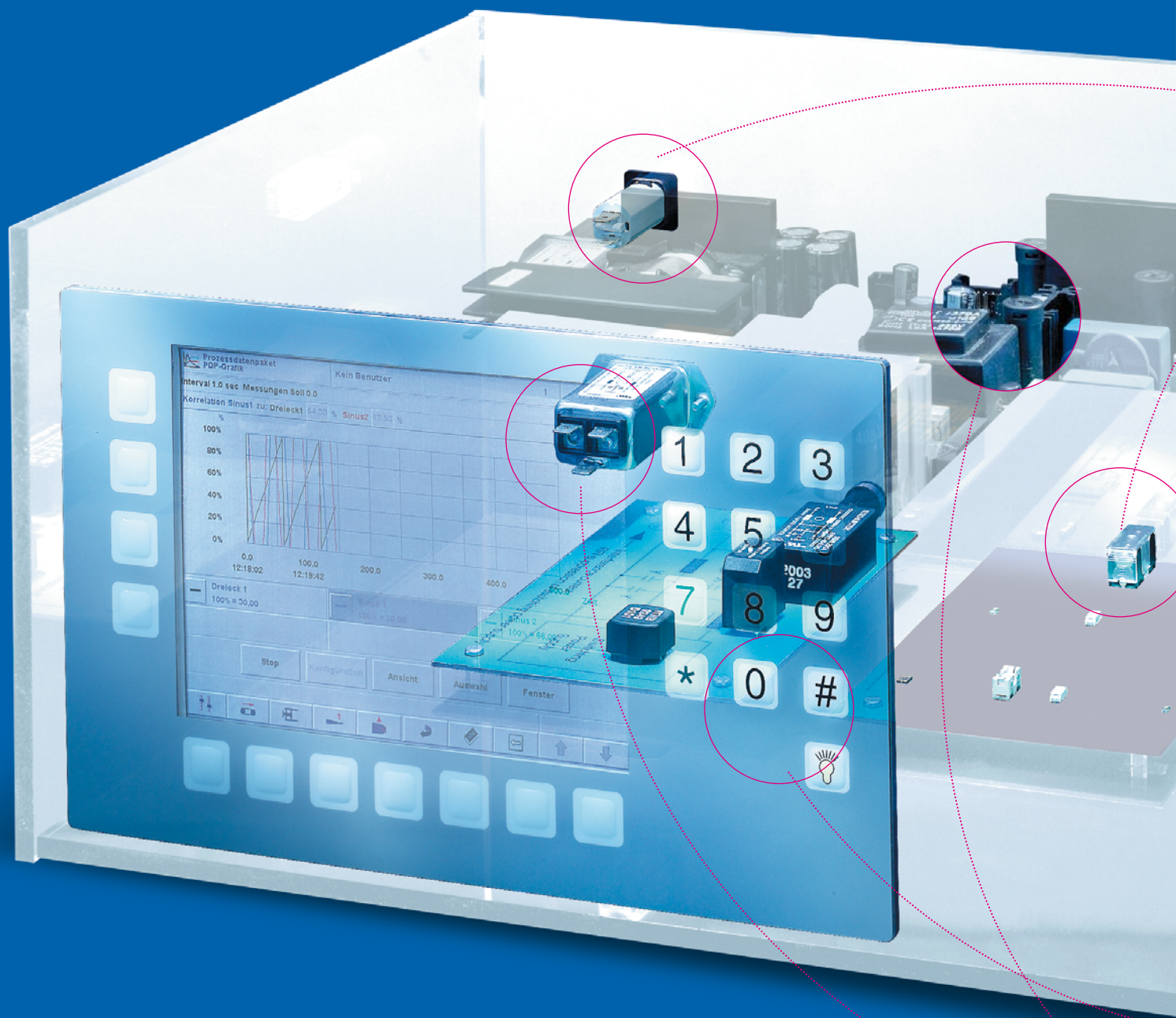


# Fuseholders Blocks & Clips





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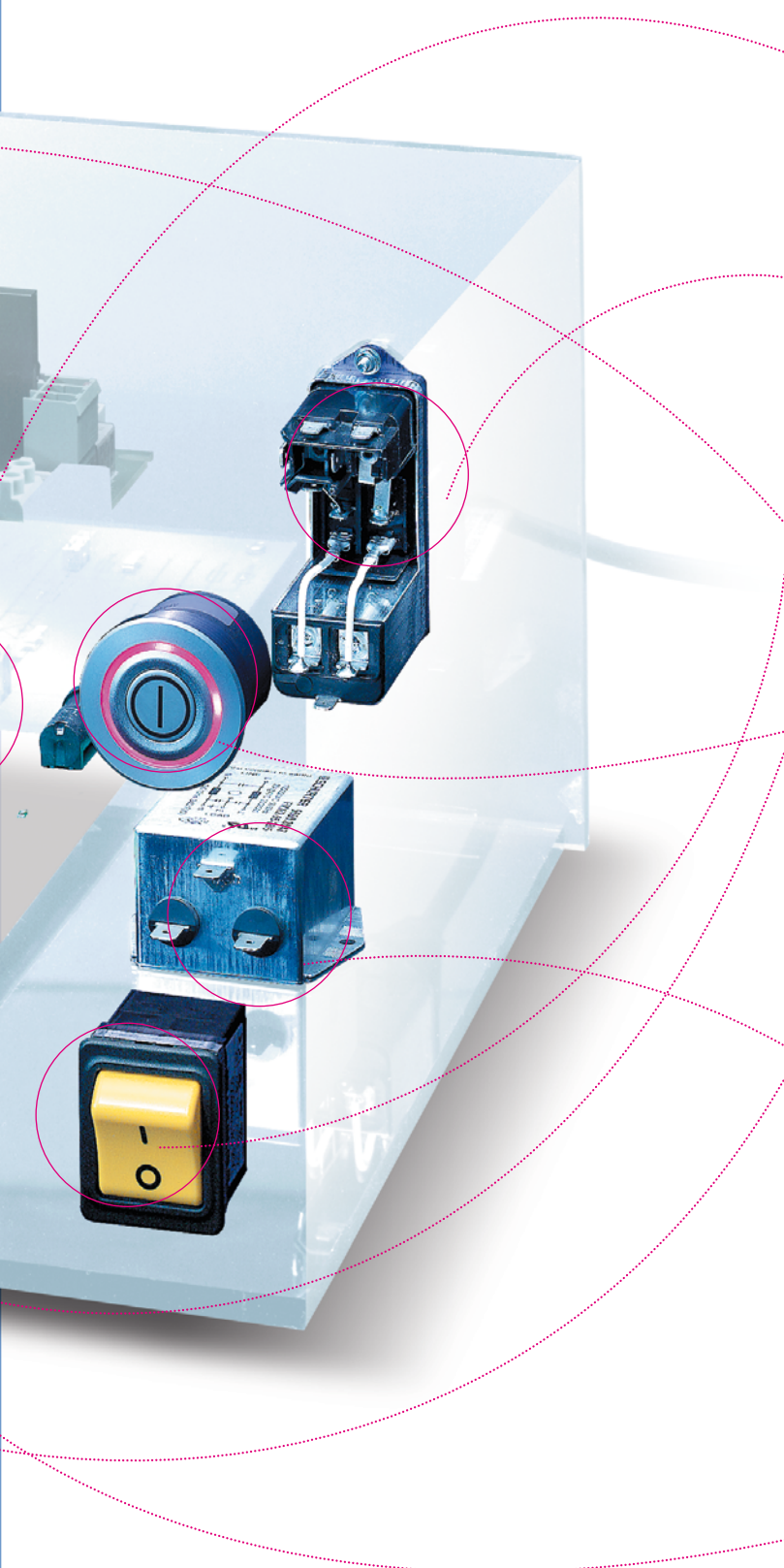


“We rely on reliability and flexibility; that is why we produce your products by our qualified and motivated employee.”

Battista Filippini, CEO Ticomel SA (a member of the SCHURTER Group)

# > the Schurter Range at the Glance

SCHURTER is a progressive innovator and manufacturer of fuses, connectors, circuit breakers, input systems, EMC products and manufacturing services for the electronics industry. We focus on components that ensure safe supply of power and make the interface between human and machine easier.



## ■ fuses

- non resettable fuses
- telecom fuses
- resettable fuses
- fuseholders
- fuseholders blocks & clips

## ■ connectors

- power entry modules without line filter
- power entry modules with line filter
- appliance couplers
- cord connectors (rewireable)
- distribution units
- cord sets

## ■ circuit breakers

- thermal (t- and ta-line)
- thermal-magnetic (tm- and as-line)
- undervoltage protection
- power entry modules with CBE

## ■ input systems

- printmount switches
- frontpanel switches
- public transport switch
- metal line switches
- sensor switches
- membrane keypads
- sensor keypad
- metal line keypads
- touch panel / touch screen
- housing systems and front panels

## ■ EMC products




- power entry modules with line filter
- 1-phase line filters
- 3-phase line filters
- chokes
- pulse transformers
- power stage driver modules











## ■ other products











- voltage selector
- test jacks & probes
- indicators
- data & signal, audio, dc/ din connectors

## ■ EMS

- Electronic Manufacturing Services

Description Approvals	Mounting Style Mounting Side IP-Protection Class	Fuse-Link	Rated Current Rated Voltage IEC/ UL	Power Acceptance	Web Reference or Type
<b>FUSE-LINK 5 X 20 MM</b>					
 <p>Fuseholder Open Design, 5 x 20 mm, THT, var. Covers, IEC 60335-1</p> <p></p>	- PCB	5x20 mm	- 10A / 10A - 250VAC	4W / 10A	<b>OGN 10</b>
 <p>Fuseholder Open Design, 5 x 20 mm, SMD, var. Covers, IEC 60335-1</p> <p></p>	- PCB	5x20 mm	- 10A / 10A - 250VAC	4W / 10A	<b>OGN-SMD 12</b>
 <p>Fuseholder Open Design, 5 x 20 mm, THT, Cover</p> <p></p>	- PCB	5x20 mm	- 10A - 250VAC	2.5W / 10A	<b>OG (Holder) 5x20 15</b>
 <p>Fuseholder Open Design, 5 x 20 mm, Solder, Cover</p> <p></p>	- Screw	5x20 mm	- 10A - 250VAC	3.2W / 10A	<b>UH 17</b>
 <p>Fuseholder Open Design, 5 x 20 mm, Solder, transparent, Cover</p> <p></p>	- Screw	5x20 mm	- 6.3A - 250VAC	3.2W / 4A	<b>UHB 19</b>
<b>FUSE-LINK 6.3 X 32 MM</b>					
 <p>Fuseholder Open Design, 6.3 x 32 mm, THT</p> <p></p>	- PCB	6.3x32 mm	- 16A - 250VAC	2.5W / 10A	<b>OG (Holder) 6.3x32 21</b>
 <p>Fuseholder Open Design, 6.3 x 32 mm, Solder</p> <p></p>	- Screw	6.3x32 mm	- 16A - 250VAC	3.2W / 10A	<b>RSH 23</b>
 <p>Fuseholder Open Design, 6.3 x 32 mm, Screw Clamp, grey</p>	- Screw	6.3x32 mm	- 16A - 250VAC	3.5W / 16A	<b>23748B 25</b>


