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Fuseholder Open Design, 5 x 20 mm, SMD, var. Covers, IEC 60335-1



OGN-SMD



OGN-SMD for increased solder temperature with gold contacts



OGN-SMD equipped with var. fuses



OGN-SMD equipped with var. fuses and cover

500 VAC · 4 W / 16 A (VDE) · 500 V · 16 A (UL/CSA)

See below:
Approvals and Compliances

Description

- For appliances in unattended use
- Fulfills increased glow wire requirements acc. IEC 60335-1

Unique Selling Proposition

- Suitable for fully automated PCB assembling
- Available with blister tape packaging
- Reflow capable and small design height
- Available preassembled with fuses and covers

Applications

- Household appliances

References

Fuseholder to FSF 5x20; FST 5x20; FTT 5x20; SMD-SPT; SPT 5x20

Weblinks

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

Technical Data

Shock-Safe Category	PC1
Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder SMT
Rated Voltage	500 VAC (VDE), 500 V (UL/CSA)
Rated current	10/16 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 16 A @ Ta 23 °C 4 W / 10A with black cover 2.5 W / 10 A with transparant cover, see derating curves
Degree of Protection	IP20 (with cover)
Protection Class	Suitable for appliances with protection class I acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	see variants
Material: Cover	Thermoplastic UL 94V-0
Material: Terminals	Copper Alloy, tin-plated or gold-plated
Unit Weight	1.7 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	⊟, Type, Rated Voltage, Rated current, Power Rating, Certification marks

Soldering Methods	Reflow (lead-free) Soldering Profile
Solderability	245-260 °C / max. 30 sec acc. to JEDEC J-STD-020E
Solderability	245-260 °C / max. 30 sec acc. to JEDEC J-STD-020E
Contact Resistance	≤ 10 mΩ at 100 mA acc. to IEC 60127-6
Dielectric Strength	> 3 kV between life parts (50 Hz: 1 min)
Impulse Withstand Voltage	> 4 kV between life parts
Insulation Resistance	≥ 10 MΩ (500 VDC: 1 min)
Overvoltage Category	III acc. to IEC 60664-1
Pollution Degree	3 acc. to IEC 60664-1

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.

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Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.
Approval Reference Type: OGN-SMD

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	VDE Certificate Number: 40001042
	VDE Approvals	VDE	VDE Certificate Number: 40045404
	UL Approvals	UL	UL File Number: E39328

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	IEC 60127-6	Miniature fuses. Part 6. Fuse-holders for miniature fuse-links
	Designed according to	UL 4248-1	Industrial Control Equipment
	Designed according to	CSA C22.2 no. 4248.1	Industrial Control Equipment

Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
	Designed for applications acc.	IEC 60335-1	Safety of electrical appliances for household and similar purposes. Meets the requirements for appliances in unattended use. This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 or -12 & -13.

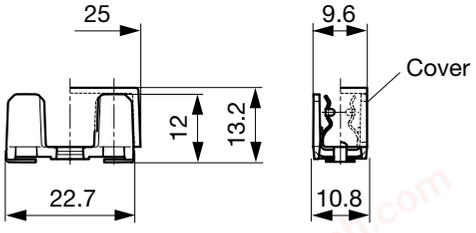
Compliances

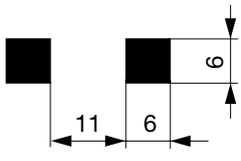
The product complies with following Guide Lines

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.
	White Paper Glow wire test	SCHURTER AG	Meets the requirements of IEC 60335-1 for appliances in unattended use. This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 or -12 &-13.

