SMD-SPT 5x20

Surface Mount Fuse, 5 x 20 mm, Time-Lag T, H, 250 VAC, Au plating



IEC 60127-2 · 250 VAC · 300 VDC · Time-Lag T

See below:
Approvals and Compliances

Description
- Directly solderable on printed circuit boards
- IEC Standard Fuse
- H = High Breaking Capacity

Applications
- Primary protection on SMD PCBs

References
Assembled Fuseholder

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

Technical Data

Rated Voltage	250 VAC, 300 VDC
Rated current	1 - 16 A
Breaking Capacity	500 A - 1500 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	Ceramics
Material: Terminals	Gold-Plated Copper Alloy
Unit Weight	1 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	S, Rated current, Rated Voltage, Characteristic, Breaking Capacity

Soldering Methods	Reflow 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
Moisture Sensitivity Level	MSL 1, J-STD-020
Case Resistance	acc. to EIA/IS-722, Test 4.7 >100 MΩ (between leeds and body)
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc
Moisture Resistance Test	MIL-STD-202, Method 106 (50 cycles in a temp./mister chamber)
Thermal Shock	MIL-STD-202, Method 107D (200 air-to-air cycles from -55 to +125°C)
Resistance to Solvents	MIL-STD-202, Method 215
Terminal Strength	MIL-STD-202, Method 211A (Deflection of board 1 mm for 1 minute)

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: SMD-SPT 5x20

Approval Logo	Certificates	Certification Body	Description
VDE	VDE Approvals	VDE	VDE Certificate Number: 40010881
c UL us	UL Approvals	UL	UR File Number: E41599
CCC	CCC Approvals	CCC	CCC Certificate Number: 2020970207000123

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
IEC	Designed according to	IEC 60127-2/5	Miniature fuses. Part 2. Cartridge fuse links
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 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

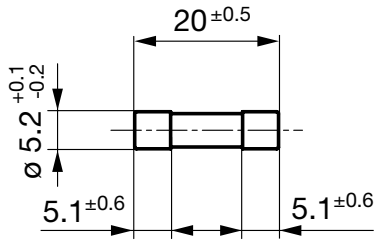
Compliances

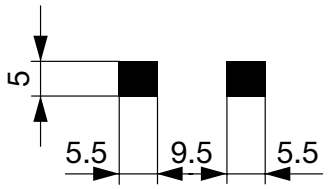
The product complies with following Guide Lines

Identification	Details	Initiator	Description
CE	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	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	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
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.
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]

20 mm



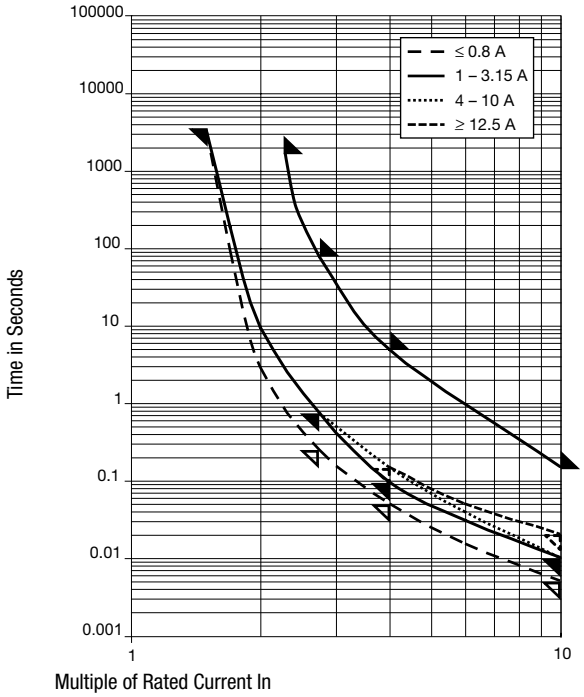


Soldering pads

Pre-Arcing Time

Rated Current In	1.5 x In min.	2.1 x In max.	2.75 x In min.	2.75 x In max.	4.0 x In min.	4.0 x In max.	10.0 x In min.	10.0 x In max.
1 A - 3.15 A	60 min	30 min	750 ms	80 s	95 ms	5 s	10 ms	150 ms
4 A - 6.3 A	60 min	30 min	750 ms	80 s	150 ms	5 s	10 ms	150 ms
8 A - 10 A	30 min	30 min	750 ms	80 s	150 ms	5 s	10 ms	150 ms
12.5 A - 16 A	15 min	30 min	750 ms	80 s	150 ms	5 s	20 ms	150 ms