Description Approvals	Mounting Style Mounting Side IP-Protection Class	Fuse-Link	Rated Current Rated Voltage IEC/ UL	Power Acceptance	Web Reference or Type
 <p>Fuseholder Open Design, 6.3 x 32 mm, Screw Clamp</p>	- Screw	6.3x32 mm	- 16A - 250VAC	3.5W / 16A	<a href="#">23211B</a> 26
FUSE-LINK 5 X 20 OR 6.3 X 32 MM					
 <p>Fuseholder Open Design, 5 x 20 / 6.3 x 32 mm, THT, IEC: 500 VAC, UL/CSA: 250 VAC, Cover, IEC 60335-1</p> 	- PCB	5x20 or 6.3x32mm	- 10A / 16A - 500VAC / 250VAC	4W / 10A	<a href="#">OGD</a> 27
 <p>Fuseholder Open Design, 5 x 20 / 6.3 x 32 mm, SMD, IEC: 500 VAC, UL/CSA: 250 VAC, Cover, IEC 60335-1</p> 	- PCB	5x20 or 6.3x32mm	- 10A / 16A - 500VAC / 250VAC	4W / 10A	<a href="#">OGD-SMD</a> 29
FUSE-LINK 10.3 X 38 MM					
 <p>Fuseholder Open Design, 10.3 x 38 mm, Screw Clamp</p>	- Screw	10.3x38mm	- 30A - 500VAC	3.6W / 30A	<a href="#">23351B</a> 31
FUSE-LINK 14.3 X 51 MM					
 <p>Fuseholder Open Design, 14.3 x 51 mm, Screw Clamp</p>	- Screw	14.3x51mm	- 40A - 500VAC	4W / 40A	<a href="#">23162</a> 32
 <p>Fuseholder Open Design, 14.3 x 51 mm, Screw Clamp, red</p>	- Screw	14.3x51mm	- 50A - 380VAC/DC	5W / 50A	<a href="#">231756R</a> 33
FUSE-LINK 5 X 20 MM					
 <p>Clip, 5 x 20 mm, UR, Cover</p> 	- PCB	5x20mm	- 6.3A - 250VAC	-	<a href="#">OG (Clip) 5x20</a> 34

Description Approvals	Mounting Style Mounting Side IP-Protection Class	Fuse-Link	Rated Current Rated Voltage IEC/ UL	Power Acceptance	Web Reference or Type
 Clip, 5 x 20 mm, Version 1	- PCB	5x20 mm	- 6.3A - 250VAC	-	<a href="#">CQM 36</a>
 Clip, 5 x 20 mm, Version 2	- PCB	5x20 mm	- 6.3A - 250VAC	-	<a href="#">231828 37</a>
 Clip, 5 x 20 mm, Version 3	- PCB	5x20 mm	- 6.3A - 250VAC	-	<a href="#">231683 38</a>
<b>FUSE-LINK 6.3 X 32 MM</b>					
 Clip, 6.3 x 32 mm	- PCB	6.3x32 mm	- 10A - 250VAC	-	<a href="#">231685 39</a>
<b>FUSE-LINK 5 X 20 OR 6.3 X 32 MM</b>					
  Clip, 5 x 20 / 6.3 x 32 mm, UR	- PCB	5x20 or 6.3x32 mm	- 16A - 500VAC	2.5W / 10A	<a href="#">OG (Clip) 5x20 / 6.3x32 40</a>
<b>FUSE-LINK 10.3 X 38 MM</b>					
  Clip, 5 x 20 mm, 10.3 x 38 mm, UR	- PCB	10.3x38 mm	20A	-	<a href="#">231660 42</a>
<b>FUSE-LINK 2 X 7 MM</b>					
  Fuseholder Open Design, Holder for MSB and 172876, SMD	- PCB	2x7 mm	125VAC/DC	0.9W	<a href="#">231787 43</a>



Description Approvals	Mounting Style Mounting Side IP-Protection Class	Fuse-Link	Rated Current Rated Voltage IEC/ UL	Power Acceptance	Web Reference or Type
 Fuseholder Open Design, Holder for MSB and 172876, THT 	- PCB	2x7mm	125VAC/DC	0.9W	<b>231786</b> 44
FUSE-LINK OMX 63/125 FUSE					
 Fuseholder Open Design, Holder for OMF 63, OMF 125 and OMT 125, SMD 	- PCB	OMx 63/125 Fuse	- 5A - 125VAC	-	<b>OMH 125</b> 45
FUSE-LINK MICROFUSE 125 V					
 Fuseholder Open Design, Holder for MSF 125, vertical, THT 	- PCB	Microfuse 125 V	- 5A - 125VAC	-	<b>FMS (125V)</b> 46
 Fuseholder Open Design, Holder for MSF 125, horizontal, THT 	- PCB	Microfuse 125 V	- 5A - 125VAC	-	<b>FMR</b> 47
FUSE-LINK MICROFUSE 250 V					
 Fuseholder Open Design, Holder for MSx 250, THT 	- PCB	Microfuse 250 V	- 6.3A - 250VAC	-	<b>FMS (250V)</b> 48

For customer specific solutions, please contact us. [www.schurter.com/contact](http://www.schurter.com/contact)  
 General Product Information see Fuseholders page 64



## > OGD: Fuse Blocks with Dual Clip

The fuse block holds dual fuse clips and accepts either 5x20 mm or 6.3x32 mm fuse-links. This allows customers to cover two fuse standard sizes with one single product.

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



250 VAC · 4 W/10 A (VDE) · 10 A (UL/CSA)



### Description

- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order number: 0031.82x1.15
- Low profile fuse block with insulation walls
- Screw or rivet fastening

### Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

### Approvals

- VDE License Number: 40001042
- UL File Number: E39328

### Applications

- Industrial electronic
- Household appliances


### References

[General Product Information](#)

### Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

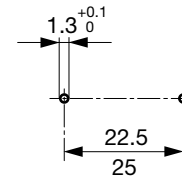
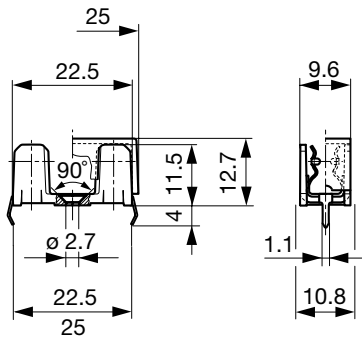
### Technical Data

Fuse-Link	5 x 20mm
Mounting	PCB
Fastening	Screw or Rivet
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 10 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C 2.5 W / 10 A with transparent cover, see derating curves
Degree of Protection	IP 00 / IP 20
Protection Class	Suitable for appliances with protection class I or II 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: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	1.7 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Power Acc./ Current Rating, Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc

Dimensions

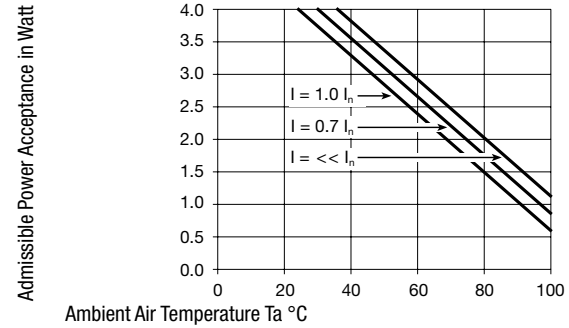
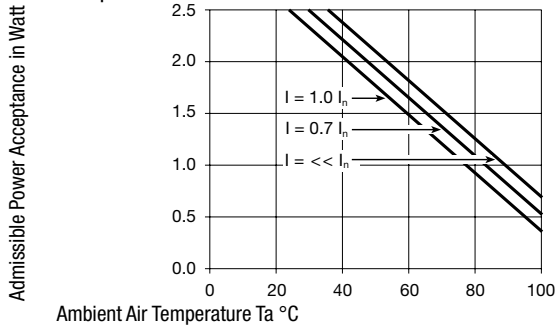
Length |-----| 22.5 mm



Drilling Diagram

Derating Curves for Fuseholders

With Transparent Cover



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Pin distance	Colour Holder	Material	Remark	Order Number
●	22.5	black	Thermoplastic	-	0031.8201
●	25	black	Thermoplastic	-	0031.8211
-	-	-	-	-	0853.0551
-	-	-	-	-	0853.0571
-	-	-	-	-	0853.0576

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

**Packaging Unit** Bulk 128 x 91 x 60 mm (100 pcs.)

Accessory

Description



Covers OGN, OGN-SMD  
Cover for Holder OGN, OGN-SMD

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



250 VAC · 4 W/10 A (VDE) · 10 A (UL/CSA)



### Description

- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order number: 0031.8263-5 / 0031.8273-5
- Low profile fuse block with insulation walls

### Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

### Approvals

- VDE License Number: 40001042
- UL File Number: E39328

### Applications

- Industrial electronic
- Household appliances

### References

- [General Product Information](#)
- [Packaging Details](#)

### Weblinks

- [Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check](#)

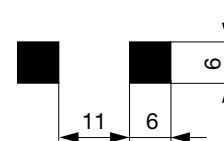
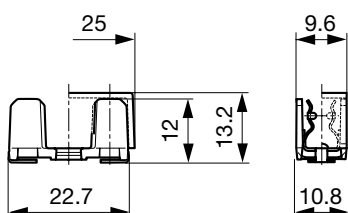
### Technical Data

Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder SMT
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 10 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C 2.5 W / 10 A with transparent cover, see derating curves
Degree of Protection	IP 00 / IP 20
Protection Class	Suitable for appliances with protection class I or II 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: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	1.7 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Power Acc./Current Rating, Approvals

Soldering Methods	Reflow (see variants)
Solderability	245 °C / 3 sec acc. to IEC 60068-2-58, Test Td
Resistance to Soldering Heat	240 - 260 °C / 20 - 40 sec acc. to IPC/JEDEC J-STD-020D
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc

### Dimensions

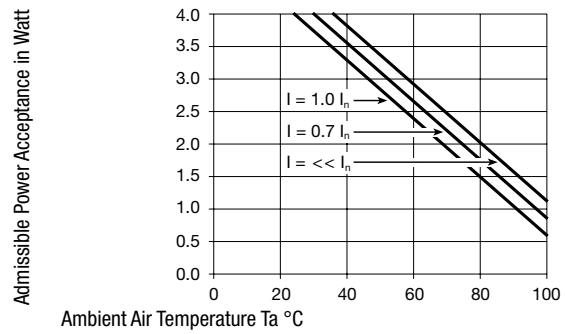
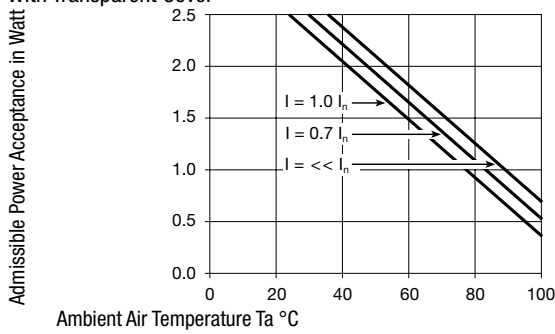
Length 22.7 mm



