UMT 250

Surface Mount Fuse, 3 x 10.1 mm, Time-Lag T, 250 VAC, 125 VDC

IEC 60127-4 · 250 VAC · 125 VDC · Time-Lag T

Description
- High current range from 80 mA to 10 A
- High breaking capacity of 200 A @ 250 VAC (IEC)
- UL approval for 277 VAC and 250 VDC

Unique Selling Proposition
- Compact design
- Maximum breaking capacity at minimal footprint
- Suitable for pulse-shaped continuous currents

Standards
- IEC 60127-4/2
- UL 248-14
- CSA C22.2 no. 248.14
- Qualification according to AEC-Q200 on request

Approvals
- Approval Reference Type: UMT 250
- VDE Certificate Number: 40013121
- UL File Number: E41599

Applications
- Primary protection on SMD PCBs
- Medical equipment
- Battery protection

References
Packaging Details
Fuse Kit Fuse Kit UMT 250 / UMZ 250

Weblinks
pdf datasheet, html-datasheet, General Product Information, Packaging details, Approvals, CE declaration of conformity, RoHS, CHINA-RoHS, REACH, Distributor-Stock-Check, Detailed request for product, Microsite

Application Note Primary Protection in Equipmentwith further information on increased Pulse Strength and their test conditions according to international standards see Impulse Withstand Voltage

Technical Data

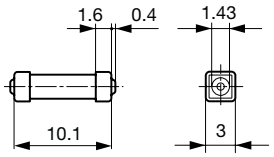
Rated Voltage	250 VAC, 125 VDC
Rated current	0.08 - 10 A
Breaking Capacity	35 A - 200 A
Characteristic	Time-Lag T
Mounting	PCB,SMT
Admissible Ambient Air Temp.	-55 °C to 125 °C
Climatic Category	55/125/21 acc. to IEC 60068-1
Material: Housing	Ceramic
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight	0.23 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Ⓜ, Rated current, Voltage, Characteristic, Breaking Capacity

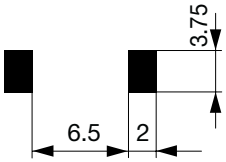
Soldering Methods	Reflow, Wave Soldering Profile
Solderability	245 °C / 3 sec acc. to IEC 60068-2-58, Test Td
Resistance to Soldering Heat	260 °C / 40 sec acc. to IPC/JEDEC J-STD-020D, 1 cycle
Life Test	MIL-STD-202, Method 108A (1000h @ 0.42*In @ 70°C)
Moisture Resistance Test	MIL-STD-202, Method 106E (50 cycles in a temp./mister chamber)
Terminal Strength	MIL-STD-202, Method 211A (Deflection of board 1 mm for 1 minute)
Mechanical Shock	MIL-STD-202, Method 213B (Shock 50g, half sine wave, 11 ms)
Resistance to Solvents	MIL-STD-202, Method 215A
Flammability	min. UL 94V-1 (acc. to EIA/IS-722, Test 4.12)

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in General Product Information

Dimension [mm]

10.1 mm



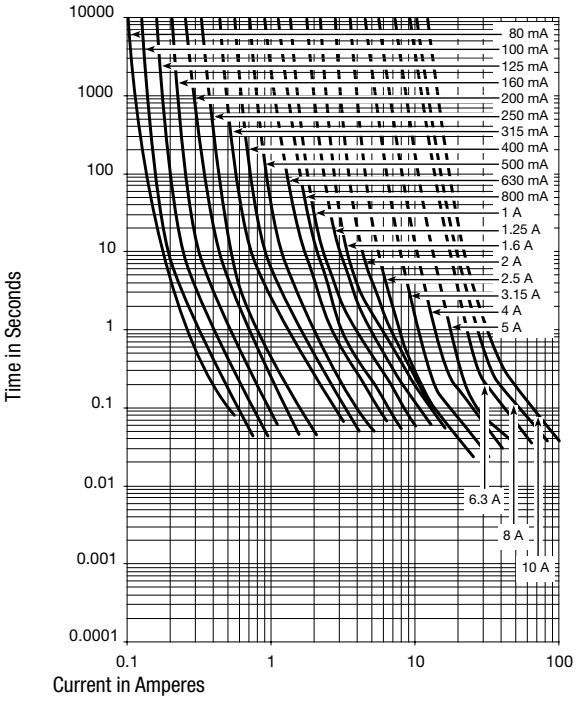


Soldering pads

Pre-Arcing Time

Rated Current In	1.0 x In min.	1.25 x In min.	2.0 x In max.	10.0 x In min.	10.0 x In max.
0.08 A - 6.3 A	-	60 min	120 s	10 ms	100 ms
8 A - 10 A	4 h	-	120 s	10 ms	100 ms

Time-Current-Curves



All Variants

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 In max. [mV]	Voltage Drop 1.0 In typ. [mV]	Power Dissipation 1.25 In max [mW]	Melting I²t 10.0 Intyp. [A²s]						Order Number
0.08	250	125	1)	1300	1030	200	0.022	●	●	●	●		3403.0155.11
0.08	250	125	1)	1300	1030	200	0.022	●	●	●	●		3403.0155.24
0.1	250	125	1)	1300	870	200	0.04	●	●	●	●		3403.0156.11
0.1	250	125	1)	1300	870	200	0.04	●	●	●	●		3403.0156.24
0.125	250	125	1)	1000	700	200	0.055	●	●	●	●		3403.0157.11
0.125	250	125	1)	1000	700	200	0.055	●	●	●	●		3403.0157.24

