

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 35 A
- Impermeable to potting compound

Applications

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

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 - 35 A
Breaking Capacity	100 A - 800 A
Characteristic	Time-Lag T
Mounting	PCB, SMT
Admissible Ambient 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 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 Sensitivity Level	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
	TUEV Approvals	TUEV	Technischer Überwachungsverein
	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

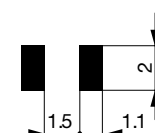
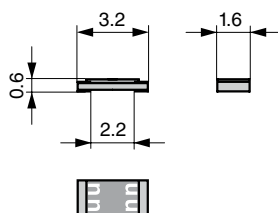
The product complies with following Guide Lines

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]

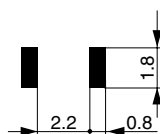
 3.2 mm

Reflow soldering pads



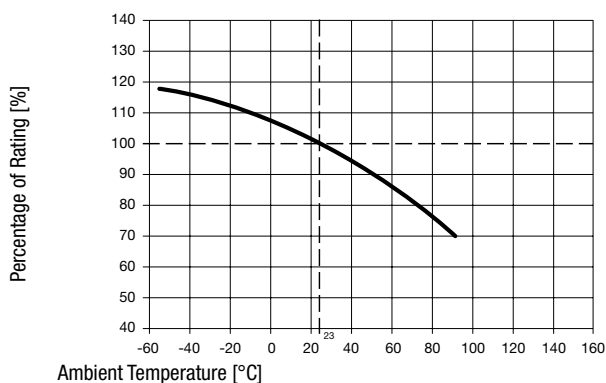
UST 1206 ≤ 25 A

Reflow soldering pads



UST 1206 > 25 A

Derating Curves

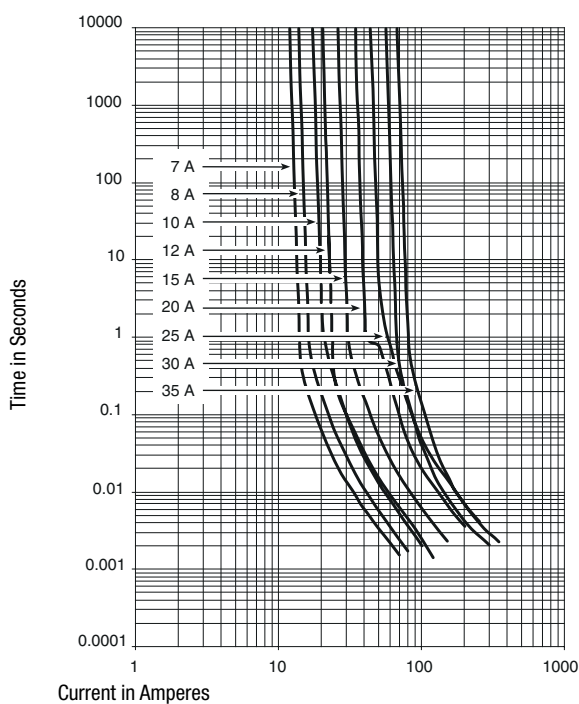


Pre-Arcing Time

Rated Current I_n 1.0 x I_n min. 2.5 x I_n max. 10.0 x I_n min. 10.0 x I_n max.

7 A - 35 A	4 h	5 s	1 ms	10 ms
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Time-Current-Curves



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. [A²s]		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

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 ² t 8.0 I _n typ. [A²s]	 	Order Number
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
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
30	-	63	tt	2)	59	1.3	173	● ●	3413.0333.11
30	-	63	tt	2)	59	1.3	173	● ●	3413.0333.22
30	-	63	tt	2)	59	1.3	173	● ●	3413.0333.24
30	-	63	tt	2)	59	1.3	173	● ●	3413.0333.26
35	-	63	xx	2)	59	1	267	●	3413.0334.11
35	-	63	xx	2)	59	1	267	●	3413.0334.22
35	-	63	xx	2)	59	1	267	●	3413.0334.24
35	-	63	xx	2)	59	1	267	●	3413.0334.26

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

- 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

- 2) UL: 100 A @ 63 VDC tau <1ms
400 A @ 42 VDC tau <0.1ms
800 A @ 32 VDC tau <0.1ms

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 to 15 A: Track width 7.5 mm, Cu layer 140 μm
20 to 25 A: Track width 7.5 mm, Cu layer 240 μm
30 to 35 A: Track width 20 mm, Cu layer 210 μm

Packaging Unit	.xx = .11	100 pcs. in tape in ESD-plastic bag
acc. IEC 60286-3 Type 2a	.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]