Dimension [mm]

22.7 mm





Soldering pads

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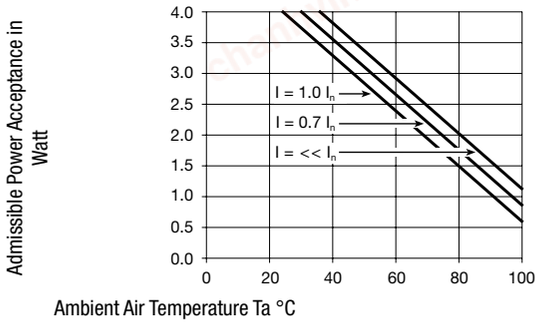
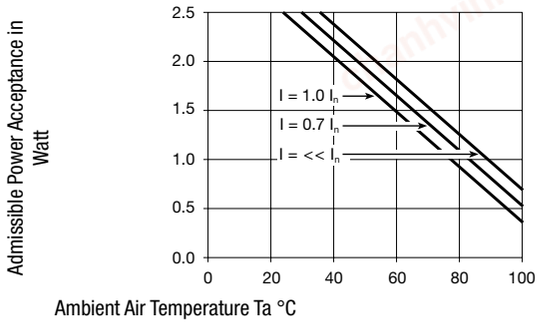
Derating Curves

with black cover or without cover



With Transparent Cover



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Order numbers for pre-assembled OGN-SMD, blister tape packaging with 400 pieces per reel

Rated current I_n	FTT 5x20 with reflow cover 0853.0571	FTT 5x20 no cover	FST 5x20 with reflow cover 0853.0571	FST 5x20 no cover	FSF 5x20 with reflow cover 0853.0571	FSF 5x20 no cover
50 mA			0031.8304	0031.8354		
63 mA	0031.8501	0031.8551	0031.8305	0031.8355		
80 mA	0031.8502	0031.8552	0031.8306	0031.8356		
100 mA	0031.8503	0031.8553	0031.8307	0031.8357		
125 mA	0031.8504	0031.8554	0031.8308	0031.8358		
160 mA	0031.8505	0031.8555	0031.8309	0031.8359		
200 mA	0031.8506	0031.8556	0031.8310	0031.8360		
250 mA	0031.8507	0031.8557	0031.8311	0031.8361		
315 mA	0031.8508	0031.8558	0031.8312	0031.8362		
400 mA	0031.8509	0031.8559	0031.8313	0031.8363		
500 mA	0031.8510	0031.8560	0031.8314	0031.8364	0031.8413	0031.8463
630 mA	0031.8511	0031.8561	0031.8315	0031.8365	0031.8414	0031.8464
800 mA	0031.8512	0031.8562	0031.8316	0031.8366	0031.8415	0031.8465
1 A	0031.8513	0031.8563	0031.8317	0031.8367	0031.8416	0031.8466
1,25 A	0031.8514	0031.8564	0031.8318	0031.8368	0031.8417	0031.8467
1,6 A	0031.8515	0031.8565	0031.8319	0031.8369	0031.8418	0031.8468
2 A	0031.8516	0031.8566	0031.8320	0031.8370	0031.8419	0031.8469
2,5 A	0031.8517	0031.8567	0031.8321	0031.8371	0031.8420	0031.8470
3,15 A	0031.8518	0031.8568	0031.8322	0031.8372	0031.8421	0031.8471
4 A	0031.8519	0031.8569	0031.8323	0031.8373	0031.8422	0031.8472
5 A			0031.8324	0031.8374	0031.8423	0031.8473
6,3 A			0031.8325	0031.8375	0031.8424	0031.8474
8 A			0031.8326	0031.8376	0031.8425	0031.8475
10 A			0031.8327	0031.8377	0031.8426	0031.8476
12,5 A						
16 A						

Rated current I_n	SMD-SPT 5x20 with reflow cover 0853.0571	SMD-SPT 5x20 no cover
50 mA		
63 mA		
80 mA		
100 mA		
125 mA		
160 mA		
200 mA		
250 mA		
315 mA		
400 mA		
500 mA		
630 mA		
800 mA		
1 A	0031.8993	0031.9007
1,25 A	0031.8994	0031.9008
1,6 A	0031.8995	0031.9009
2 A	0031.8996	0031.9010
2,5 A	0031.8997	0031.9011
3,15 A	0031.8998	0031.9012
4 A	0031.8999	0031.9013
5 A	0031.9000	0031.9014
6,3 A	0031.9001	0031.9015
8 A	0031.9002	0031.9016
10 A	0031.9003	0031.9017
12,5 A		
16 A		

All pre-assembled OGN-SMD fuseholders are based on 0031.8225 and are suitable for a reflow-temperature of +245°C.

