA-104 Condition G |
| Board Flex | AEC-Q200-005 |
| Terminal Strength | AEC-Q200-006 |

## 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: UST 1206

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

## Product standards

Product standards that are referenced

| Organization | Design | Standard | Description |
|---|---|---|---|
| | Designed according to | UL 248-14 | Low voltage fuses - Part 14: Supplemental 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 |
|---|---|---|---|
| | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |

## Compliances

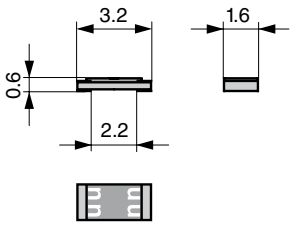
The product complies with following Guide Lines

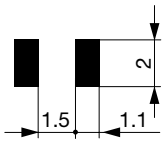
| Identification | Details | Initiator | Description |
|---|---|---|---|
| | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
| | UKCA declaration of conformity | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008. |
| | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
| | 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]

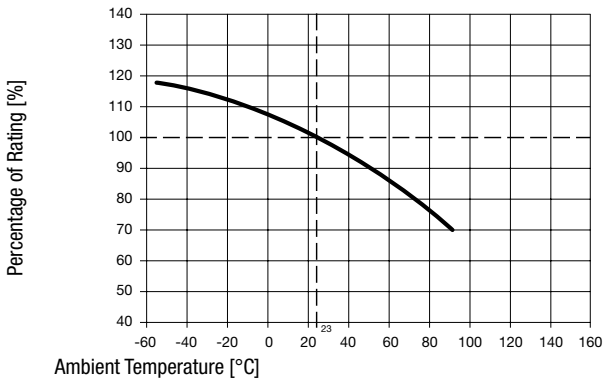
3.2 mm

Reflow soldering pads



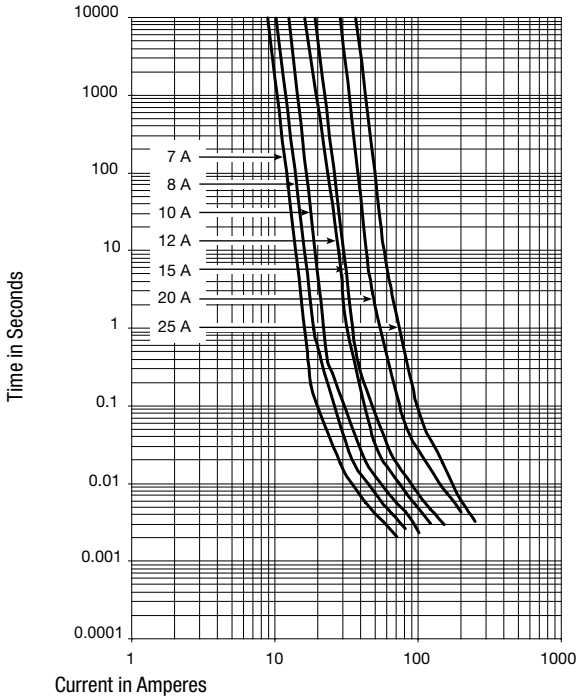

## Derating Curves



## Pre-Arcing Time

| Rated Current In | 1.0 x In min. | 2.5 x In max. | 10.0 x In min. | 10.0 x In max. |
|---|---|---|---|---|
| 7 A - 25 A | 4 h | 5 s | 1 ms | 10 ms |

