



# UMT-H

SMD fuse with high breaking capacity



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## SMD fuse with high breaking capacity



- > High voltage ratings up to 277 VAC / 250 VDC
- > 19 rated currents from 160 mA to 10 A
- > High breaking capacity of 1500 A
- > Safe interruption at line voltage
- > Smaller alternative to cylindrical 5 x 20 mm fuses
- > Applications in explosive environments (IEC60079-11)



- |                        |                                |
|------------------------|--------------------------------|
| > Rated current range: | 0.16 - 10 A                    |
| > Rated voltage:       | 250 - 277 VAC<br>125 - 250 VDC |
| > Breaking capacity:   | 1500 A                         |
| > Characteristic:      | Time-Lag T                     |

### > Standards, approvals

- > IEC 60127-7
- > UL 248-14
- > CSA C22.2



## Market Position

### Strategic Positioning

- > Square SMD fuse with 1500 A breaking capacity for primary protection at line voltage as an alternative to cylindrical 5x20 mm fuses

### Competitors

- > SIBA: Type 160016
- > SOC: 36CT

### Price Position

- > Competitor level
- > Attractive prices for high volumes

### Applications

- > Primary protection on SMD PCBs
- > Industrial electronics
- > Sensors
- > Power supplies
- > Equipment subjected to explosion proof testing
- > Lighting and other appliances connected to single phase 277 VAC in US market

### USP (Customer focus)

- > Low voltage drop
- > Fuse cap distance > 10 mm, ability to be potted and breaking capacity of 1500 A according to IEC 60079-11 (explosion protection)

## Cross Reference List - features

	SCHURTER	SIBA	SOC	SCHURTER	SIBA
	Switzerland	Germany	Japan	Switzerland	Germany
	<a href="http://www.schurter.com">www.schurter.com</a>	<a href="http://www.siba-fuses.com">www.siba-fuses.com</a>	<a href="http://www.socfuse.com">www.socfuse.com</a>	<a href="http://www.schurter.com">www.schurter.com</a>	<a href="http://www.siba-fuses.com">www.siba-fuses.com</a>
	<b>UMT-H</b>	<b>160016</b>	<b>36CT</b>	<b>SMD-SPT</b>	<b>179200 SMD</b>
Fuse design	UL 248-14, CSA C22.2 no. 248.14	IEC 60127-4/2, UL 248-14	UL 248-14, CSA C22.2 no. 248.14 IEC 60127-4 J60127-4	UL 248-14, CSA C22.2 no. 248.15 IEC 60127-2/5	IEC 60127-2/5
Time-current characteristic	time-lag T	time-lag T	time-lag T	time-lag T	time-lag T
Rated current range	0.16 - 10 A	0.05 - 10 A	0.1 - 6.3 A	1 - 16 A	1 - 6.3 A
Rated AC voltage	277 VAC	250 - 305 VAC	250 VAC	250 VAC	250 VAC
Rated DC voltage	125 - 250 VDC	250 VDC	300 VDC	125 - 300 VDC	n/a
Breaking capacity @ rated voltage	1500 A	1500 A	200 - 1500 A	500 - 1500 A	1500 A
Voltage drop typ.	220 mV (2 A)	280 mV (2 A)	n/a	120 mV (2 A)	130 mV (2 A)
Pre-arcing I <sup>2</sup> t typ.	11.8 A <sup>2</sup> s (2 A)	13 A <sup>2</sup> s (2 A)	n/a	9.2 A <sup>2</sup> s (2 A)	5.2 A <sup>2</sup> s (2 A)
Characteristic [% In]	125%: >1 h 200%: <120 s 1000%: >10 ms, <100 ms	125%: >1 h 200%: <120 s 1000%: >10 ms, <100 ms	125%: >1 h 200%: <120 s 1000%: >10 ms, <100 ms	150%: >15-30-60 min 210%: <30 min 275%: >750 ms, <80 s 400%: >95-150 ms, <5 s 1000%: 10-20 ms, <150 ms	150%: >60 min 210%: <30 min 275%: >750 ms, <80 s 400%: >95-150 ms, <5 s 1000%: >10 ms, <150 ms
Operating temperature	-55 to +125 °C	-55 to +125 °C	n/a	-55 to +125 °C	n/a
Marking rated current	yes	yes	yes	yes (on fuse cap)	n/a
Mounting	PCB, SMT	PCB, SMT	PCB, SMT	PCB, SMT	PCB, SMT
Design	square	square	square	cylindrical	cylindrical
Dimension [mm]	■ 5.3 x 16	■ 4.5 x 16	■ 3.6 x 17	● 5 x 20	● 5 x 20
Fuse cap distance [mm]	> 10	≥ 9.75	10	10 <sup>+/-0.2</sup>	n/a
Approvals					
Packing unit [pcs]	100 / 1500	100 / 1500	100 / 2000	100 / 1000	2000

