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 equiped with fuse

OGN-SMD equiped with fuse

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 PCD assembling
- Available with blister tape packaging
- Reflow capable and small design height
- Available preassembled with fuses and covers

Applications
- Household appliances

Weblinks
pdf data sheet, html datasheet, General Product Information, Packaging details, 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	IP 20 (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	Tin-Plated Copper Alloy
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-020D
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.

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
IEC	Designed according to	IEC 60127-6	Miniature fuses. Part 6. Fuse-holders for miniature fuse-links
	Designed according to	UL 4248-1	Fuseholder general requirements
CSA Group	Designed according to	CSA C22.2 no. 4248.1	Fuseholder general requirements

Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
IEC	Designed for applications acc.	IEC/UL 62368-1	IEC 62368-1 includes the basic requirements for safety of audio, video, information technology and office equipment.
IEC	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.

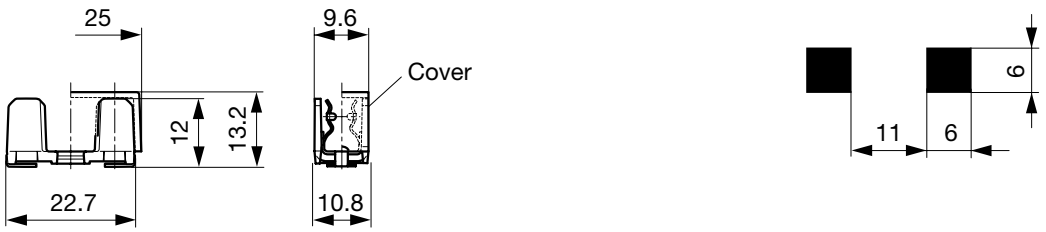
Compliances

The product complies with following Guide Lines

Identification	Details	Initiator	Description
CE	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 COMPLIANT	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	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]

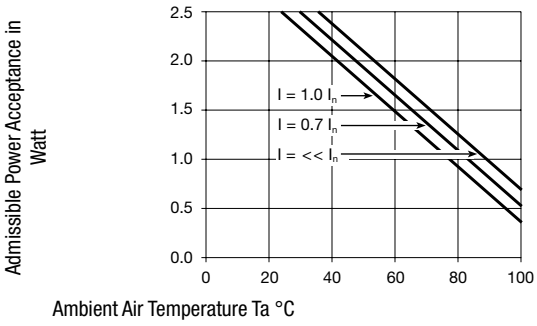
22.7 mm

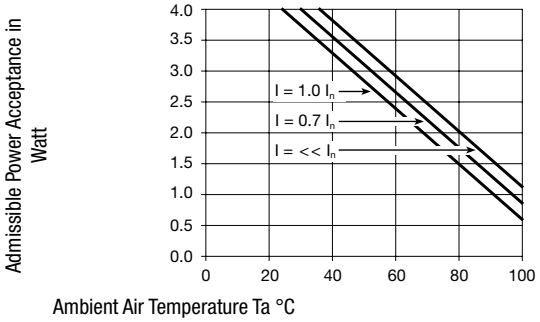


Soldering pads

Derating Curves

With Transparent Cover





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

Rated current In	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	SMD-SPT 5x20 with reflow cover 0853.0571	SMD-SPT 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	0031.8993	0031.9007
1,25 A	0031.8514	0031.8564	0031.8318	0031.8368	0031.8417	0031.8467	0031.8994	0031.9008
1,6 A	0031.8515	0031.8565	0031.8319	0031.8369	0031.8418	0031.8468	0031.8995	0031.9009
2A	0031.8516	0031.8566	0031.8320	0031.8370	0031.8419	0031.8469	0031.8996	0031.9010
2,5 A	0031.8517	0031.8567	0031.8321	0031.8371	0031.8420	0031.8470	0031.8997	0031.9011
3,15 A	0031.8518	0031.8568	0031.8322	0031.8372	0031.8421	0031.8471	0031.8998	0031.9012
4 A	0031.8519	0031.8569	0031.8323	0031.8373	0031.8422	0031.8472	0031.8999	0031.9013
5 A			0031.8324	0031.8374	0031.8423	0031.8473	0031.9000	0031.9014
6,3 A			0031.8325	0031.8375	0031.8424	0031.8474	0031.9001	0031.9015
8 A			0031.8326	0031.8376	0031.8425	0031.8475	0031.9002	0031.9016
10 A			0031.8327	0031.8377	0031.8426	0031.8476	0031.9003	0031.9017

All fuses in the pre-assembled OGN-SMD fuseholders are suitable for the reflow solder process.

All Variants

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

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

18.06.2020

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.