

Surface Mount Fuse, 5.3 x 16 mm, Time-Lag T, 277 VAC / 250 VDC, Breaking Capacity 1500 A



SMD fuse UMT-H

UL 248-14 · 277 VAC · 250 VDC · Time-Lag T

See below:

[Approvals and Compliances](#)

Description

- 24 rated currents from 160 mA to 30 A
- Square design: 5.3 x 16
- Impermeable to potting compound used to achieve hermetic seal for use in intrinsically safe applications according to ATEX and IECEx requirements.

Unique Selling Proposition

- High breaking capacity up to 1500 A
- High rated voltages up to 277 VAC / 250 VDC
- Compact design
- Suitable for pulse-shaped continuous currents

Applications

- Primary protection on SMD PCBs
- Sensors
- Power supplies
- Intrinsically Safe
- Illumination
- Battery protection

References

[Packaging Details](#)

Fuse Kit [Fuse Kit UMT-H](#)

Weblinks

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

[Application Note Primary Protection in Equipment](#) with further information on increased [Pulse Strength](#) and their test conditions according to international standards see [Impulse Withstand Voltage](#)

Technical Data

Rated Voltage	250 - 277 VAC, 72 - 250 VDC
Rated current	0.16 - 30 A
Breaking Capacity	100 - 1500 A
Characteristic	Time-Lag T
Mounting	PCB, SMT
Admissible Ambient Air Temp.	-55 °C to 125 °C
Climatic Category	55/125/21 acc. to IEC 60068-1
Material: Housing	Ceramics
Material: Terminals	Ni/Sn-Plated Copper Alloy
Unit Weight	1.42 g
Storage Conditions	0 °C to 40 °C, max. 70% r.h.
Product Marking	 Rated current, Voltage, Characteristic, Breaking Capacity, Approvals

Soldering Methods	Reflow Soldering Profile
Solderability	245 °C / 3 sec acc. to IEC 60068-2-58
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-58
Moisture Sensitivity Level	MSL 1, J-STD-020
Moisture Resistance Test	MIL-STD-202, Method 106 (acc. to EIA/IS-722, Test 4.4.3)
Operational Life	1000h @ 0.60 x I _n @ 70 °C (acc. to EIA/IS-722, Test 4.4.1)
Mechanical Shock	MIL-STD-202, Method 213 Condition A
Resistance to Solvents	MIL-STD-202, Method 215 (EIA-722, 4.11)
Terminal Strength	(Deflection of board 1 mm for 1 minute) (acc. to EIA/IS-722, Test 4.5.5)

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: UMT-H

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	VDE Certificate Number: 40039476
	UL Approvals	UL	UL File Number: E41599

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	IEC 60127-7	Miniature fuses - Part 7: Miniature fuse-links for special applications
	Designed according to	UL 248-14	Low voltage fuses - Part 14: Additional fuses

Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 62368-1	IEC 62368-1 includes the basic requirements for safety of audio, video, information technology and office equipment.

Compliances

The product complies with following Guide Lines

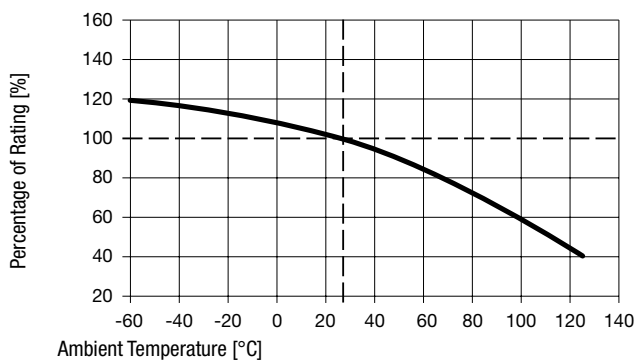
Identification	Details	Initiator	Description
	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
	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.
	Halogen Free	SCHURTER AG	SCHURTER strives to offer our customers halogen free products.
	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.
	Automotive	SCHURTER AG	AEC-Q200 is a test standard for passive components used in automotive applications. SCHURTER tests components according to the customer's agreement and is certified according to IATF 16949.

Dimension [mm]



Soldering pads

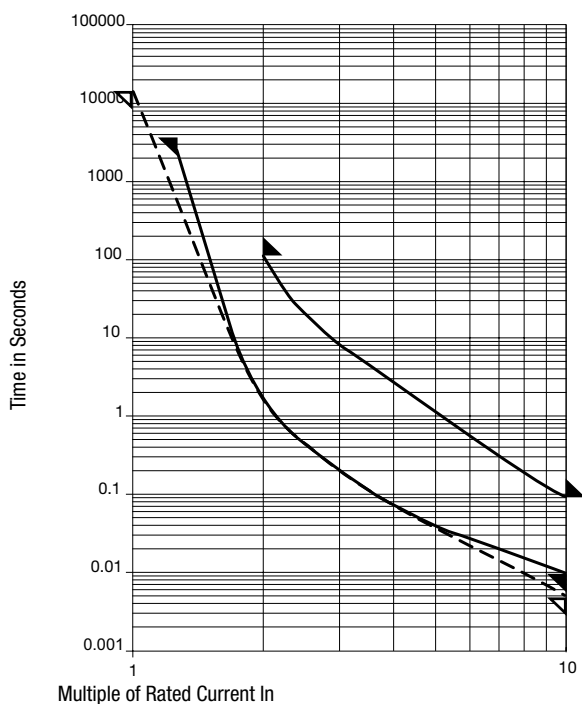
Derating Curves



Pre-Arcing Time

Rated Current I_n	1.0 x I_n min.	1.25 x I_n min.	2.0 x I_n max.	2.5 x I_n max.	10.0 x I_n min.	10.0 x I_n max.
0.160 A - 12.5 A	-	60 min	120 s	-	10 ms	100 ms
16 A	4 h	-	120 s	-	10 ms	100 ms
20 A - 30 A	4 h	-	-	120 s	5 ms	100 ms

