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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Surface Mount Fuse with Clip, 4.2 x 11.3 mm, Quick-Acting F, UMK 250 = UMF 250 (Au) + UMC 250



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

See below:

Approvals and Compliances

Description

- VDE/UL Approvals, UMF 250, UMF 250 (Au), UMC 250, see variants
- High breaking capacity of up to 200 A @ 250 VAC
- UL approval for 0.05 A 4 A @ 250 VAC and 125 VDC

Applications

- Primary protection on SMD PCBs

References

Packaging Details

Fuse $\check{\text{Kit}}$ Fuse $\check{\text{Kit}}$ 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 - 4A
Breaking Capacity	100-200A
Characteristic	Quick-Acting F
Mounting	PCB,SMT
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Housing	Ceramic
Material: Terminals	Gold-Plated Copper Alloy
Storage Conditions	0°C to 40°C, max. 70% r.h.
Product Marking	I , Rated current, Rated Voltage, Characteristic, Breaking Capacity

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
Life Test	(acc. to EIA/IS-722, Test 4.4.1) 1000h @ 0.60 x ln @ 70°C
Moisture Resistance Test	(acc. to EIA/IS-722, Test 4.4.3) 10% rated current. Temperatur change between 25°C und 65°C at 100% relative humidity. Duration: 24h each cycle, total 10 cycles
Terminal Strength	(acc. to EIA/IS-722, Test 4.5.5) (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	Cleaning with common solvents
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: UMK 250

Approval Logo	Certificates	Certification Body	Description
_DVE	VDE Approvals	VDE	VDE Certificate Number: 40027880 / 40023291
c FU °us	UL Approvals	UL	UL File Number: E41599

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
<u>IEC</u>	Designed according to	IEC 60127-6	Miniature fuses. Part 6. Fuse-holders for miniature fuse-links
<u>IEC.</u>	Designed according to	IEC 60127-4	Miniature fuses. Part 4. Universal modular fuse-links for through-hole and surface mount types
(UL)	Designed according to	UL 248-14 / 4248-1	Low voltage fuses - Part 14: Additional fuses
GE Group	Designed according to	CSA22.2 No. 248.14 / No. 4248.1	Low-Voltage Fuses - Part 14: Supplemental Fuses

Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
<u>IEC</u>	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment. $ \\$

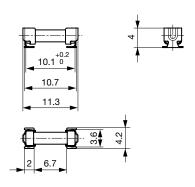
Compliances

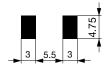
The product complies with following Guide Lines

Identification	Details	Initiator	Description
C€	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	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU
5	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 🖽	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.

Dimension [mm]

┥11.3 mm



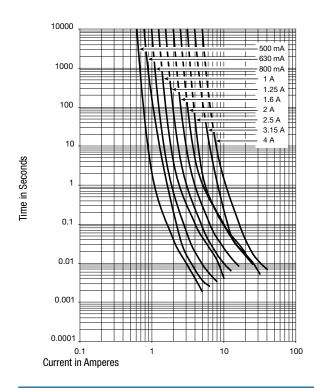


Soldering pads

Pre-Arcing Time

Rated Current In	1.0 x ln min.	1.25 x In min.	2.0 x In max.	10.0 x ln min.	10.0 x ln max.
0.5 A - 4.0 A	-	60 min	120 s	1 ms	10 ms

Time-Current-Curves



All Variants

Rated Cur- rent [A]	Rated Voltage [VAC]	Rated Vol- tage [VDC]	Breaking Capacity	Voltage Drop 1.0 In max. [mV]	Voltage Drop 1.0 In typ. [mV]	Power Dissi- pation 1.25 In max [mW]	Melting I ² t 10.0 In typ. [A ² s]	O S S S S S S S S S S S S S S S S S S S	Order Number
0.5	250	125	1)	430	600	500	0.27	• • 3	404.2463.11
0.5	250	125	1)	430	600	500	0.27	• • 3	404.2463.22
0.63	250	125	1)	350	500	500	0.9	• • 3	404.2464.11
0.63	250	125	1)	350	500	500	0.9	• • 3	404.2464.22
0.8	250	125	1)	300	400	500	0.21	• • 3	404.2465.11
0.8	250	125	1)	300	400	500	0.21	• • 3	404.2465.22
1	250	125	1)	250	300	500	0.4	• • 3	404.2466.11
1	250	125	1)	250	300	500	0.4	• • 3	404.2466.22
1.25	250	125	2)	220	300	1000	1	• • 3	404.2467.11
1.25	250	125	2)	220	300	1000	1	• • 3	404.2467.22
1.6	250	125	2)	190	300	1000	2.1	• • 3	404.2468.11
1.6	250	125	2)	190	300	1000	2.1	• • 3	404.2468.22
2	250	125	2)	200	300	1000	3.26	• • 3	404.2469.11
2	250	125	2)	200	300	1000	3.26	• • 3	404.2469.22
2.5	250	125	2)	160	300	1200	4.8	• • 3	404.2470.11
2.5	250	125	2)	160	300	1200	4.8	• • 3	404.2470.22
3.15	250	125	2)	100	300	1500	5.17	• • 3	404.2471.11
3.15	250	125	2)	100	300	1500	5.17	• • 3	404.2471.22
4	250	125	2)	100	300	2000	9.4	• • 3	404.2472.11
4	250	125	2)	100	300	2000	9.4	• • 3	404.2472.22

Most Popular.

A vailability 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

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

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

Approval Overview

 $\hbox{UMF 250 -> Fuse with tin-plated caps, Approval Status: VDE, UL LISTED, cURus, Free of CCC, PSE JET, KTL COMMON COMMON$

UMF 250 (Au) -> Fuse with gold-plated caps, Approval Status: VDE Mark and cURus

UMC 250 -> Clip, Approval Status: VDE UG Mark and cURus

Rated Cur-	Rated Vol-	Rated Vol-	Breaking	Voltage Drop	Voltage Drop	Power Dissi-	Melting I ² t	Order Number
rent [A]	tage [VAC]	tage [VDC]	Capacity	1.0 In max.	1.0 In typ.	pation 1.25 In	10.0 In typ. $\sqrt{V_E}$ $_{c}$ \mathbf{R}^{V}	iie
				[mV]	[mV]	max [mW]	[A ² s]	00

UMK 250 = UMF 250 (Au) + UMC 250

There is no approval existing for the combination fuse and clip UMK 250, but the fuse and the clip are fully approved independently at VDE/UL. See details above.

In the reflow soldering process, the fuse must have gold-plated caps, otherwise fuse and clip would be soldered together. For fuse replacement in the field, a standard UMF 250 fuse with tin-plated caps can be used.

It is not allowed to replace higher rated current than 4 A in the clip.

Packaging Unit .xx = .11 Blister Tape (100 pcs.)

.xx = .22 Blister Tape 33 cm Reel (1000 pcs.)

Fuses