## Cross Reference List – order numbers

	<b>SCHURTER</b>	<b>SIBA</b>	<b>SOC</b>	<b>SCHURTER</b>	<b>SIBA</b>
	Switzerland	Germany	Japan	Switzerland	Germany
	<a href="http://www.schurter.com">www.schurter.com</a>	<a href="http://www.siba-fuses.com">www.siba-fuses.com</a>	<a href="http://www.socfuse.com">www.socfuse.com</a>	<a href="http://www.schurter.com">www.schurter.com</a>	<a href="http://www.siba-fuses.com">www.siba-fuses.com</a>
Rated Current	<b>UMT-H</b>	<b>160016</b>	<b>36CT</b>	<b>SMD-SPT</b>	<b>179200 SMD</b>
32 mA	3403.0260	n/a	n/a	n/a	n/a
50 mA	3403.0261	160016.0,05	n/a	n/a	n/a
63 mA	3403.0262	n/a	n/a	n/a	n/a
80 mA	3403.0263	160016.0,08	n/a	n/a	n/a
100 mA	3403.0264	160016.0,1	36CT-0100	n/a	n/a
125 mA	3403.0265	160016.0,125	36CT-0125	n/a	n/a
160 mA	3403.0266	160016.0,16	36CT-0160	n/a	n/a
200 mA	3403.0267	160016.0,2	36CT-0200	n/a	n/a
250 mA	3403.0268	160016.0,25	36CT-0250	n/a	n/a
315 mA	3403.0269	160016.0,315	36CT-0315	n/a	n/a
400 mA	3403.0270	160016.0,4	36CT-0400	n/a	n/a
500 mA	3403.0271	160016.0,5	36CT-0500	n/a	n/a
630 mA	3403.0272	160016.0,63	36CT-0630	n/a	n/a
800 mA	3403.0273	160016.0,8	36CT-0800	n/a	n/a
1 A	3403.0274	160016.1	36CT-1000	0001.2704	179200.1SMD
1.25 A	3403.0275	160016.1,25	36CT-1250	0001.2705	179200.1,25
1.6 A	3403.0276	160016.1,6	36CT-1600	0001.2706	179200.1,6SMD
2 A	3403.0277	160016.2	36CT-2000	0001.2707	179200.2SMD
2.5 A	3403.0278	160016.2,5	36CT-2500	0001.2708	179200.2,5SMD
3.15 A	3403.0279	160016.3,15	36CT-3150	0001.2709	179200.3,15SMD
4 A	3403.0280	160016.4	36CT-4000	0001.2710	179200.4SMD
5 A	3403.0281	160016.5	36CT-5000	0001.2711	179200.5SMD
6.3 A	3403.0282	160016.6,3	36CT-6300	0001.2712	179200.6,3SMD
8 A	3403.0283	160016.8	n/a	0001.2713	n/a
10 A	3403.0284	160016.10	n/a	0001.2714	n/a
12.5 A	n/a	n/a	n/a	0001.2715	n/a
16 A	n/a	n/a	n/a	0001.2716	n/a