Solder pads

**Derating Curves for Fuseholders**

With Transparent Cover



**Variants**

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Material	Material: Terminals	Reflow Condition	Packaging	Order Number
●	Thermoplastic	Tin-Plated Copper Alloy	(acc. to JEDEC J-STD-020C), Tp=240 +/-5 °C, tp = 20-40 s	Bulk 128 x 91 x 60 mm(100 pcs.)	0031.8221
●	Thermoplastic	Tin-Plated Copper Alloy	(acc. to JEDEC J-STD-020C), Tp=240 +/-5 °C, tp = 20-40 s	Blister Tape 38 cm Reel(400 pcs.)	0031.8225
●	Thermoplastic	Tin-Plated Copper Alloy	(acc. to JEDEC J-STD-020C), Tp=240 +/-5 °C, tp = 20-40 s	Blister Tray 266 x 173 mm(500 pcs.)	0031.8222
-	-	-	-	Plastic Bag(100 pcs.)	0853.0551
-	-	-	-	Plastic Bag(100 pcs.)	0853.0571
-	-	-	-	Plastic Bag(100 pcs.)	0853.0576

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

0031.8273, 0031.8274 and 0031.8275 with gold-plated clips are more heat resistant than 0031.8263, 0031.8264 and 0031.8265 with tin-plated clips.

If reflow soldering problems with standard thermoplastic occur, it is recommended testing spec. thermoplastic 2 versions with tin-plated and gold-plated clips. If tin-plated version meets the requirement then this would be the right choice because of price.

**Packaging Unit** see variants

**Accessory**

Description



Covers OGN, OGN-SMD  
Cover for Holder OGN, OGN-SMD

### Order Numbers for Pre-Assembled OGN-SMD, Blister Tape Packaging with 400 pieces per reel

Rated current I <sub>n</sub>	FTT 5x20 Fuse With Reflow-Cover 0853.0571	FTT 5x20 Fuse No Cover	FST 5x20 Fuse With Reflow-Cover 0853.0571	FST 5x20 Fuse No Cover	FSF 5x20 Fuse With Reflow-Cover 0853.0571	FSF 5x20 Fuse 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

Fuseholder Open Design, 5 x 20 mm, THT, Cover



250 VAC · 2.5W/10A · 10A (UL/CSA)

**Description**

- Optional covers, see accessories

**Standards**

- IEC 60127-6  
 - UL 512  
 - CSA C22.2 no. 39

**Approvals**

- UL File Number: E39328

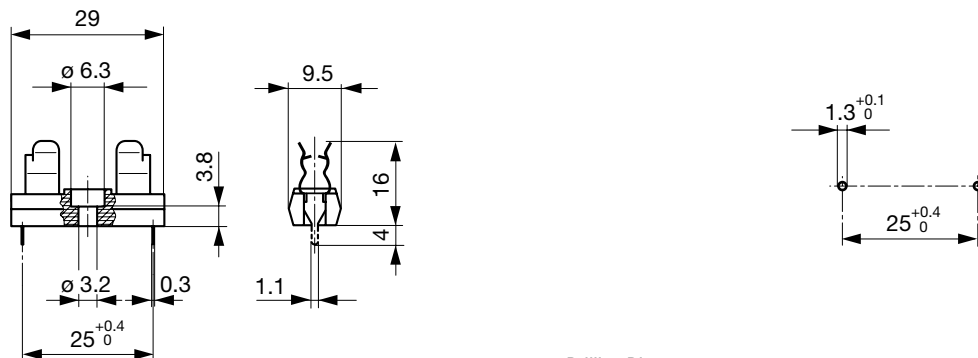
**References**[General Product Information](#)**Weblinks**[Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	5 x 20 mm
Mounting	PCB
Fastening	Screw or Rivet
Terminal	Solder THT
Rated Voltage	250VAC
Rated Current	10A (UL/CSA)
Rated Power Acceptance IEC	2.5W / 10A @ Ta 23 °C 2 W / 10 A with cover, see derating curves
Degree of Protection	IP 00
Protection Class	Suitable for appliances with protection class I or II 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	Thermoset, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	2.9 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating, Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

**Dimensions**

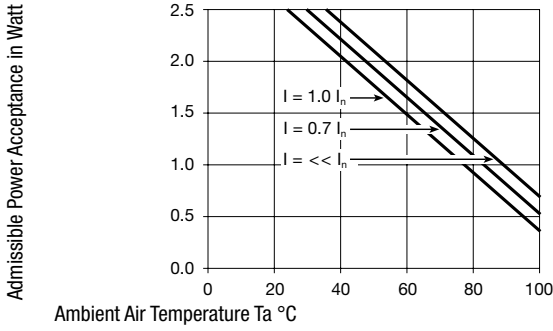
Length 29 mm



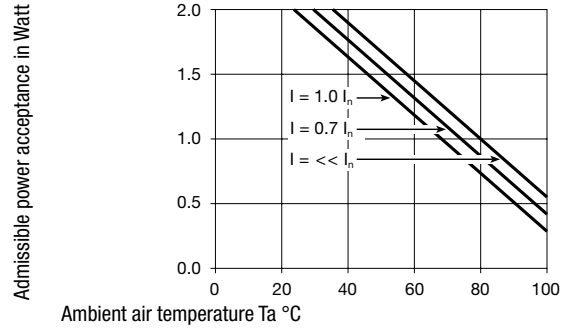
Drilling Diagram

## Derating Curves for Fuseholders

without Cover



with cover



## Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Order Number
●	0031.8001
	0853.9561
	0853.9562

**Packaging Unit** Bulk (100 pcs.)

## Accessory

Description



Cover to OG, UHB, UH  
Cover for Holder OG (Clip) 5x20, OG (Holder) 5x20, UH, UHB



Fuseholder Open Design, 5 x 20 mm, Solder, Cover



250 VAC · 3.2W/10A · 10A (UL/CSA)



**Description**

- Optional covers, see accessories

**Standards**

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

**Approvals**

- UL File Number: E39328

**References**

[General Product Information](#)

**Weblinks**

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

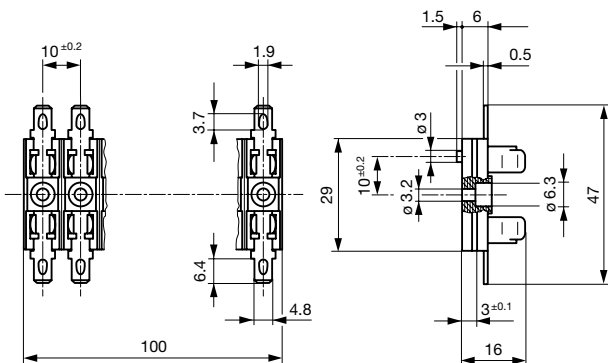
**Technical Data**

Fuse-Link	5 x 20 mm
Mounting	Screw
Fastening	Screw or Rivet
Terminal	Solder
Rated Voltage	250VAC
Rated Current	10A (UL/CSA)
Rated Power Acceptance IEC	3.2W / 10A @ Ta 23 °C 2.5 W / 10 A with cover, see derating curves
Degree of Protection	IP 00
Protection Class	Suitable for appliances with protection class I or II 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	Thermoset, black, UL 94V-0
Material: Terminals	Nickel-Silver
Unit Weight (Socket/Cap)	3.62 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating, Approvals

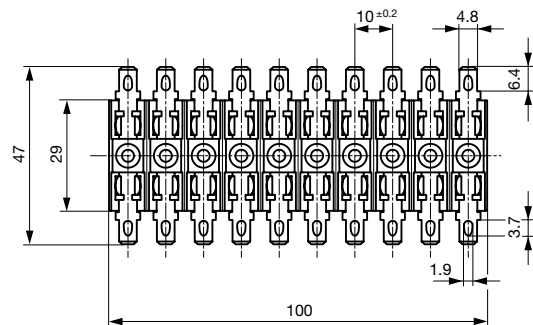
Soldering Methods	Wave
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3kV between L-N (50Hz; 1 min)
Impulse Withstand Voltage	> 4kV between L-N
Insulation Resistance	> 10MΩ between L-N (500VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

**Dimensions**

Length |-----| 47 mm



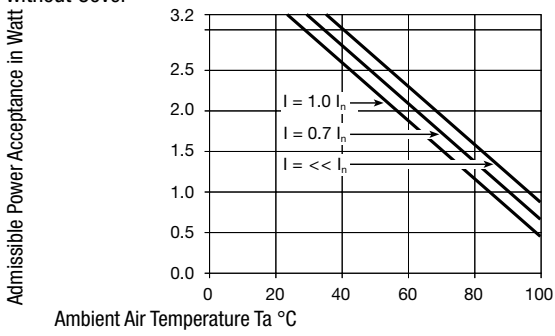
Variant 0031.5001



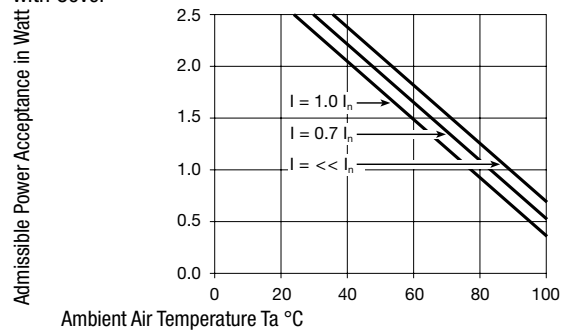
Variant 0031.5010

### Derating Curves for Fuseholders

without Cover



with Cover



### Variants

Holder	Strip	Order Number
●		0031.5001
	●	0031.5010
		0853.9561
		0853.9562

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

### Packaging Unit

Bulk (100 pcs.)

