

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

new



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



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

Standards

- IEC 60127-4/2, IEC 60127-6
- UL 248-14 / 4248-1
- CSA C22.2 no. 248.14 / no. 4248.1

Approvals

- VDE Certificate Number: 40027880 / 40023291
- UL File Number: E41599

Applications

- Primary protection on SMD PCBs
- Industrial electronic

References

[Packaging Details](#)

Fuse Kit [Fuse Kit UMF 250 / UMK 250](#)

Weblinks

[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

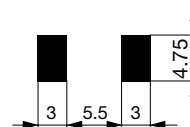
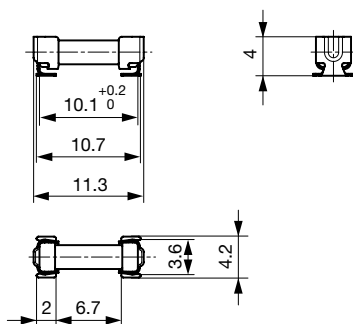
Technical Data

Rated Voltage	250 VAC, 125 VDC
Rated current	0.5 - 4 A
Breaking Capacity	100-200 A
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	 , 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 I _n @ 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)

Dimension

11.3 mm

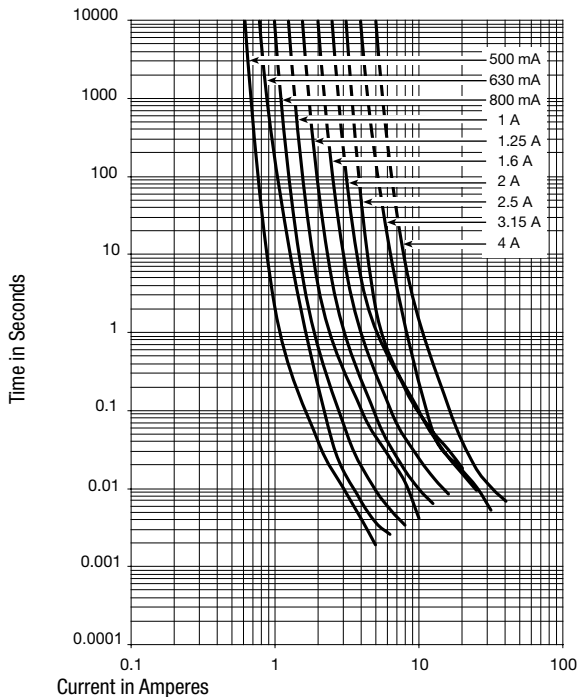


Soldering pads

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.
0.5 A - 4.0 A	-	60 min	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 In max [mW]	Melting I ² t 10.0 Intyp. [A ² s]	 	Order Number
0.5	250	125	1)	430	600	500	0.27	● ●	3404.2463.xx
0.63	250	125	1)	350	500	500	0.9	● ●	3404.2464.xx
0.8	250	125	1)	300	400	500	0.21	● ●	3404.2465.xx
1	250	125	1)	250	300	500	0.4	● ●	3404.2466.xx
1.25	250	125	2)	220	300	1000	1	● ●	3404.2467.xx
1.6	250	125	2)	190	300	1000	2.1	● ●	3404.2468.xx
2	250	125	2)	200	300	1000	3.26	● ●	3404.2469.xx
2.5	250	125	2)	160	300	1200	4.8	● ●	3404.2470.xx
3.15	250	125	2)	100	300	1500	5.17	● ●	3404.2471.xx
4	250	125	2)	100	300	2000	9.4	● ●	3404.2472.xx

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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

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

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

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

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.

Rated Cur- rent [A]	Rated Vol- tage [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 Intyp. [A ² s]		Order Number
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It is not allowed to replace higher rated current than 4 A in the clip.

Packaging Unit	.xx = .11 Plastic Bag (100 pcs.)
	.xx = .22 Blister Tape 33 cm Reel (1000 pcs.)