

Subminiature Fuse, 8.5 mm, Quick-Acting F, 250 VAC



Subminiature fuse 8.5 mm, quick-acting
F, 250 VAC
Short terminal



Subminiature fuse 8.5 mm, quick-acting
F, 250 VAC
Terminal long
PCB

IEC 60127-3 · 250 VAC · Quick-Acting F

See below:

[Approvals and Compliances](#)

Description

- Directly solderable on printed circuit boards
- Low Breaking Capacity


References

Corresponding Fuseholder [FMS \(250V\)](#)
Fuse Kit [Fuse Kit MST250 / MSF 250](#)

Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

Technical Data

Rated Voltage	250 VAC
Rated current	0.04 - 5 A
Breaking Capacity	35 A
Characteristic	Quick-Acting F
Mounting	PCB, THT
Admissible Ambient Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Housing	Thermoplastic, UL 94V-0
Material: Terminals	Tin-Plated Copper
Unit Weight	0.5 g
Storage Conditions	0 °C to 40 °C, max. 70% r.h.
Product Marking	 Type, Rated current, Rated Voltage, Characteristic, Certification marks

Soldering Methods	Wave Soldering Profile
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb
Case Resistance	>100 MΩ (between leads and body) acc. to EIA/IS-722, Test 4.7
Flammability	UL 94V-0 (acc. to EIA/IS-722, Test 4.12)
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc
Current Carrying Capacity	acc. to EIA/IS-722, Test 4.3.3
Moisture Sensitivity Level	(acc. to EIA/IS-722, Test 4.4.3)
Thermal Shock	MIL-STD-202, Method 107D (200 air-to-air cycles from -55 to +125 °C)
Operational Life	1000h @ 0.60 x In @ 70 °C (acc. to EIA/IS-722, Test 4.4.1)
Load Humidity Test	0.1 x In @ 0.85 r.H. @ 85 °C (acc. to EIA/IS-722, Test 4.4.2)
Mechanical Shock	MIL-STD-202, Method 213 Condition A
Resistance to Solvents	MIL-STD-202, Method 215
Terminal Strength	Tensile load min. 9 N (acc. to EIA/IS-722, Test 4.5.1)

Approvals and Compliances




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

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Approvals




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

Approval Reference Type: MSF 250

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	VDE Certificate Number: 101035
	UL Approvals	UL	UR File Number: E41599
	CCC Approvals	CCC	CCC Certificate Number: 2020970207000095


Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	IEC 60127-3/3	Miniature fuses - Part 3: Miniature fuse-links
	Designed according to	UL 248-14	Low voltage fuses - Part 14: Supplemental fuses
	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
	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

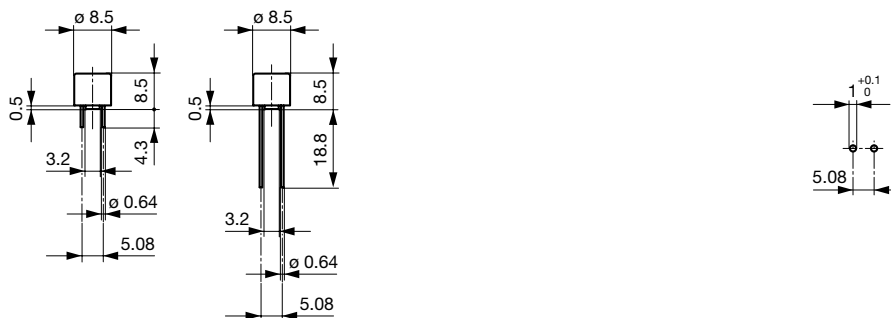
Compliances

The product complies with following Guide Lines

Identification	Details	Initiator	Description
	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.
	UKCA declaration of conformity	SCHURTER AG	The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.
	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
	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.
	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.