### Accessory

#### Description



Cover to OG, UHB, UH  
 Cover for Holder OG (Clip) 5x20, OG (Halter) 5x20, UH, UHB

Fuseholder Open Design, 5 x 20 mm, Solder, transparent, Cover



250 VAC · 3.2W/4A · 6.3A (UL/CSA)

**Description**

- Screw or rivet fastening
- Solder terminals

**Standards**

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

**Approvals**

- UL File Number: E39328


**References**

General Product Information

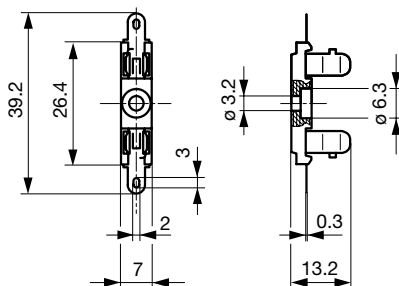
**Weblinks**

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

**Technical Data**

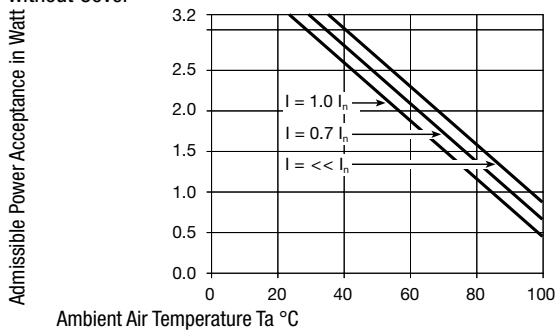
Fuse-Link	5 x 20mm
Mounting	Screw
Fastening	Screw or Rivet
Terminal	Solder
Rated Voltage	250VAC
Rated Current	6.3A (UL/CSA)
Rated Power Acceptance IEC	3.2W / 4A @ Ta 23°C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 00
Protection Class	Suitable for appliances with protection class I or II 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	Thermoplastic, Nature, UL 94V-1
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	1.5 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	 Voltage Rating, Current Rating, Approvals

Soldering Methods	Wave
Solderability	350°C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350°C / 10sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 10mΩ at 20 mV
Dielectric Strength	> 3kV between L-N (50Hz; 1 min)
Impulse Withstand Voltage	> 4kV between L-N
Insulation Resistance	> 10MΩ between L-N (500VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

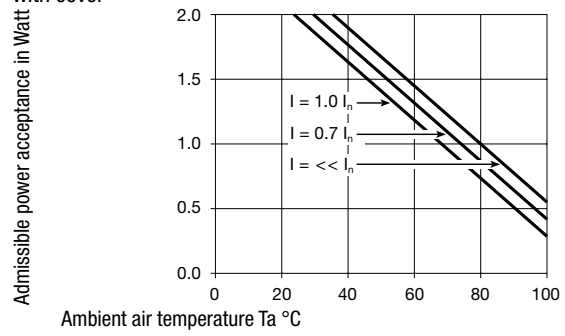
**Dimensions**Length  39.2 mm

### Derating Curves for Fuseholders

without Cover



with cover



### Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Order Number
●	0031.5101
	0853.9561
	0853.9562

**Packaging Unit** Bulk (100 pcs.)

### Accessory

Description



Cover to OG, UHB, UH  
 Cover for Holder OG (Clip) 5x20, OG (Halter) 5x20, UH, UHB

Fuseholder Open Design, 6.3 x 32 mm, THT



250 VAC · 2.5W/10A · 16A (UL)



**Description**

- Through hole mounting

**Approvals**

- UL File Number: E39328

**References**

[General Product Information](#)

**Weblinks**

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

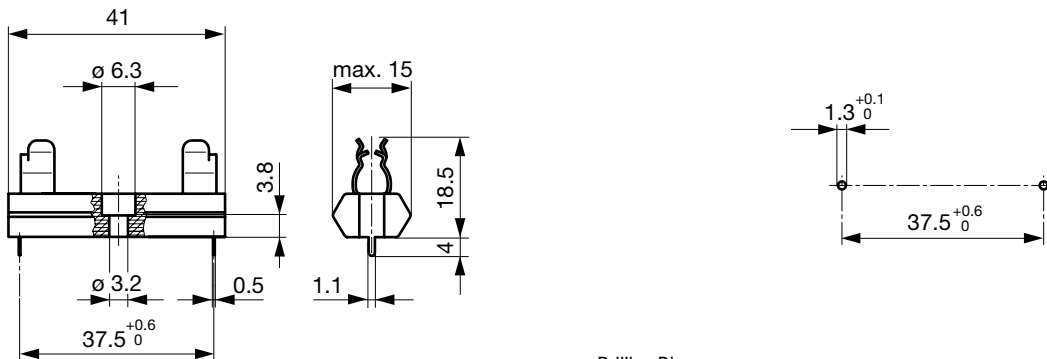
**Technical Data**

Fuse-Link	6.3 x 32mm
Mounting	PCB
Fastening	Screw or Rivet
Terminal	Solder THT
Rated Voltage	250VAC
Rated Current	16A (UL)
Rated Power Acceptance IEC	2.5W / 10A @ Ta 23°C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 00
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40°C to 85°C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	7.23 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating, Approvals

Soldering Methods	Wave
Solderability	235°C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260°C / 10sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5mΩ at 20 mV
Dielectric Strength	> 3kV between L-N (50Hz; 1 min)
Impulse Withstand Voltage	> 4kV between L-N
Insulation Resistance	> 10MΩ between L-N (500VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

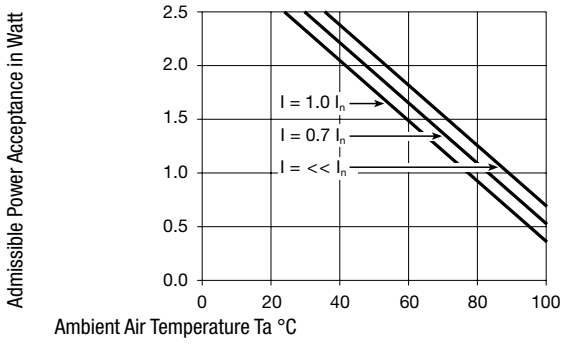
**Dimensions**

Length |-----| 41 mm



Drilling Diagram

## Derating Curves for Fuseholders



### Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Order Number
●	0031.8002
	0853.9561
	0853.9562

**Packaging Unit** Bulk (100 pcs.)

Fuseholder Open Design, 6.3 x 32 mm, Solder



250 VAC · 3.2W/10A · 16A (UL)



**Description**

- Screw or rivet fastening

**Standards**

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

**Approvals**

- UL File Number: E39328

**References**

[General Product Information](#)

**Weblinks**

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

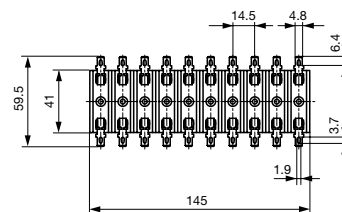
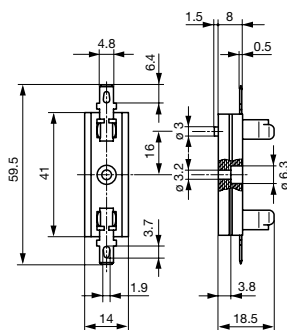
**Technical Data**

Fuse-Link	6.3 x 32 mm
Mounting	Screw
Fastening	Screw or Rivet
Terminal	Solder
Rated Voltage	250VAC
Rated Current	16A (UL)
Rated Power Acceptance IEC	3.2W / 10A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 00
Protection Class	Suitable for appliances with protection class I or II 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	Thermoset, black, UL 94V-0
Material: Terminals	Nickel-Silver
Unit Weight (Socket/Cap)	7.27 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating, Approvals

Soldering Methods	Wave
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3kV between L-N (50Hz; 1 min)
Impulse Withstand Voltage	> 4kV between L-N
Insulation Resistance	> 10MΩ between L-N (500VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

**Dimensions**

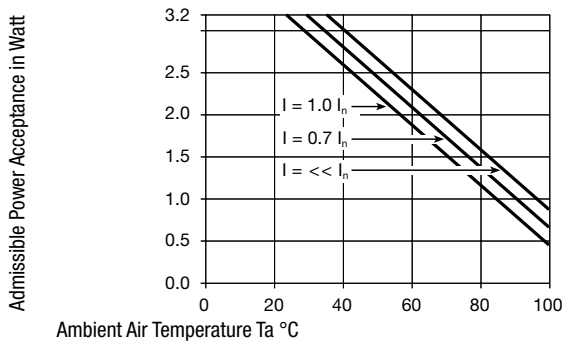
Length 59.5 mm



Variant 0031.6001

Variant 0031.6010

## Derating Curves for Fuseholders



### Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Strip	Order Number
●		0031.6001
	●	0031.6010

**Packaging Unit** Bulk (100 pcs.)



Fuseholder Open Design, 6.3 x 32 mm, Screw Clamp, grey



250 VAC · 3.5W/16A

GAM  
T1 NNO**Description**

- Screw or rivet fastening

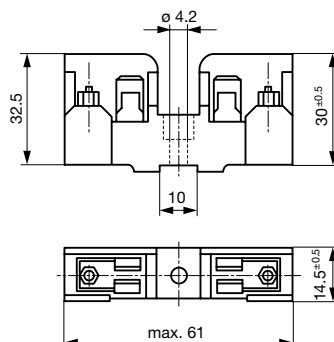
**References**[General Product Information](#)**Weblinks**[Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	6.3 x 32 mm
Mounting	Screw
Fastening	Screw or Rivet
Terminal	Screw Clamp
Rated Voltage	250VAC
Rated Current	16A
Rated Power Acceptance IEC	3.5W / 16A @ Ta 23°C
Degree of Protection	IP 00
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40°C to 85°C
Climatic Category	40/085/56 acc. to IEC 60068-1
Material: Socket	Thermoset, Light-Grey
Unit Weight (Socket/Cap)	40 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating, HB5

Soldering Methods	Wave
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-619 Phase D

**Dimensions**

Length 61 mm

**Variants**[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Colour Holder	Order Number
●	Light-Grey	7083.2110

**Packaging Unit**

Bulk (100 pcs.)

Fuseholder Open Design, 6.3 x 32 mm, Screw Clamp



250 VAC · 3.5W/16A

GAM  
T1 NNO**Description**

- Screw or rivet fastening

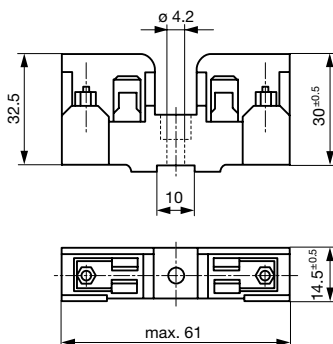
**References**[General Product Information](#)**Weblinks**[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	6.3 x 32mm
Mounting	Screw
Fastening	Screw or Rivet
Terminal	Screw Clamp
Rated Voltage	250 VAC
Rated Current	16A
Rated Power Acceptance IEC	3.5W / 16A @ Ta 23°C
Degree of Protection	IP 00
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40°C to 85°C
Climatic Category	40/085/56 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Unit Weight (Socket/Cap)	40 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating, HB5

Soldering Methods	Wave
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-619 Phase D

**Dimensions**

Length |-----| 61 mm

**Variants**[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Colour Holder	Order Number
●	black	7083.1110

**Packaging Unit**

Bulk (100 pcs.)