Time-Current-Curves



All Variants

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 I_n typ. [mV]	Power Dissipation 1.25 I_n typ. [mW]	Melting I^2t 10.0 I_n typ. [A²s]		Order Number
0.16	277	250	1)	1520	410	0.045	● ●	3403.0266.11
0.16	277	250	1)	1520	410	0.045	● ●	3403.0266.23
0.2	277	250	1)	1230	415	0.095	● ●	3403.0267.11
0.2	277	250	1)	1230	415	0.095	● ●	3403.0267.23
0.25	277	250	1)	1000	425	0.17	● ●	3403.0268.11
0.25	277	250	1)	1000	425	0.17	● ●	3403.0268.23

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	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]		Order Number
0.315	277	250	1)	805	435	0.265	● ●	3403.0269.11
0.315	277	250	1)	805	435	0.265	● ●	3403.0269.23
0.4	277	250	1)	715	490	0.33	● ●	3403.0270.11
0.4	277	250	1)	715	490	0.33	● ●	3403.0270.23
0.5	277	250	1)	650	590	0.45	● ●	3403.0271.11
0.5	277	250	1)	650	590	0.45	● ●	3403.0271.23
0.63	277	250	1)	540	595	1.1	● ●	3403.0272.11
0.63	277	250	1)	540	595	1.1	● ●	3403.0272.23
0.8	277	250	1)	460	635	2.1	● ●	3403.0273.11
0.8	277	250	1)	460	635	2.1	● ●	3403.0273.23
1	277	250	1)	405	710	3.44	● ●	3403.0274.11
1	277	250	1)	405	710	3.44	● ●	3403.0274.23
1.25	277	250	1)	325	750	3.12	● ●	3403.0275.11
1.25	277	250	1)	325	750	3.12	● ●	3403.0275.23
1.6	277	250	1)	270	785	5.4	● ●	3403.0276.11
1.6	277	250	1)	270	785	5.4	● ●	3403.0276.23
2	277	250	1)	220	795	11.8	● ●	3403.0277.11
2	277	250	1)	220	795	11.8	● ●	3403.0277.23
2.5	277	125	2)	210	980	21	● ●	3403.0278.11
2.5	277	125	2)	210	980	21	● ●	3403.0278.23
3.15	277	125	2)	190	1060	43	● ●	3403.0279.11
3.15	277	125	2)	190	1060	43	● ●	3403.0279.23
4	277	125	2)	140	1070	48	● ●	3403.0280.11
4	277	125	2)	140	1070	48	● ●	3403.0280.23
5	277	125	2)	115	1080	99	● ●	3403.0281.11
5	277	125	2)	115	1080	99	● ●	3403.0281.23
6.3	277	125	2)	100	1160	165	● ●	3403.0282.11
6.3	277	125	2)	100	1160	165	● ●	3403.0282.23
8	250	125	3)	75	1220	125	● ●	3403.0283.11
8	250	125	3)	75	1220	125	● ●	3403.0283.23
10	250	125	3)	73	1320	198	● ●	3403.0284.11
10	250	125	3)	73	1320	198	● ●	3403.0284.23
12.5	250	125	4)	63	1395	344	● ●	3403.0285.11
12.5	250	125	4)	63	1395	344	● ●	3403.0285.11
16	250	125	5)	62	1050	640	● ●	3403.0286.11
16	250	125	5)	62	1050	640	● ●	3403.0286.23
20	250	72	6)	76	1565	445	●	3403.0287.11
20	250	72	6)	76	1656	445	●	3403.0287.23
25	250	72	6)	64	1650	1170	●	3403.0288.11
25	250	72	6)	64	1650	1170	●	3403.0288.23
30	250	72	6)	63	2020	1650	●	3403.0289.11
30	250	72	6)	63	2020	1650	●	3403.0289.23

Most Popular:

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

- 1) UL = 1500 A @ 277 VAC, resistive / 1500 A @ 250 VDC
- 1) IEC = 1500 A @ 250 VAC, resistive / 1500 A @ 250 VDC
- 2) UL = 1500 A @ 277 VAC, resistive / 1500 A @ 125 VDC
- 2) IEC = 1500 A @ 250 VAC, resistive / 1500 A @ 125 VDC
- 3) UL = 1500 A @ 250 VAC, resistive / 1500 A @ 125 VDC
- 3) IEC = 1500 A @ 250 VAC, resistive / 1500 A @ 125 VDC
- 4) UL = 1000 A @ 250 VAC, resistive / 1000 A @ 125 VDC

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	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]		Order Number
4) IEC = 1000 A @ 250 VAC, resistive / 1000 A @ 125 VDC								
5) UL = 500 A @ 250 VAC, resistive / 500 A @ 125 VDC								
5) IEC = 500 A @ 250 VAC, resistive / 500 A @ 125 VDC								
6) UL = 100 A @ 250 VAC, resistive / 500 A @ 125 VAC, resistive / 500 A @ 72 VDC								
Packaging Unit			.xx = .11	Plastic Bag (100 pcs.)				
			.xx = .23	Blister Tape 33 cm Reel (1500 pcs.)				