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All Variants

Holder	Material	Material: Terminals	Reflow Condition	Packaging	Order Number	
●	Thermoplastic	Copper alloy, tin-plated	acc. to JEDEC J-STD-020E, Tp=245 +0/-5 °C, tp = max. 30 s	Bulk 128 x 91 x 60 mm (100 pcs.)	0031.8221	▮
●	Thermoplastic	Copper alloy, tin-plated	acc. to JEDEC J-STD-020E, Tp=245 +0/-5 °C, tp = max. 30 s	Blister Tape 38 cm Reel (400 pcs.)	0031.8225	▮
●	Thermoplastic	Copper alloy, tin-plated	acc. to JEDEC J-STD-020E, Tp=245 +0/-5 °C, tp = max. 30 s	Blister Tray 266 x 174 mm (500 pcs.)	0031.8222	
●	Spec. Thermoplastic	Copper alloy, tin-plated	acc. to JEDEC J-STD-020E, Tp=260 +0/-5 °C, tp = max. 30 s	Bulk 128 x 91 x 60 mm (100 pcs.)	0031.8263	▮
●	Spec. Thermoplastic	Copper alloy, tin-plated	acc. to JEDEC J-STD-020E, Tp=260 +0/-5 °C, tp = max. 30 s	Blister Tape 38 cm Reel (400 pcs.)	0031.8265	▮
●	Spec. Thermoplastic	Copper alloy, tin-plated	acc. to JEDEC J-STD-020E, Tp=260 +0/-5 °C, tp = max. 30 s	Blister Tray 266 x 174 mm (500 pcs.)	0031.8264	
●	Spec. Thermoplastic	Gold-Plated Copper Alloy	acc. to JEDEC J-STD-020E, Tp=260 +0/-5 °C, tp = max. 30 s	Bulk 128 x 91 x 60 mm (100 pcs.)	0031.8273	
●	Spec. Thermoplastic	Gold-Plated Copper Alloy	acc. to JEDEC J-STD-020E, Tp=260 +0/-5 °C, tp = max. 30 s	Blister Tape 38 cm Reel (400 pcs.)	0031.8275	▮
●	Spec. Thermoplastic	Gold-Plated Copper Alloy	acc. to JEDEC J-STD-020E, Tp=260 +0/-5 °C, tp = max. 30 s	Blister Tray 266 x 174 mm (500 pcs.)	0031.8274	

▮ Most Popular.

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

The fuseholder is suitable for use in equipment according to IEC 60335-1.

Fuseholders with gold-plated terminals are more heat resistant than fuseholders with tin-plated terminals.

If soldering problems occur with the thermoplastic version, it is recommended to use the spec. thermoplastic with tin-plated and gold-plated terminals.

Packaging Unit see variants
acc. IEC 60286-3 Type 3

Accessories

	Description
	Covers for OGN, OGN-SMD Cover for Holder OGN, OGN-SMD
	Adapter to OGN, OGN-SMD Fuse Carriage with Handle for OGN, OGN-SMD

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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.

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0031.8222 0031.8221 0031.8225 0031.8304 0031.8305 0031.8306 0031.8307 0031.8308 0031.8309 0031.8311
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0031.8323 0031.8324 0031.8325 0031.8326 0031.8327 0031.8354 0031.8355 0031.8356 0031.8357 0031.8358
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