Fuseholder Open Design, 5 x 20 / 6.3 x 32 mm, THT, IEC: 500 VAC, UL/CSA: 250 VAC, Cover, IEC 60335-1



500 VAC · 4 W/10 A (VDE) · 250 VAC · 16 A (UL/

**Description**

- Fuseholder for 500 VAC applications
- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order number: 0031.8231.15
- Fuse block accepts 5x20 or 6.3x32 fuse-links

**Standards**

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

**Approvals**

- VDE License Number: 40008993 (250V) + 40018378 (500V)
- UL File Number: E39328

**Applications**

- Equipment with three-phase supply (400 VAC)
- Industrial electronic


**References**

[General Product Information](#)

**Weblinks**

[Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check](#)

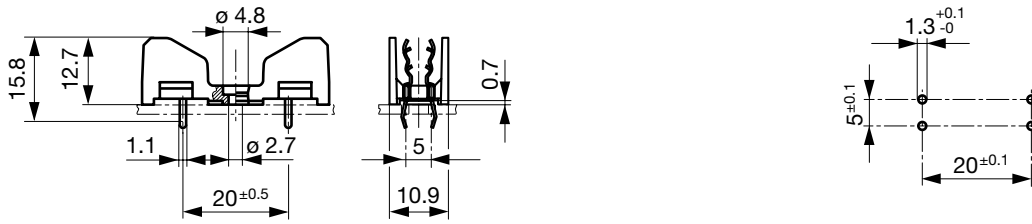
**Technical Data**

Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	PCB
Fastening	Screw or Rivet
Terminal	Solder THT
Rated Voltage	500 VAC (VDE), 250 VAC (UL/CSA)
Rated Current	10 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 00 / IP 20
Protection Class	Suitable for appliances with protection class I or II 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	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	3.7 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Power Acc./Current Rating, Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	2 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc

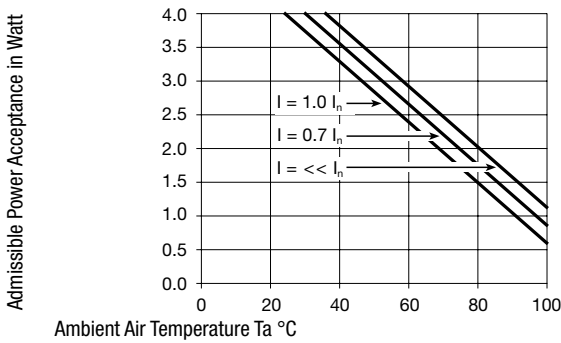
### Dimensions

Length |-----| 35.4 mm



Drilling holes

### Derating Curves for Fuseholders



### Variants

Holder	Material	Remark	Order Number
●	Thermoplastic	-	0031.8231
	-	-	0853.0917

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

**Packaging Unit** Bulk 178 x 91 x 71 mm (100 pcs.)

### Accessory

Description



Cover OGD, OGD-SMD  
Cover for Holder OGD, OGD-SMD

Fuseholder Open Design, 5 x 20 / 6.3 x 32 mm, SMD, IEC: 500 VAC, UL/CSA: 250 VAC, Cover, IEC 60355-

1



500 VAC · 4 W/10 A (VDE) · 250 VAC · 16 A (UL/

**Description**

- Fuseholder for 500 VAC applications
- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order number: 0031.8242 / 0031.8242.F1
- Fuse block accepts 5x20 or 6.3x32 fuse-links

**Standards**

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

**Approvals**

- VDE License Number: 40008993 (250V) + 40018378 (500V)
- UL File Number: E39328

**Applications**

- Equipment with three-phase supply (400 VAC)
- Industrial electronic


**References**

[General Product Information](#)  
[Packaging Details](#)

**Weblinks**

[Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check](#)

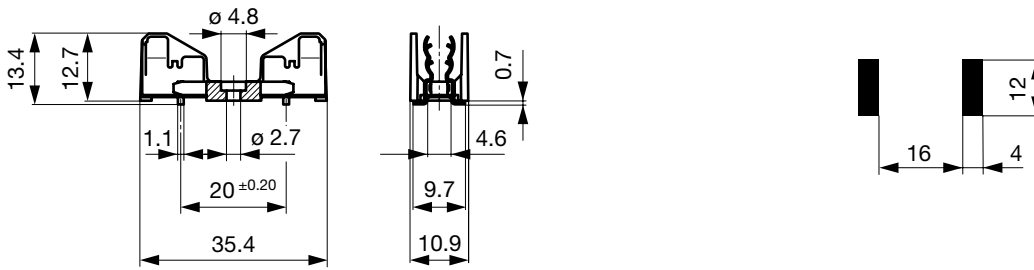
**Technical Data**

Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	PCB
Fastening	Screw or Rivet
Terminal	Solder SMT
Rated Voltage	500 VAC (VDE), 250 VAC (UL/CSA)
Rated Current	10 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 00 / IP 20
Protection Class	Suitable for appliances with protection class I or II 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	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	3.7 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Power Acc./Current Rating, Approvals

Soldering Methods	Reflow (see variants)
Solderability	245 °C / 3 sec acc. to IEC 60068-2-58, Test Id
Resistance to Soldering Heat	240 - 260 °C / 20 - 40 sec acc. to IPC/JEDEC J-STD-020D
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	2 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc

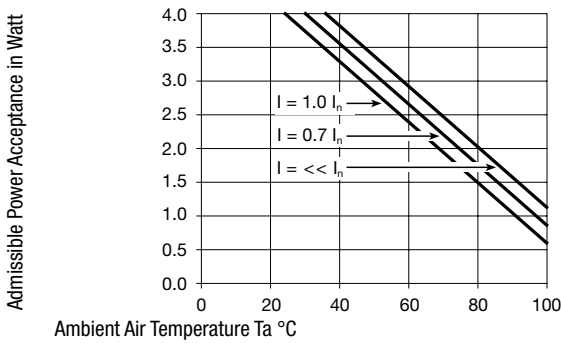
## Dimensions

Length |-----| 35.4 mm



Solder pads

## Derating Curves for Fuseholders



## Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Material	Reflow Condition	Remark	Order Number
●	Thermoplastic	(acc. to JEDEC J-STD-020C), T <sub>p</sub> =240 +0/-5 °C, t <sub>p</sub> = 20-40 s	-	0031.8241
-	-	Reflow	-	0853.0917

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

## Packaging Unit

Bulk 178 x 91 x 71 mm (100 pcs.)  
xxxx.xxxx.F1 Bar Packaging (20x50 pcs.)

## Accessory

### Description



Cover OGD, OGD-SMD  
Cover for Holder OGD, OGD-SMD

Fuseholder Open Design, 10.3 x 38 mm, Screw Clamp



500 VAC · 3.6W/30A



NNO

**Description**

- Screw or rivet fastening

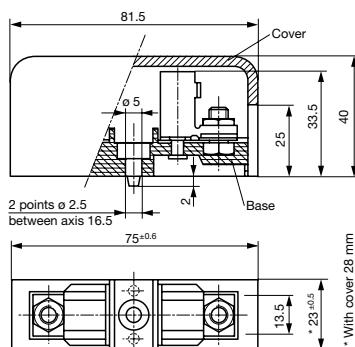
**References**[General Product Information](#)**Weblinks**[Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	10.3 x 38mm
Mounting	Screw
Fastening	Screw or Rivet
Terminal	Screw Clamp
Rated Voltage	500VAC
Rated Current	30A
Rated Power Acceptance IEC	3.6W / 30A @ Ta 23 °C
Degree of Protection	IP 00 / IP 20
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40°C to 85 °C
Climatic Category	40/085/56 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Unit Weight (Socket/Cap)	60 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating, HB7

Soldering Methods	Wave
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11

**Dimensions**

Length | 81.5 mm

**Variants**[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Degree of Protection	Reference	Order Number
●	-	23351B	7082.1110
●	IP 20	23372	7170.0480

**Packaging Unit** Bulk (100 pcs.)

Fuseholder Open Design, 14.3 x 51 mm, Screw Clamp



500 VAC · 4 W/40 A

GAM  
T1 NNO**Description**

- Screw or rivet fastening
- With lock and safety calibration

**References**

General Product Information

**Weblinks**

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

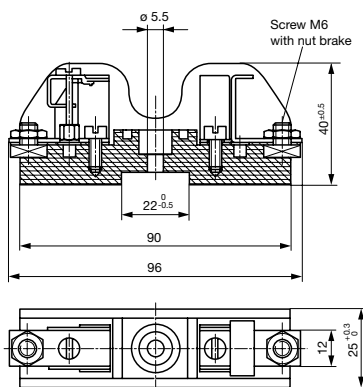
**Technical Data**

Fuse-Link	14.3 x 51 mm
Mounting	Screw
Fastening	Screw or Rivet
Terminal	Screw Clamp
Rated Voltage	500 VAC
Rated Current	40 A
Rated Power Acceptance IEC	4 W / 40 A @ Ta 23 °C
Degree of Protection	IP 00
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset
Unit Weight (Socket/Cap)	94 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating, HB8

Soldering Methods	Wave
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-619 Phase D

**Dimensions**

Length |-----| 90 mm

**Variants**

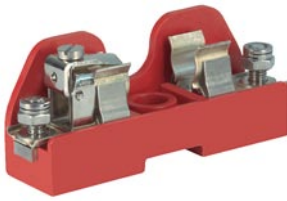
Distributor-Stock-Check | SCHURTER-Stock-Check | e-Store

Holder	Colour Holder	Order Number
●	black	7085.1910
●	Grey	7085.2910
●	red	7085.3910

**Packaging Unit** Bulk (100 pcs.)



Fuseholder Open Design, 14.3 x 51 mm, Screw Clamp, red



380 VAC/DC · 5 W / 50 A



NNO

**Description**

- Screw or rivet fastening
- With lock and safety calibration
- Model following a navy specifications

**References**

General Product Information

**Weblinks**

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

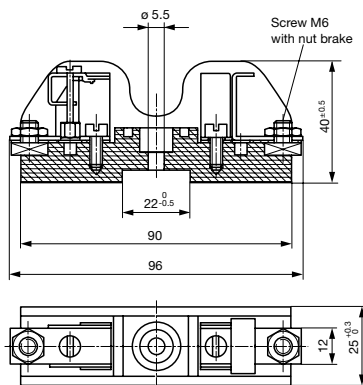
**Technical Data**

Fuse-Link	14.3 x 51 mm
Mounting	Screw
Fastening	Screw or Rivet
Terminal	Screw Clamp
Rated Voltage	380VAC/DC
Rated Current	50A
Rated Power Acceptance IEC	5 W / 50 A @ Ta 23 °C
Degree of Protection	IP 00
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-5 °C to 70 °C
Climatic Category	5/070/21 acc. to IEC 60068-1
Material: Socket	Thermoset, red
Unit Weight (Socket/Cap)	102 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating

Soldering Methods	Wave
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-610 Phase 1-2-3-5

**Dimensions**

Length |-----| 96 mm

**Variants**

Distributor-Stock-Check | SCHURTER-Stock-Check | e-Store

Holder	Colour Holder	Order Number
●	red	7085.4910

**Packaging Unit** Bulk (100 pcs.)

Clip, 5 x 20 mm, UR, Cover



Variant 2

250 VAC · 6.3 A (UL)



### Description

- Clip-material: bronze or brass
- Optional covers, see accessories

### Standards

- UL 512

### Approvals

- UL File Number: E39328

### References

[General Product Information](#)