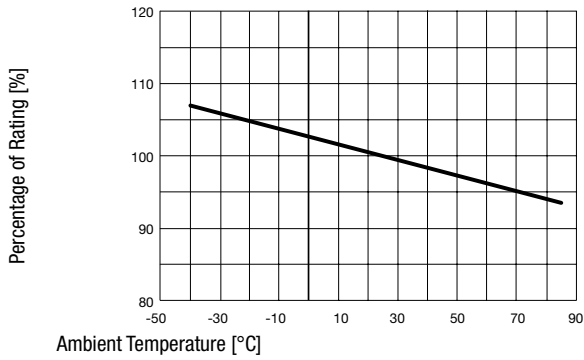
Dimension [mm]

8.5 mm



Drilling diagram

Derating Curves

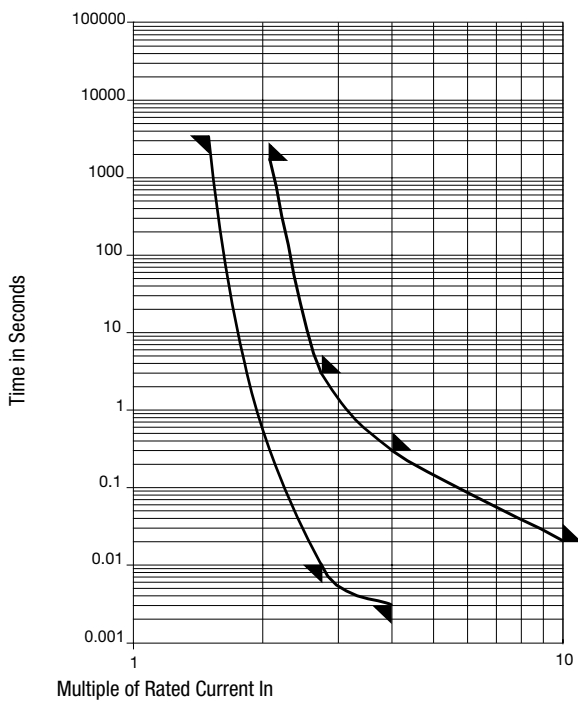


Pre-Arcing Time




Rated Current I_n 1.5 x I_n min. 2.1 x I_n max. 2.75 x I_n min. 2.75 x I_n max. 4.0 x I_n min. 4.0 x I_n max. 10.0 x I_n max.




0.04 A - 5 A	60 min	30 min	10 ms	3 s	3 ms	300 ms	20 ms
--------------	--------	--------	-------	-----	------	--------	-------




Time-Current-Curves



All Variants

Rated Current [A]	Rated Voltage [VAC]	Breaking Capacity	Voltage Drop 1.0 I_n max. [mV]	Voltage Drop 1.0 I_n typ. [mV]	Power Dissipation 1.5 I_n max. [mW]	Melting I^2t 10.0 I_n typ. [A ² s]				S	L	T	Order Number
0.04	250	1)	-	400	-	0.00016	●	●	●	●			0034.6000
0.05	250	1)	850	460	110	0.0004	●	●	●	●			0034.6001
0.063	250	1)	750	330	120	0.001	●	●	●	●			0034.6002
0.08	250	1)	650	280	140	0.001	●	●	●	●			0034.6003
0.1	250	1)	600	300	160	0.002	●	●	●	●			0034.6004
0.125	250	1)	550	210	180	0.006	●	●	●	●			0034.6005
0.16	250	1)	500	460	210	0.014	●	●	●	●			0034.6006