Time-Current-Curves



All Variants

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	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]	Power Dissipation 1.5 I_n typ. [mW]	Melting I^2t 10.0 I_n typ. [A^2s]	VDE	cULus		Order Number	
1	250	300	1)	250	180	2500	500	1.1	●	●	●	0001.2704.11	
1	250	300	1)	250	180	2500	500	1.1	●	●	●	0001.2704.22	
1.25	250	300	1)	250	150	2500	500	1.86	●	●	●	0001.2705.11	
1.25	250	300	1)	250	150	2500	500	1.86	●	●	●	0001.2705.22	
1.6	250	300	1)	200	130	2500	500	4.35	●	●	●	0001.2706.11	
1.6	250	300	1)	200	130	2500	500	4.35	●	●	●	0001.2706.22	
2	250	300	1)	190	120	2500	600	9.2	●	●	●	0001.2707.11	
2	250	300	1)	190	120	2500	600	9.2	●	●	●	0001.2707.22	
2.5	250	300	1)	180	100	2500	600	11.7	●	●	●	0001.2708.11	
2.5	250	300	1)	180	100	2500	600	11.7	●	●	●	0001.2708.22	
3.15	250	300	1)	140	100	4000	800	33.7	●	●	●	0001.2709.11	
3.15	250	300	1)	140	100	4000	800	33.7	●	●	●	0001.2709.22	
4	250	150	2)	100	90	4000	900	62.4	●	●	●	0001.2710.11	
4	250	150	2)	100	90	4000	900	62.4	●	●	●	0001.2710.22	
5	250	150	2)	100	90	4000	1200	97.5	●	●	●	0001.2711.11	
5	250	150	2)	100	90	4000	1200	97.5	●	●	●	0001.2711.22	
6.3	250	150	2)	100	70	4000	1200	171	●	●	●	0001.2712.11	
6.3	250	150	2)	100	70	4000	1200	171	●	●	●	0001.2712.22	
8	250	150	3)	100	70	4000	1300	268	●	●		0001.2713.11	
8	250	150	3)	100	70	4000	1300	268	●	●		0001.2713.22	
10	250	150	3)	100	70	4000	2100	400	●	●		0001.2714.11	
10	250	150	3)	100	70	4000	2100	400	●	●		0001.2714.22	
12.5	250	125	4)	100	70	4000	2500	563		●		0001.2715.11	
12.5	250	125	4)	100	70	4000	2500	563		●		0001.2715.22	
16	250	125	4)	100	70	4000	3000	1272		●		0001.2716.11	
16	250	125	4)	100	70	4000	3000	1272		●		0001.2716.22	

Most Popular.

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

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	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]	Power Dissipation 1.5 I_n typ. [mW]	Melting I^2t 10.0 I_n typ. [A^2s]	Order Number

1) IEC: 1500 A @ 250 VAC, p.f. = 0.7 - 0.8

1) UL: 10 kA @ 125 VAC, p.f. = 0.7 - 0.8 / 1500 A @ 250 VAC, p.f. = 0.7 - 0.8 / 1500 A @ 300 VDC

2) IEC: 1500 A @ 250 VAC, p.f. = 0.7 - 0.8

2) UL: 10 kA @ 125 VAC, p.f. = 0.7 - 0.8 / 1500 A @ 250 VAC, p.f. = 0.7 - 0.8 / 1500 A @ 150 VDC

3) IEC: 1000 A @ 250 VAC

3) UL: 1000 A @ 250 VAC / 1500 A @ 150 VDC

4) UL: 500 A @ 125 VAC, p.f. = 0.7 - 0.8 / 1000 A @ 125 VAC / 500 A @ 250 VAC / 1500 A @ 125 VDC

Packaging Unit acc. IEC 60286-3 Type 3	.xx = .11	100 pcs. in ESD-plastic bag
	.xx = .22	1000 pcs. in tape [W: 32mm and P1: 8mm] on reel [A: 33cm]

21.03.2022

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.