### Weblinks

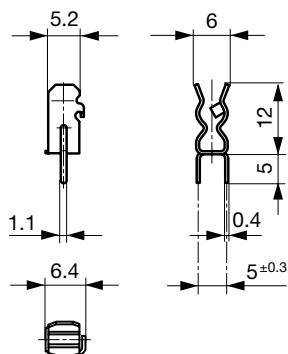
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

### Technical Data

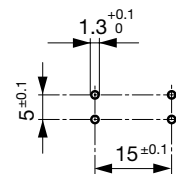
Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	6.3 A (UL)
Degree of Protection	IP 00
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Terminals	see variants
Unit Weight (Socket/Cap)	0.55 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A

### Dimensions



Variants 0751.0052 and 0751.0062



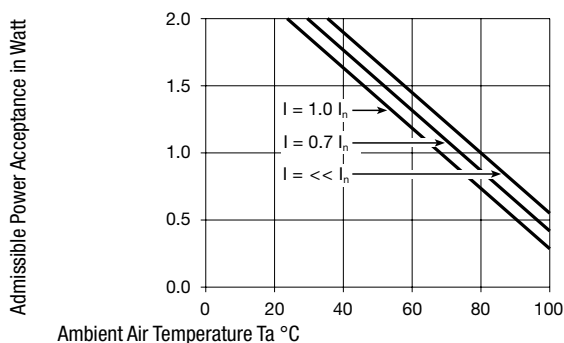
Drilling holes variants 0751.0052 and 0751.0062



Variants 2 0751.0110 and 0751.0231

Drilling Diagram variants 2 0751.0110 and 0751.0231

### Derating Curves for Fuseholders



### Variants

Clip	Terminal	Material: Terminals	Order Number
●	Straight	Tin-Plated Bronze	● 0751.0052
●	Straight	Tin-Plated Brass	0751.0062
-	-	-	0853.9561
-	-	-	0853.9562
●	Kicked	Tin-Plated Brass	0751.0110
●	Kicked	Silver-Plated	0751.0231

Covers only for 0751.0052 and 0751.0062

**Packaging Unit** Bulk (1000 pcs.)

### Accessory

Description



Cover to OG, UHB, UH  
Cover for Holder OG (Clip) 5x20, OG (Halter) 5x20, UH, UHB

Clip, 5 x 20 mm, Version 1



250 VAC



### Description

- Through hole mounting

### References

General Product Information

### Weblinks

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

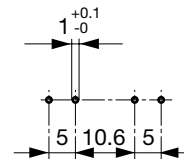
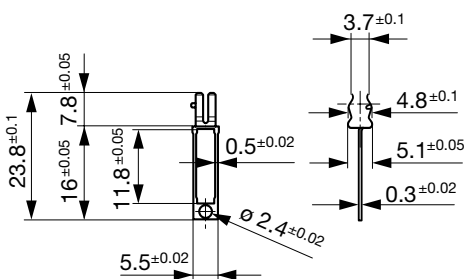
### Technical Data

Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	6.3 A
Degree of Protection	IP 00
Admissible Ambient Air Temp.	-40 °C to 90 °C
Climatic Category	40/090/21 acc. to IEC 60068-1
Material: Terminals	see variants
Unit Weight (Socket/Cap)	0.32 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	none

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 10 mΩ at 20 mV

### Dimensions

Length 26.5 mm



Drilling Diagram

### Variants

Clip	Terminal	Material: Terminals	Order Number
●	Straight	Silver-Plated Bronze	0752.1242
●	Straight	Nickel-Plated Brass	0752.1243

Distributor-Stock-Check | SCHURTER-Stock-Check | e-Store

### Packaging Unit

Taped (1000 pcs.)

Clip, 5 x 20 mm, Version 2



250 VAC

**Description**

- Through hole mounting

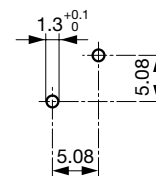
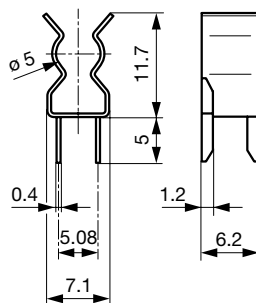
**References**[General Product Information](#)**Weblinks**[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	6.3 A
Degree of Protection	IP 00
Material: Terminals	see variants
Unit Weight (Socket/Cap)	0.7 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	none

Soldering Methods	Wave
Solderability	235°C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260°C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A

**Dimensions**

Length 7.1 mm



Drilling holes variant 7141.2001

**Packaging Unit**

Bulk (100 pcs.)

Clip, 5 x 20 mm, Version 3



250 VAC

**Description**

- Through hole mounting

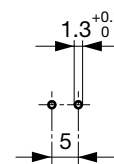
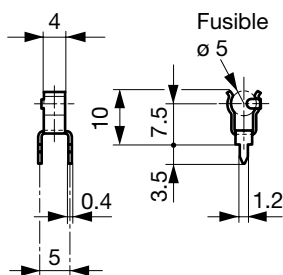
**References**[General Product Information](#)**Weblinks**[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	5 x 20mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	6.3A
Degree of Protection	IP 00
Material: Terminals	see variants
Unit Weight (Socket/Cap)	0.37 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	none

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A

**Dimensions**

Length 5.8 mm

**Drilling Diagrams****Variants**[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Clip	Terminal	Material: Terminals	Order Number
•	Straight	Tin-Plated Bronze	7181.5001

**Packaging Unit**

Bulk (100 pcs.)

Clip, 6.3 x 32 mm



250 VAC

**Description**

- Through hole mounting

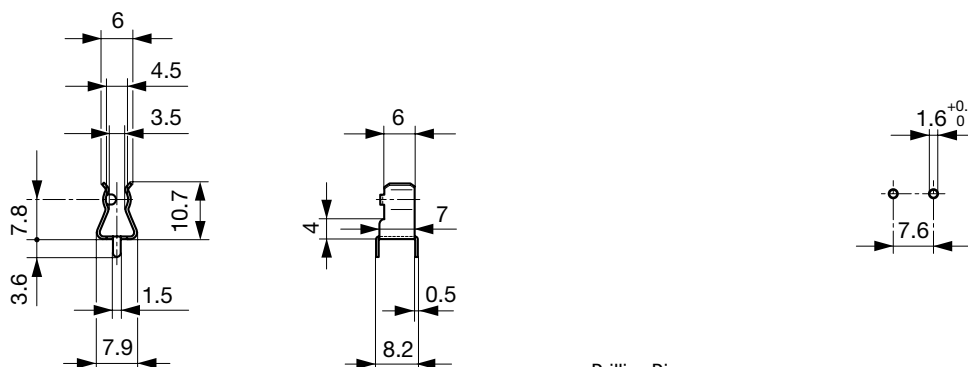
**References**[General Product Information](#)**Weblinks**[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	6.3 x 32 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	10 A
Degree of Protection	IP 00
Material: Terminals	see variants
Unit Weight (Socket/Cap)	0.9 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	none

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A

**Dimensions**

Length 8 mm



Drilling Diagrams

**Variants**[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Clip	Terminal	Material: Terminals	Order Number
●	Straight	Tin-Plated Bronze	7181.5003

**Packaging Unit**

Bulk (100 pcs.)

Clip, 5 x 20 / 6.3 x 32 mm, UR



Variant 2

500 VAC · 2.5W/10A · 16A (UL)



### Description

- Through hole mounting
- Clip-material: bronze or brass
- Fuse block accepts 5x20 or 6.3x32 fuse-links

### Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

### Approvals

- UL File Number: E39328

### References

[General Product Information](#)

### Weblinks

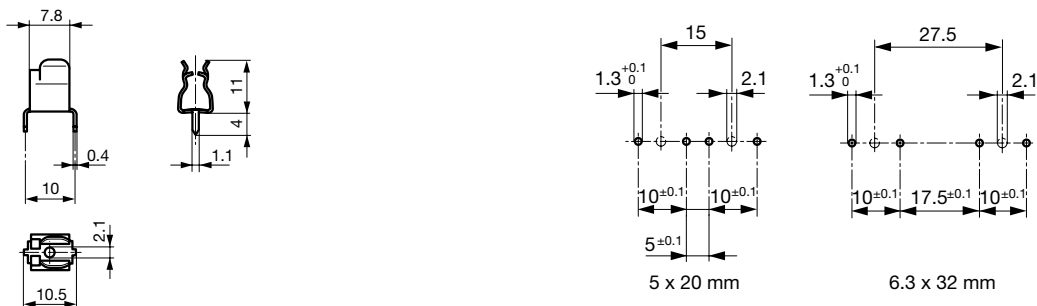
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

### Technical Data

Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	500 VAC
Rated Current	16 A (UL)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23°C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 00
Admissible Ambient Air Temp.	-40°C to 85°C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Terminals	see variants
Unit Weight (Socket/Cap)	0.98 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	Approvals

Soldering Methods	Wave
Solderability	235°C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260°C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 2.5 mΩ at 20 mV

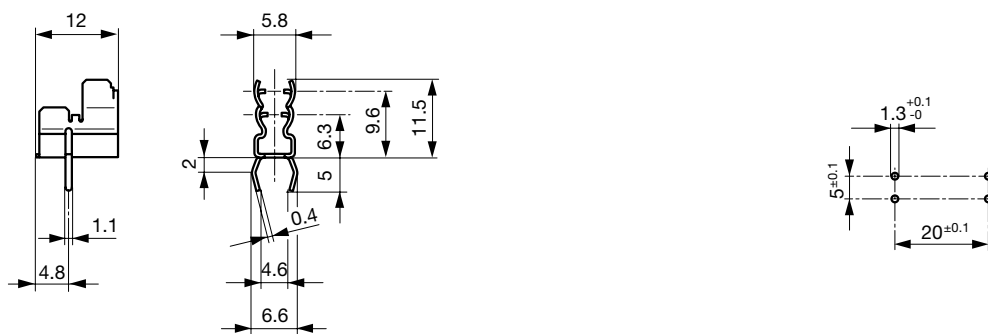
### Dimensions



Variant 0751.0056

Drilling holes variant 0751.0056

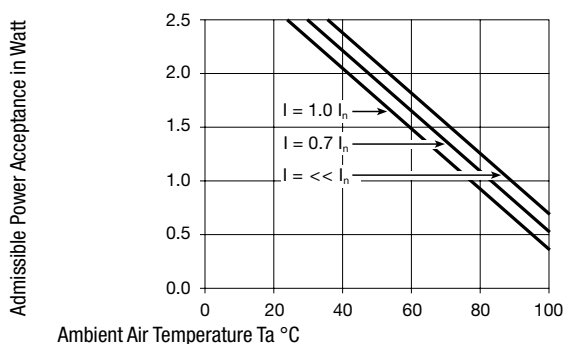





Variant 2 0751.0099, 0751.0100, 0751.0141 and 0751.0142

Drilling diagram variant 2 0751.0099, 0751.0100, 0751.0141 and 0751.0142

### Derating Curves for Fuseholders



### Variants

Clip	Terminal	Material: Terminals		Order Number
●	Kicked	Tin-Plated Bronze	●	0751.0099
●	Kicked	Tin-Plated Brass		0751.0100
●	Straight	Tin-Plated Bronze	●	0751.0141
●	Straight	Tin-Plated Brass		0751.0142
●	Straight	Tin-Plated Bronze	●	0751.0056