Rated Current [A]	Rated Voltage [VAC]	Breaking Capacity	Voltage Drop 1.0 I _n max. [mV]	Voltage Drop 1.0 I _n typ. [mV]	Power Dissipation 1.5 I _n max. [mW]	Melting I ² t 10.0 I _n typ. [A ² s]				S	L	T	Order Number
0.2	250	1)	480	470	250	0.024	●	●	●	●			0034.6007
0.25	250	1)	440	360	290	0.058	●	●	●	●			0034.6008
0.315	250	1)	400	345	330	0.104	●	●	●	●			0034.6009
0.4	250	1)	370	80	390	0.044	●	●	●	●			0034.6010
0.5	250	1)	350	75	460	0.09	●	●	●	●			0034.6011
0.63	250	1)	320	70	530	0.15	●	●	●	●			0034.6012
0.8	250	1)	300	70	630	0.22	●	●	●	●			0034.6013
1	250	1)	280	70	740	0.33	●	●	●	●			0034.6014
1.25	250	1)	280	65	920	0.68	●	●	●	●			0034.6015
1.6	250	1)	250	70	1000	0.94	●	●	●	●			0034.6016
2	250	1)	240	70	1360	1.3	●	●	●	●			0034.6017
2.5	250	1)	200	65	1310	1.9	●	●	●	●			0034.6018
3.15	250	1)	180	65	1490	5.4	●	●	●	●			0034.6019
4	250	2)	160	60	1680	7.9	●			●			0034.6020
5	250	2)	150	60	1970	11.2	●			●			0034.6021
0.04	250	1)	-	400	-	0.00016	●				●		0034.6030
0.05	250	1)	850	460	110	0.0004	●	●	●		●		0034.6031
0.063	250	1)	750	330	120	0.001	●	●	●		●		0034.6032
0.08	250	1)	650	280	140	0.001	●	●	●		●		0034.6033
0.1	250	1)	600	300	160	0.002	●	●	●		●		0034.6034
0.125	250	1)	550	210	180	0.006	●	●	●		●		0034.6035
0.16	250	1)	500	460	210	0.014	●	●	●		●		0034.6036
0.2	250	1)	480	470	250	0.024	●	●	●		●		0034.6037
0.25	250	1)	440	360	290	0.058	●	●	●		●		0034.6038
0.315	250	1)	400	345	330	0.104	●	●	●		●		0034.6039
0.4	250	1)	370	80	390	0.044	●	●	●		●		0034.6040
0.5	250	1)	350	75	460	0.09	●	●	●		●		0034.6041
0.63	250	1)	320	70	530	0.15	●	●	●		●		0034.6042
0.8	250	1)	300	70	630	0.22	●	●	●		●		0034.6043
1	250	1)	280	70	740	0.33	●	●	●		●		0034.6044
1.25	250	1)	280	65	920	0.68	●	●	●		●		0034.6045
1.6	250	1)	250	70	1000	0.94	●	●	●		●		0034.6046
2	250	1)	240	70	1360	1.3	●	●	●		●		0034.6047
2.5	250	1)	200	65	1310	1.9	●	●	●		●		0034.6048
3.15	250	1)	180	65	1490	5.4	●	●	●		●		0034.6049
4	250	2)	160	60	1680	7.9	●			●			0034.6050
5	250	2)	150	60	1970	11.2	●			●			0034.6051
0.04	250	1)	-	400	-	0.00016	●				●		0034.6060
0.05	250	1)	850	460	110	0.0004	●	●	●		●		0034.6061
0.063	250	1)	750	330	120	0.001	●	●	●		●		0034.6062
0.08	250	1)	650	280	140	0.001	●	●	●		●		0034.6063
0.1	250	1)	600	300	160	0.002	●	●	●		●		0034.6064
0.125	250	1)	550	210	180	0.006	●	●	●		●		0034.6065
0.16	250	1)	500	460	210	0.014	●	●	●		●		0034.6066
0.2	250	1)	480	470	250	0.024	●	●	●		●		0034.6067
0.25	250	1)	440	360	290	0.058	●	●	●		●		0034.6068
0.315	250	1)	400	345	330	0.104	●	●	●		●		0034.6069
0.4	250	1)	370	80	390	0.044	●	●	●		●		0034.6070
0.5	250	1)	350	75	460	0.09	●	●	●		●		0034.6071
0.63	250	1)	320	70	530	0.15	●	●	●		●		0034.6072
0.8	250	1)	300	70	630	0.22	●	●	●		●		0034.6073
1	250	1)	280	70	740	0.33	●	●	●		●		0034.6074
1.25	250	1)	280	65	920	0.68	●	●	●		●		0034.6075

Rated Current [A]	Rated Voltage [VAC]	Breaking Capacity	Voltage Drop 1.0 I _n max. [mV]	Voltage Drop 1.0 I _n typ. [mV]	Power Dissipation 1.5 I _n max. [mW]	Melting I ² t 10.0 I _n typ. [A ² s]				S	L	T	Order Number
1.6	250	1)	250	70	1000	0.94	●	●	●	●			0034.6076
2	250	1)	240	70	1360	1.3	●	●	●	●			0034.6077
2.5	250	1)	200	65	1310	1.9	●	●	●	●			0034.6078
3.15	250	1)	180	65	1490	5.4	●	●	●	●			0034.6079
4	250	2)	160	60	1680	7.9		●		●			0034.6080
5	250	2)	150	60	1970	11.2		●		●			0034.6081

Availability for all products can be searched real-time: <https://www.schurter.com/en/info-center/support-tools/stock-check-distributors>

1) 35 A @ 250 VAC

2) 10 In @ 250 VAC

Packaging Unit
acc. IEC 60286-2

S = 4.3 mm	100 pcs in ESD-plastic bag
L = 18.8 mm	100 St. (Bulk)
T = 18.8 mm	750 pcs. in tape [P = P0: 12.7; P1: 3.81; H1: 26.45] on reel [A: 360; W3: 40; W4: 52; C: 30.5]