variants in grey will follow

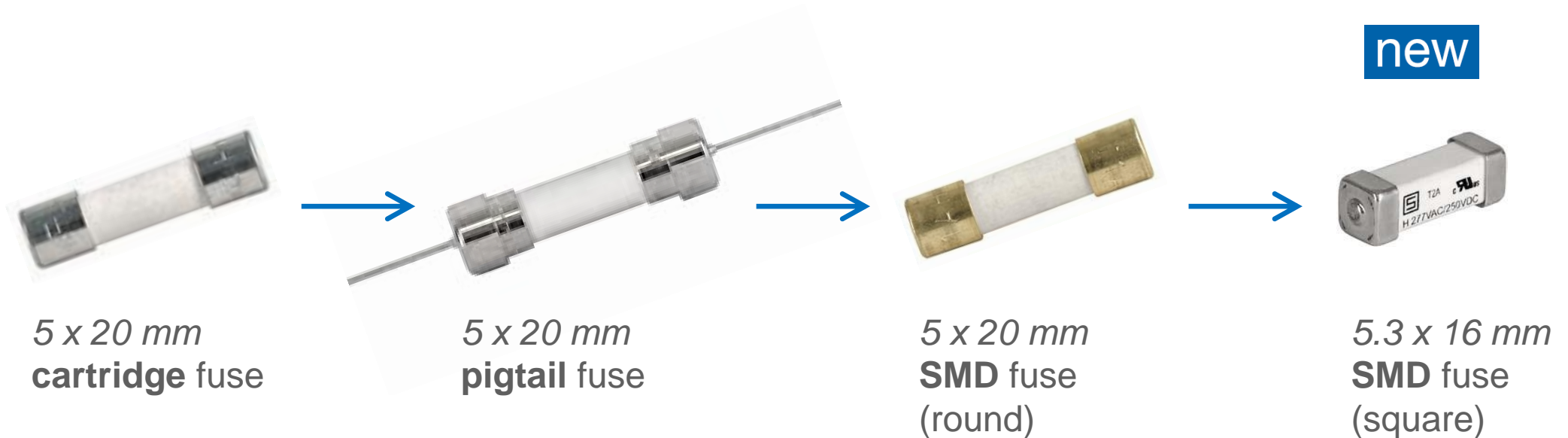
## Cross Reference List – cartridge and pigtail fuses

The UMT-H is also an alternative to the following cartridge and pigtail fuses:

Company	SCHURTER	Bussamnn	Conquer	Littelfuse	Bel Fuse
Type	<b>SPT 5x20</b>	<b>S505</b>	<b>UDA</b>	<b>215 series</b>	<b>5HT / 5HTP</b>
Description	<i>cartridge &amp; pigtail variant</i>	<i>cartridge &amp; pigtail variant</i>	<i>cartridge &amp; pigtail variant</i>	<i>cartridge &amp; pigtail variant</i>	<i>cartridge &amp; pigtail variant</i>



## Evolution of fuses for equipment with high breaking capacity (1500 A)



## Detailed Information

- > Data Sheet ( [htm](#) / [pdf](#) )
- > Microsite [umt-h.schurter.com](http://umt-h.schurter.com)

### All Variants

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 I <sub>n</sub> typ. [mV]	Power Dissipation 1.25 I <sub>n</sub> typ. [mW]	Melting I <sup>2</sup> t 10.0 Intyp. [A <sup>2</sup> s]		Order Number
0.16	277	250	1)	1520	410	0.045	● ●	3403.0266.xx
0.2	277	250	1)	1230	415	0.095	● ●	3403.0267.xx
0.25	277	250	1)	1000	425	0.17	● ●	3403.0268.xx
0.315	277	250	1)	805	435	0.265	● ●	3403.0269.xx
0.4	277	250	1)	715	490	0.33	● ●	3403.0270.xx
0.5	277	250	1)	650	590	0.45	● ●	3403.0271.xx
0.63	277	250	1)	540	595	1.1	● ●	3403.0272.xx
0.8	277	250	1)	460	635	2.1	● ●	3403.0273.xx
1	277	250	1)	405	710	3.44	● ●	3403.0274.xx
1.25	277	250	1)	325	750	3.12	● ●	3403.0275.xx
1.6	277	250	1)	270	785	5.4	● ●	3403.0276.xx
2	277	250	1)	220	795	11.8	● ●	3403.0277.xx
2.5	277	125	2)	210	980	21	● ●	3403.0278.xx
3.15	277	125	2)	190	1060	43	● ●	3403.0279.xx
4	277	125	2)	140	1070	48	● ●	3403.0280.xx
5	277	125	2)	115	1080	99	● ●	3403.0281.xx
6.3	277	125	2)	100	1160	165	● ●	3403.0282.xx
8	250	125	3)	75	1220	125	● ●	3403.0283.xx
10	250	125	3)	73	1320	198	● ●	3403.0284.xx

Most Popular.

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

- 1) 1500 A @ 277 VAC, resistive / 1500 A @ 250 VDC
- 2) 1500 A @ 277 VAC, resistive / 1500 A @ 125 VDC
- 3) 1500 A @ 250 VAC, resistive / 1500 A @ 125 VDC

### Packaging Unit

.xx = .11 Plastic Bag (100 pcs)  
 .xx = .23 Blister Tape 33 cm Reel (1500 pcs)