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

**Packaging Unit** Bulk (1000 pcs.)

Clip, 5 x 20 mm, 10.3 x 38 mm, UR



20 A (UL)



**Description**

- Through hole mounting

**Standards**

- UL 512

**Approvals**

- UL File Number: E41738

**References**

[General Product Information](#)

**Weblinks**

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

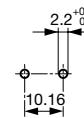
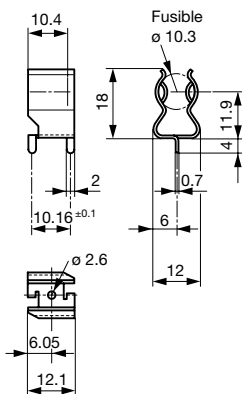
**Technical Data**

Fuse-Link	10.3 x 38 mm
Mounting	PCB
Terminal	Solder THT
Rated Current	20 A (UL)
Degree of Protection	IP 00
Material: Terminals	see variants
Unit Weight (Socket/Cap)	4.1 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	Type, Approvals

Soldering Methods	Wave
Solderability	235°C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260°C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A

**Dimensions**

Length 12 mm



Drilling Diagram

**Variants**

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Clip	Terminal	Material: Terminals	Order Number
●	Straight	Tin-Plated Bronze	7170.0470

**Packaging Unit**

Bulk (100 pcs.)

Fuseholder Open Design, Holder for MSB and 172876, SMD



125 VAC/DC · 0.9 W (UL/CSA)

**Standards**

- UL 512
- CSA C22.2 no. 39

**Approvals**

- UL File Number: E41738

**References**

General Product Information  
 Packaging Details  
 Sicherungshalter zu MSB; 172876

**Weblinks**

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

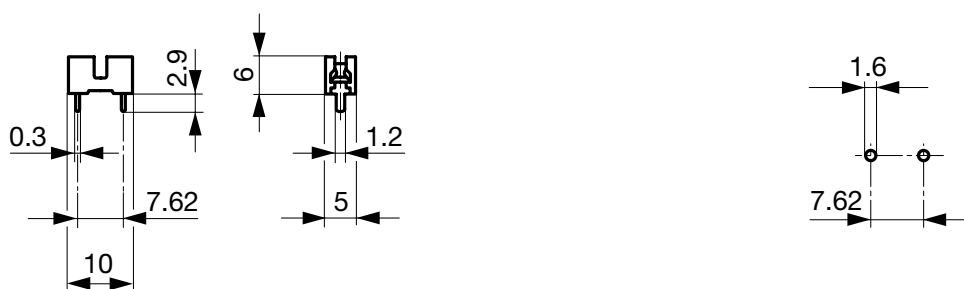
**Technical Data**

Fuse-Link	2 x 7 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	125 VAC/DC
Rated Power Acceptance IEC	0.9 W @ Ta 23 °C
Degree of Protection	IP 00
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Bronze
Unit Weight (Socket/Cap)	0.45 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	☑, Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A

**Dimensions**

Length 10 mm



Drilling Diagram

**Variants**

Holder	Order Number
●	7090.9020.xx

Distributor-Stock-Check | SCHURTER-Stock-Check | e-Store

**Packaging Unit**

- .xx = .03 Plastic Bag (100 pcs.)
- .xx = .55 Blister Tape (500 pcs.)

Fuseholder Open Design, Holder for MSB and 172876, THT



125 VAC/DC · 0.9W (UL/CSA)

**Description**

- Surface Mount Device


**Standards**

- UL 512  
- CSA C22.2 no. 39

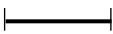
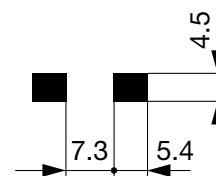
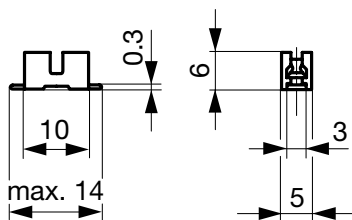
**Approvals**

- UL File Number: E41738

**References**[General Product Information](#)[Packaging Details](#)Sicherungshalter zu [MSB](#); [172876](#)**Weblinks**
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)
**Technical Data**

Fuse-Link	2 x 7 mm
Mounting	PCB
Terminal	Solder SMT
Rated Voltage	125 VAC/DC
Rated Power Acceptance IEC	0.9W @ Ta 23 °C
Degree of Protection	IP 00
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Bronze
Unit Weight (Socket/Cap)	0.45 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Approvals

Soldering Methods	Reflow
Solderability	245 °C / 3 sec acc. to IEC 60068-2-20, Test Td
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Td

**Dimensions**Length  14 mm

Solder pads

**Variants**
[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Order Number
•	7090.9010.xx

**Packaging Unit**

.xx = .03 Plastic Bag (100 pcs.)  
.xx = .55 Blister Tape (500 pcs.)

Fuseholder Open Design, Holder for OMF 63, OMF 125 and OMT 125, SMD



125 VAC · 5 A (UL/CSA)

**Description**

- Suitable for SMD fuse-links OMF 63/OMF 125/OMT 125


**Standards**

- UL 512 and CSA C22.2 no. 39

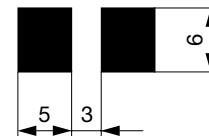
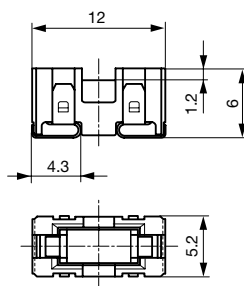
**Approvals**

- UL File Number: E39328

**References**[General Product Information](#)[Packaging Details](#)Sicherungshalter zu [OMF 125](#); [OMF 63](#); [OMT 125](#)**Weblinks**[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	OMx 63/125 Fuse
Mounting	PCB
Terminal	Solder SMT
Rated Voltage	125VAC
Rated Current	5A (UL/CSA)
Degree of Protection	IP 00
Admissible Ambient Air Temp.	-40°C to 85°C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, Beige, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	3.9 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	 , Approvals

Soldering Methods	Reflow
Solderability	245°C / 3 sec acc. to IEC 60068-2-20, Test Td
Resistance to Soldering Heat	260°C / 10sec acc. to IEC 60068-2-20, Test Td
Dielectric Strength	> 3kV between L-N (50Hz; 1 min)
Impulse Withstand Voltage	> 4kV between L-N
Insulation Resistance	> 10MΩ between L-N (500VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

**Dimensions**Length  12 mm

Solder pads

**Packaging Unit**

- .xx = .11 Plastic Bag (100 pcs.)
- .xx = .22 Blister Tape 33 cm Reel (750 pcs.)
- .xx = .23 Blister Tape 33 cm Reel (1500 pcs.)

Fuseholder Open Design, Holder for MSF 125, vertical, THT



125 VAC · 5 A (UL/CSA)



### Description

- Through hole mounting

### Standards

- UL 512  
- CSA C22.2 no. 39

### Approvals

- UL File Number: E39328

### References

General Product Information  
Sicherungshalter zu MSF 125

### Weblinks

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

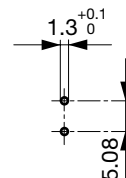
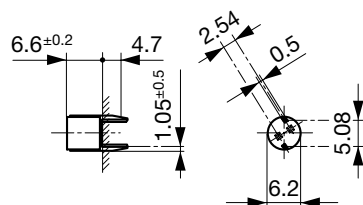
### Technical Data

Fuse-Link	Microfuse 125 V
Mounting	PCB
Terminal	Solder THT
Rated Voltage	125 VAC
Rated Current	5 A (UL/CSA)
Degree of Protection	IP 40
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Silver-Plated Brass
Unit Weight (Socket/Cap)	0.37 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

### Dimensions

Length 8.3 mm



Drilling Diagram

### Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Order Number
●	0031.7501

### Packaging Unit

Plastic Bag (100 pcs.)

Fuseholder Open Design, Holder for MSF 125, horizontal, THT



125 VAC · 5 A (UL/CSA)

**Description**

- Through hole mounting
- Horizontal mount

**Standards**

- UL 512
- CSA C22.2 no. 39

**Approvals**

- UL File Number: E39328

**References**

General Product Information  
Sicherungshalter zu MSF 125

**Weblinks**

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

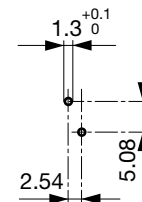
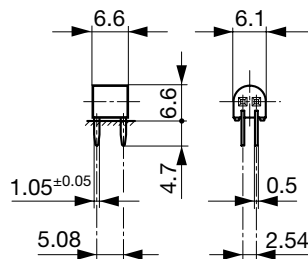
**Technical Data**

Fuse-Link	Microfuse 125 V
Mounting	PCB
Terminal	Solder THT
Rated Voltage	125 VAC
Rated Current	5 A (UL/CSA)
Degree of Protection	IP 40
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Silver-Plated Brass
Unit Weight (Socket/Cap)	0.34 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

**Dimensions**

Length 11.3 mm

**Drilling Diagram****Variants**

Holder	Order Number
●	0031.7505

Distributor-Stock-Check | SCHURTER-Stock-Check | e-Store

**Packaging Unit** Plastic Bag (100 pcs.)

Fuseholder Open Design, Holder for MSx 250, THT



250 VAC · 6.3 A (UL/CSA)



### Description

- Through hole mounting

### Standards

- UL 512  
- CSA C22.2 no. 39

### References

General Product Information

Sicherungshalter zu [MSF 250](#); [MST 250](#); [MSTU 250](#); [MSU 250](#); [MXT 250](#)

### Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

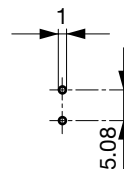
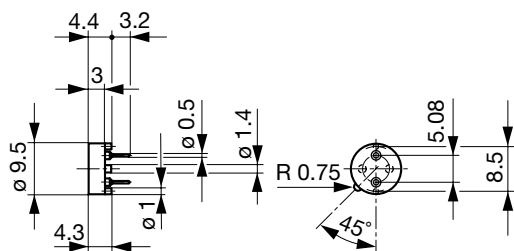
### Technical Data

Fuse-Link	Microfuse 250 V
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	6.3A (UL/CSA)
Degree of Protection	IP 30
Admissible Ambient Air Temp.	-40°C to 85°C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, Beige, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	0.37 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	Approvals

Soldering Methods	Wave
Solderability	235°C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260°C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 7 mΩ at 20 mV
Dielectric Strength	> 3kV between L-N (50Hz; 1 min)
Impulse Withstand Voltage	> 4kV between L-N
Insulation Resistance	> 10MΩ between L-N (500VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

### Dimensions

Length 7.6 mm



Drilling Diagram

### Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Order Number
●	0031.7601

### Packaging Unit

Plastic box (100 pcs.)