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 In max. [mV]	Voltage Drop 1.0 In typ. [mV]	Power Dissipation 1.25 In max [mW]	Melting I²t 10.0 Intyp. [A²s]							Order Number
0.16	250	125	1)	1000	540	240	0.057	●		●		●	●	3403.0158.11
0.16	250	125	1)	1000	540	240	0.057	●		●		●	●	3403.0158.24
0.2	250	125	1)	1000	460	500	0.092	●		●		●	●	3403.0159.11
0.2	250	125	1)	1000	460	500	0.092	●		●		●	●	3403.0159.24
0.25	250	125	1)	800	395	500	0.2	●		●		●	●	3403.0160.11
0.25	250	125	1)	800	395	500	0.2	●		●		●	●	3403.0160.24
0.315	250	125	1)	750	343	500	0.27	●	●	●		●	●	3403.0161.11
0.315	250	125	1)	750	343	500	0.27	●	●	●		●	●	3403.0161.24
0.4	250	125	1)	700	290	500	0.4	●	●	●		●	●	3403.0162.11
0.4	250	125	1)	700	290	500	0.4	●	●	●		●	●	3403.0162.24
0.5	250	125	1)	600	257	500	0.54	●	●	●		●	●	3403.0163.11
0.5	250	125	1)	600	257	500	0.54	●	●	●		●	●	3403.0163.24
0.63	250	125	1)	500	216	500	1.1	●	●	●		●	●	3403.0164.11
0.63	250	125	1)	500	216	500	1.1	●	●	●		●	●	3403.0164.24
0.8	250	125	1)	400	190	500	1.4	●	●	●		●	●	3403.0165.11
0.8	250	125	1)	400	190	500	1.4	●	●	●		●	●	3403.0165.24
1	250	125	2)	300	164	500	2.8	●	●	●	●	●	●	3403.0166.11
1	250	125	2)	300	164	500	2.8	●	●	●	●	●	●	3403.0166.24
1.25	250	125	2)	300	138	1000	4.5	●	●	●	●	●	●	3403.0167.11
1.25	250	125	2)	300	138	1000	4.5	●	●	●	●	●	●	3403.0167.24
1.6	250	125	2)	300	124	1000	6.9	●	●	●	●	●	●	3403.0168.11
1.6	250	125	2)	300	124	1000	6.9	●	●	●	●	●	●	3403.0168.24
2	250	125	2)	300	102	1000	7.3	●	●	●	●	●	●	3403.0169.11
2	250	125	2)	300	102	1000	7.3	●	●	●	●	●	●	3403.0169.24
2.5	250	125	2)	300	90	1200	7.5	●	●	●	●	●	●	3403.0170.11
2.5	250	125	2)	300	90	1200	7.5	●	●	●	●	●	●	3403.0170.24
3.15	250	125	2)	300	95	1500	14	●	●	●	●	●	●	3403.0171.11
3.15	250	125	2)	300	95	1500	14	●	●	●	●	●	●	3403.0171.24
4	250	125	2)	300	78	2000	26	●	●	●	●	●	●	3403.0172.11
4	250	125	2)	300	78	2000	26	●	●	●	●	●	●	3403.0172.24
5	250	125	3)	300	76	2500	38	●		●	●	●	●	3403.0173.11
5	250	125	3)	300	76	2500	38	●		●	●	●	●	3403.0173.24
6.3	250	125	3)	300	71	3000	66	●		●	●	●	●	3403.0174.11
6.3	250	125	3)	300	71	3000	66	●		●	●	●	●	3403.0174.24
8	250	125	4)	220	72	3000	113			●	●			3403.0175.11
8	250	125	4)	220	72	3000	113			●	●			3403.0175.24
10	250	125	4)	220	73	3500	166			●	●			3403.0176.11
10	250	125	4)	220	73	3500	166			●	●			3403.0176.24

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

1) IEC: 200 A @ 250 VAC, p.f. ≥ 0.95 / 100 A @ 125 VDC

1) UL: 200 A @ 277 VAC / 100 A @ 125 VDC / 35 A @ 250 VDC / 200 A @ 63 VAC/DC

2) IEC: 200 A @ 250 VAC, p.f. ≥ 0.95 / 100 A @ 125 VDC

2) UL: 200 A @ 277 VAC / 100 A @ 125 VDC / 35 A @ 250 VDC / 200 A @ 63 VAC/DC

2) PSE: 100 A @ 250 VAC

3) IEC: 100 A @ 250 VAC, p.f. ≥ 0.95 / 100 A 125 VDC

3) UL: 100 A @ 250 VAC / 100 A @ 125 VDC / 35 A @ 250 VDC / 200 A @ 63 VAC/DC

3) PSE: 100 A @ 250 VAC

4) UL: 35 A @ 250 VAC / 35 A @ 125 VDC / 200 A @ 63 VAC/DC

4) PSE: 100 A @ 250 VAC

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 In max. [mV]	Voltage Drop 1.0 In typ. [mV]	Power Dissipation 1.25 In max [mW]	Melting I²t 10.0 Intyp. [A²s]	Order Number

The 80 mA variant may not be to replace the 80 mA used with gold caps UMT (Au).

Packaging Unit

.xx = .11 Plastic Bag (100 pcs.)
.xx = .24 Blister Tape 33 cm Reel (2000 pcs.)

14.11.2017