## Time-Current-Curves




## All Variants

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Marking | Breaking Capacity | Voltage Drop 1.0 $I_n$ typ. [mV] | Cold Resistance typ. [mΩ] | Melting $I^2t$ 8.0 $I_n$ typ. [$A^2s$] | cULus | Order Number | |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 32 | 63 | mm | 1) | 73 | 8.7 | 8.7 | ● | 3413.0326.11 | ▮ |
| 7 | 32 | 63 | mm | 1) | 73 | 8.7 | 8.7 | ● | 3413.0326.22 | |
| 7 | 32 | 63 | mm | 1) | 73 | 8.7 | 8.7 | ● | 3413.0326.24 | ▮ |
| 7 | 32 | 63 | mm | 1) | 73 | 8.7 | 8.7 | ● | 3413.0326.26 | |
| 8 | 32 | 63 | nn | 1) | 60 | 6.7 | 14 | ● | 3413.0327.11 | ▮ |
| 8 | 32 | 63 | nn | 1) | 60 | 6.7 | 14 | ● | 3413.0327.22 | |
| 8 | 32 | 63 | nn | 1) | 60 | 6.7 | 14 | ● | 3413.0327.24 | ▮ |
| 8 | 32 | 63 | nn | 1) | 60 | 6.7 | 14 | ● | 3413.0327.26 | |
| 10 | 32 | 63 | oo | 1) | 69 | 5.5 | 21 | ● | 3413.0328.11 | ▮ |
| 10 | 32 | 63 | oo | 1) | 69 | 5.5 | 21 | ● | 3413.0328.22 | |
| 10 | 32 | 63 | oo | 1) | 69 | 5.5 | 21 | ● | 3413.0328.24 | ▮ |
| 10 | 32 | 63 | oo | 1) | 69 | 5.5 | 21 | ● | 3413.0328.26 | |
| 12 | 32 | 63 | pp | 1) | 63 | 3.9 | 33 | ● | 3413.0329.11 | ▮ |
| 12 | 32 | 63 | pp | 1) | 63 | 3.9 | 33 | ● | 3413.0329.22 | |
| 12 | 32 | 63 | pp | 1) | 63 | 3.9 | 33 | ● | 3413.0329.24 | ▮ |
| 12 | 32 | 63 | pp | 1) | 63 | 3.9 | 33 | ● | 3413.0329.26 | |
| 15 | 32 | 63 | qq | 1) | 57 | 3.5 | 65 | ● | 3413.0330.11 | |
| 15 | 32 | 63 | qq | 1) | 57 | 3.5 | 65 | ● | 3413.0330.22 | |
| 15 | 32 | 63 | qq | 1) | 57 | 3.5 | 65 | ● | 3413.0330.24 | ▮ |
| 15 | 32 | 63 | qq | 1) | 57 | 3.5 | 65 | ● | 3413.0330.26 | |
| 20 | 32 | 63 | rr | 1) | 53 | 2.7 | 110 | ● | 3413.0331.11 | |
| 20 | 32 | 63 | rr | 1) | 53 | 2.7 | 110 | ● | 3413.0331.22 | |
| 20 | 32 | 63 | rr | 1) | 53 | 2.7 | 110 | ● | 3413.0331.24 | ▮ |

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Marking | Breaking Capacity | Voltage Drop 1.0 $I_n$ typ. [mV] | Cold Resistance typ. [mΩ] | Melting $I^2t$ 8.0 $I_n$ typ. [$A^2s$] | cULus | Order Number |
|---|---|---|---|---|---|---|---|---|---|
| 20 | 32 | 63 | rr | 1) | 53 | 2.7 | 110 | ● | 3413.0331.26 |
| 25 | 32 | 63 | ss | 1) | 48 | 2.1 | 220 | ● | 3413.0332.11 |
| 25 | 32 | 63 | ss | 1) | 48 | 2.1 | 220 | ● | 3413.0332.22 |
| 25 | 32 | 63 | ss | 1) | 48 | 2.1 | 220 | ● | 3413.0332.24 |
| 25 | 32 | 63 | ss | 1) | 48 | 2.1 | 220 | ● | 3413.0332.26 |

Most Popular.

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

1) UL: 100 A @ 63 VDC tau <1ms; 400 A @ 42 VDC tau <0.1ms; 750 A @ 32 VDC tau <0.1ms; 100 A @ 32 VAC cos φ ≥ 0.99; 150 A @ 24 VAC cos φ ≥ 0.99

1) Additional internal testing: 400 A @ 12 VDC; 600 A @ 9 VDC

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All measurements are carried out on a test board according to IEC 60127-4 with the following tracks:

7 to 10 A: Track width 7.5 mm, Cu layer 70 µm

12 to15 A: Track width 7.5 mm, Cu layer 140 µm

20 to 25 A: Track width 7.5 mm, Cu layer 240 µm

**Packaging Unit**
acc. IEC 60286-3 Type 2a

| | |
|---|---|
| .xx = .11 | 100 pcs. in tape in ESD-plastic bag |
| .xx = .22 | 1000 pcs. in tape [W: 8mm and P1: 4mm] on reel [A: 18cm] |
| .xx = .24 | 5000 pcs. in tape [W: 8mm and P1: 4mm] on reel [A: 33cm] |
| .xx = .26 | 15000 pcs. in tape [W: 8mm and P1: 4mm] on reel [A: 33cm] |

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