Surface Mount Fuse, 3 x 10.1 mm, Quick-Acting F, 250 VAC, 125 VDC

new

IEC 60127-4 · 250 VAC · 125 VDC · Quick-Acting F

Approvals and Compliances

Description
- Directly solderable on printed circuit boards
- Low melting I²t-values, fast interruption
- Compact design
- UMF (universal modular fuse)

Applications
- Primary protection on SMD PCBs
- Secondary protection on SMD PCBs
- Medical equipment
- Power supplies
- Lighting

References
Packaging Details
Fuse Kit Fuse Kit UMF 250 / UMK 250

Weblinks
pdf datasheet, html-datasheet, General Product Information, Packaging details, Distributor-Stock-Check, Detailed request for product, Microsite

Technical Data

Rated Voltage	250 VAC, 125 VDC
Rated current	0.5 - 10 A
Breaking Capacity	100 A - 200 A
Characteristic	Quick-Acting F
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 40 °C, max. 70% r.h.
Product Marking	Ⓜ, Rated current, Rated 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 / 10 sec acc. to IEC 60068-2-58, Test Td
Life Test	1000h @ 0.60 x In @ 70°C (acc. to EIA/IS-722, Test 4.4.1)
Moisture Resistance Test	MIL-STD-202, Method 106E (acc. to EIA/IS-722, Test 4.4.3)
Case Resistance	>100 MΩ (between leeds and body) acc. to EIA/IS-722, Test 4.7
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)

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: UMF 250

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	VDE Certificate Number: 40027880
	UL Approvals	UL	UL File Number: E41599

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
IEC	Designed according to	IEC 60127-4/2	Miniature fuses. Part 4. Universal modular fuse-links for through-hole and surface mount types
UL	Designed according to	UL 248-14	Low voltage fuses - Part 14: Additional fuses
CSA Group	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
IEC	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technologyequipment.

Compliances

The product complies with following Guide Lines

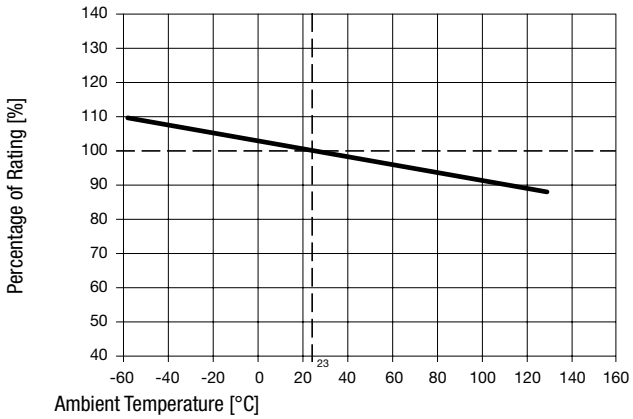
Identification	Details	Initiator	Description
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
RoHS COMPLIANT	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU
50	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 HF	Halogen Free	SCHURTER AG	SCHURTER strives to offer our customers halogen free products.
REACH	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.
M		SCHURTER AG	Universal Modular Fuse meets the standard IEC 60127-4

Dimension [mm]

10.1 mm

Soldering pads

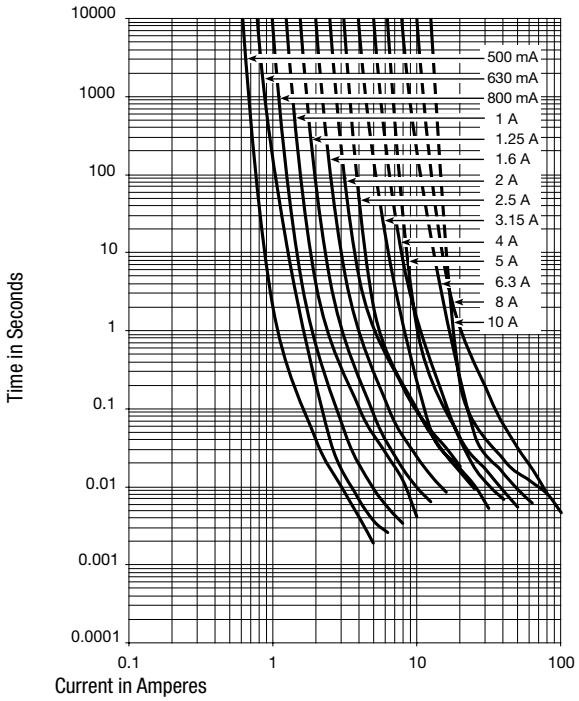
Derating Curves



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.
0.5 A - 8 A	-	60 min	120 s	1 ms	10 ms
10 A	4 h	-	120 s	1 ms	10 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 I_n typ. [mW]	Melting I^2t 10.0 Intyp. [A^2s]			Order Number	
0.5	250	125	1)	600	430	500	0.052	●	●	3405.0163.11	
0.5	250	125	1)	600	430	500	0.052	●	●	3405.0163.24	
0.63	250	125	1)	500	350	500	0.092	●	●	3405.0164.11	
0.63	250	125	1)	500	350	500	0.092	●	●	3405.0164.24	
0.8	250	125	1)	400	300	500	0.21	●	●	3405.0165.11	
0.8	250	125	1)	400	300	500	0.21	●	●	3405.0165.24	

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 I_n typ. [mW]	Melting I^2t 10.0 Intyp. [A^2s]	VDE	cULus	Order Number	
1	250	125	1)	300	250	500	0.4	●	●	3405.0166.11	▮
1	250	125	1)	300	250	500	0.4	●	●	3405.0166.24	▮
1.25	250	125	2)	300	220	1000	1	●	●	3405.0167.11	▮
1.25	250	125	2)	300	220	1000	1	●	●	3405.0167.24	▮
1.6	250	125	2)	300	190	1000	2.1	●	●	3405.0168.11	▮
1.6	250	125	2)	300	190	1000	2.1	●	●	3405.0168.24	▮
2	250	125	2)	300	200	1000	3.26	●	●	3405.0169.11	▮
2	250	125	2)	300	200	1000	3.26	●	●	3405.0169.24	▮
2.5	250	125	2)	300	160	1200	4.8	●	●	3405.0170.11	▮
2.5	250	125	2)	300	160	1200	4.8	●	●	3405.0170.24	
3.15	250	125	2)	300	100	1500	5.17	●	●	3405.0171.11	▮
3.15	250	125	2)	300	100	1500	5.17	●	●	3405.0171.24	▮
4	250	125	2)	300	100	2000	9.4	●	●	3405.0172.11	▮
4	250	125	2)	300	100	2000	9.4	●	●	3405.0172.24	▮
5	250	125	2)	300	110	2500	13.57	●	●	3405.0173.11	▮
5	250	125	2)	300	110	2500	13.57	●	●	3405.0173.24	▮
6.3	250	125	2)	300	80	3000	23.85	●	●	3405.0174.11	▮
6.3	250	125	2)	300	80	3000	23.85	●	●	3405.0174.24	
8	250	125	2)	220	80	3000	52.58	●	●	3405.0175.11	▮
8	250	125	2)	220	80	3000	52.58	●	●	3405.0175.24	▮
10	250	125	3)	220	150	3500	45.8		●	3405.0176.11	
10	250	125	3)	220	150	3500	45.8		●	3405.0176.24	▮

▮ Most Popular.

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

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

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

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

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

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

Packaging Unit

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

01.12.2017