

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 fuse



OGN-SMD equipped 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<br>4 W / 10 A with black cover<br>2.5 W / 10 A with transparent 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)<br><a href="#">Soldering Profile</a> |
| 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                      |
|----------------------------------------------------------------------------------|-------------------------------|--------------------|----------------------------------|
|  | <a href="#">VDE Approvals</a> | VDE                | VDE Certificate Number: 40001042 |
|  | <a href="#">VDE Approvals</a> | VDE                | VDE Certificate Number: 40045404 |
|  | <a href="#">UL Approvals</a>  | 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            | Fuseholder general requirements                                |
|  | Designed according to | CSA C22.2 no. 4248.1 | Fuseholder general requirements                                |

Application standards

Application standards where the product can be used

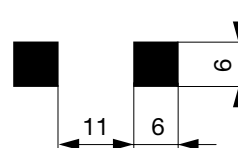
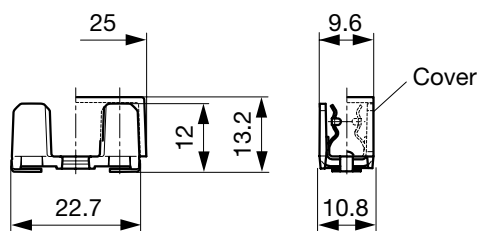
| Organization                                                                      | Design                         | Standard       | Description                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | 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.                                                                                                         |
|  | 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                                                                                                                                                                                           |
|------------------------------------------------------------------------------------|----------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <a href="#">CE declaration of conformity</a> | 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. |
|  | <a href="#">RoHS</a>                         | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863                                                                                                                                                    |
|  | <a href="#">China RoHS</a>                   | 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.                                                                                  |
|  | <a href="#">REACH</a>                        | 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.                               |
|  | <a href="#">White Paper Glow wire test</a>   | 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.                               |

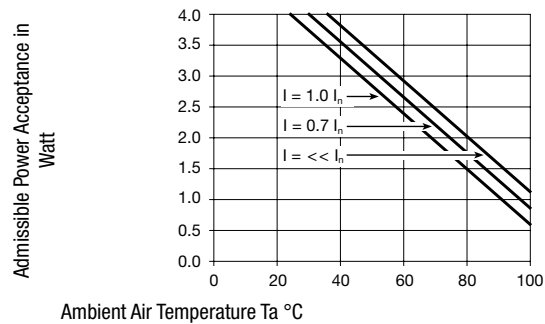
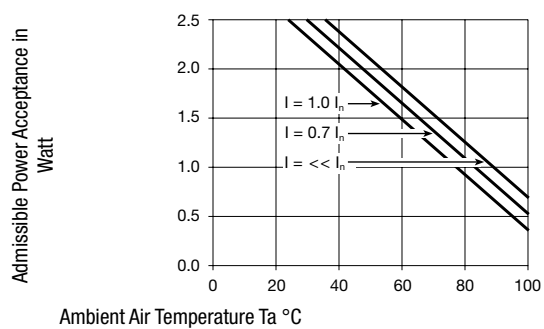
Dimension [mm] 



Soldering pads

## Derating Curves

With Transparent Cover



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

| Rated<br>current In | FTT 5x20<br>with reflow cover<br>0853.0571 | FTT 5x20<br>no cover | FST 5x20<br>with reflow cover<br>0853.0571 | FST 5x20<br>no cover | FSF 5x20<br>with reflow cover<br>0853.0571 | FSF 5x20<br>no cover | SMD-SPT 5x20<br>with reflow cover<br>0853.0571 | SMD-SPT 5x20<br>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                |
| 2 A                 | 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