# accessories types

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Cover for Holder OGD, OGD-SMD



4W/10A



## Description

- Fits to type: [OGD](#); [OGD-SMD](#)

## Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

## Approvals

- VDE License Number: 4008993
- UL File Number: E39328

## References

[General Product Information](#)

## Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

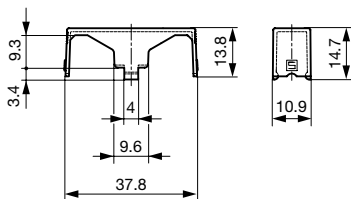
## Technical Data

Fuse-Link	6.3 x 32 mm
Rated Power Acceptance IEC	4W / 10A @ Ta 23 °C
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

Soldering Methods	Reflow, Wave
Solderability	245 °C / 3 sec acc. to IEC 60068-2-20, Test Td
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Td

## Dimensions

Length  37.8 mm



## Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Reflow Condition	Order Number
Reflow	0853.0917

## Packaging Unit

Plastic Bag (100 pcs.)

Cover for Holder OGN, OGN-SMD



4 W/10 A

**Description**- Fits to type: [OGN](#); [OGN-SMD](#)**Standards**


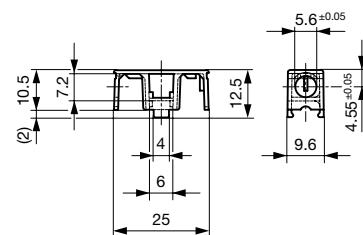
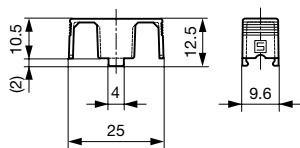
- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

**Approvals**

- VDE License Number: 4001042
- UL File Number: E39328

**References**[General Product Information](#)**Weblinks**
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)
**Technical Data**

Fuse-Link	5 x 20 mm
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C 2.5 W / 10 A with transparent cover, see derating curves
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

**Dimensions**Length  25 mm

Variants 0853.0551 and 0853.0571

Variant 0853.0576

**Variants**

Reflow Condition	Order Number
-	0853.0551
-	0853.0571
-	0853.0576

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)
**Packaging Unit**

Plastic Bag (100 pcs.)

Cover for Holder OG (Clip) 5x20, OG (Holder) 5x20, UH, UHB



## Description

- Fits to type: [OG \(Clip\) 5x20](#); [OG \(Holder\) 5x20](#); [UH](#); [UHB](#)

## Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

## References

[General Product Information](#)

## Weblinks

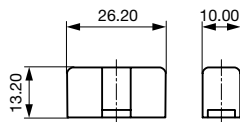
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

## Technical Data

Fuse-Link	5 x 20 mm
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

## Dimensions

Length 26.2 mm



## Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Reflow Condition	Order Number
-	0853.9561
-	0853.9562

## Packaging Unit

Plastic Bag (100 pcs.)



500 VAC · 4 W/10 A (VDE) · 250 VAC · 20 A (UL/



### Description

- Fits to type: [FEC](#)

### Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

### Approvals

- VDE License Number: 137910 UG
- UL File Number: E39328

### References

[General Product Information](#)

### Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

### Technical Data

Fuse-Link	5 x 20 or 6.3 x 32 mm
Rated Voltage	500 VAC (VDE), 250 VAC (UL/CSA)
Rated Current	10 A (VDE), 20 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
Material: Cap	Thermoset, black, UL 94V-0
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

### Variants

Cap	Fuse-Link	Degree of Protection	Order Number
Slot Knob	5 x 20mm	IP 40	0031.1611
Slot Knob	6.3 x 32mm	IP 40	0031.1613
Fingergrip	6.3 x 32mm	IP 40	0031.1616

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

**Packaging Unit** Plastic Bag (100 pcs.)

Caps for Holder FEU (Grip)



250 VAC · 4 W/10 A (VDE) · 20 A (UL/CSA)



## Description

- Fits to type: [FEU \(Grip\)](#)

## Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

## Approvals

- VDE License Number: 134125
- UL File Number: E39328

## References

[General Product Information](#)

## Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

## Technical Data

Fuse-Link	5 x 20 or 6.3 x 32 mm
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 20 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
Material: Cap	Thermoset, black
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

## Variants

Cap	Fuse-Link	Degree of Protection	Order Number
Fingergrip	6.3 x 32 mm	IP 40	0031.1812
Fingergrip	5 x 20 mm	IP 40	0031.1811

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

## Packaging Unit

Plastic Bag (100 pcs.)

Caps to Holder FEU, FEU (Med), FAU, FAC



250 VAC · 4 W/10 A (VDE) · 16 A (UL/CSA)

**Description**- Fits to type: [FAC](#); [FAU](#); [FEU](#); [FEU \(Med\)](#)**Standards**

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

**Approvals**

- VDE License Number: 134125
- UL File Number: E39328

**References**[General Product Information](#)**Weblinks**[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	5 x 20 or 6.3 x 32 mm
Rated Voltage	250VAC
Rated Current	10 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class Protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
Material: Cap	Thermoplastic, UL 94V-0
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

**Variants [nicht konfiguriert]**[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Order	Type	Holder	Clip	Strip	Cap	Fuse-	Panel	Rated	Termi-	Termi-	Pin di-	Termi-	Moun-

**Packaging Unit** Plastic Bag (100 pcs.)

Caps to Holder FUL, FUP, FUA



500 VAC · 4 W/16 A (VDE) · 250 VAC · 30 A (UL/



### Description

- Fits to type: [FUA](#); [FUL](#); [FUP](#)

### Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

### Approvals

- VDE License Number: 40010391
- UL File Number: E39328

### References

[General Product Information](#)

### Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

### Technical Data

Fuse-Link	5 x 20 or 6.3 x 32 mm
Rated Voltage	500 VAC (VDE), 250 VAC (UL/CSA)
Rated Current	16 A (VDE), 30 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 16 A @ Ta 23 °C
	Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
Material: Cap	Thermoset, UL 94V-0
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

### Variants

Cap	Fuse-Link	Degree of Protection	Order Number
Slot Knob	6.3 x 32 mm	IP 40	0031.2321
Slot Knob	5 x 20 mm	IP 40	0031.2323

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

### Packaging Unit

Plastic Bag (25 pcs.)



## Caps to Holder FUL (IP 67)



500 VAC · 4 W/16 A (VDE) · 250 VAC · 30 A (UL/

**Description**

- Fits to type: [FUL](#)

**Standards**

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

**Approvals**

- VDE License Number: 40010391
- UL File Number: E39328

**References**

[General Product Information](#)

**Weblinks**

[Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check](#)

**Technical Data**

Fuse-Link	5 x 20 or 6.3 x 32 mm
Rated Voltage	500 VAC , 250 VAC
Rated Current	16 A (VDE), 30 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 16 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 67
Protection Class	Suitable for appliances with protection class Protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
Material: Cap	Thermoset, UL 94V-0
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

**Variants**

Cap	Fuse-Link	Degree of Protection	Order Number
Slot Knob	6.3 x 32mm	IP 67	0031.2320
Slot Knob	5 x 20mm	IP 67	0031.2322

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

**Packaging Unit**

Plastic Bag (25 pcs.)

Caps to Holder 231618



250 VAC · 16 A (UL/CSA)



### Description

- Fits to type: [231618](#)

### Standards

- UL 512
- CSA C22.2 no. 39

### References

[General Product Information](#)

### Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

### Technical Data

Fuse-Link	5 x 20 or 6.3 x 32 mm
Rated Voltage	250 VAC
Rated Current	16 A (UL/CSA)
Degree of Protection	IP 40
Admissible Ambient Air Temp.	-40 °C to 85 °C
Material: Cap	Thermoplastic, black
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

### Variants

Cap	Fuse-Link	Degree of Protection	Order Number
Fingergrip	5 x 20mm	IP 40	7091.7120
Fingergrip	6.3 x 32mm	IP 40	7091.7130

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)



### Description

- Fits to type: [FIZ](#); [FUL](#)

### References

[General Product Information](#)

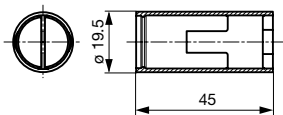
### Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

### Technical Data

Admissible Ambient Air Temp.	-40 °C to 85 °C
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

### Dimensions



### Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Reflow Condition	Order Number
-	0859.0046

Insulation Cover for FEU, FEU (Med)



## Description

- Fits to type: [FEU](#); [FEU \(Med\)](#)

## References

[General Product Information](#)

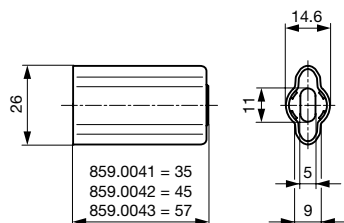
## Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

## Technical Data

Admissible Ambient Air Temp.	-40 °C to 85 °C
Storage Conditions	0 °C to 60 °C, max. 70% r.h.

## Dimensions



## Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Reflow Condition	Order Number
-	0859.0041
-	0859.0042
-	0859.0043

**Packaging Unit** Bulk (100 pcs.)

# > | general product-information

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# general product-information

## Product standard equipment standard

The product standard only contains minimum requirements. Attention is drawn to the fact that appliance specifications might contain requirements additional to or deviating from those specified in the relevant product standards.

## Comments on definitions used

Please be aware that the specifications nominal value used in the German part of the Schurter catalogue and the data sheets, is synonymous with rated value. The difference between these two values is a pure matter of definition. In order to avoid any unnecessary complications we will continue to use the specifications nominal value.


## CE marking acc. to EU-directives















CE marking is the only marking which indicates that a product conforms to the relevant EU-directive. This means that the CE-mark is no quality or standard conformity mark but only an administration mark. SCHURTER products are covered by the low voltage directives 72/23/EEC and 93/68/EEC. Those are valid for equipment and appliances with rated voltage values between AC 50 V to AC 1000 V as well as DC 75 V to DC 1500 V. The CE marking of SCHURTER parts will be found on the label of the smallest packing unit. On request we will submit a CE conformity statement for each component. CE conformity statements and approvals can also be retrieved from the internet under [www.schurter.com](http://www.schurter.com).

## Conformity to component standards, national approvals

National testing institutions are testing according to national and international standards or other generally recognized rules of technology. Their certification/approval-marks confirm the observance of the safety requirements which electric appliances must fulfil.

## National approvals

 (Mark)	European Norms Electrical Certification
 (Mark)	VDE      Verband Deutscher Elektrotechniker

	(Certificate of conformity with factory surveillance)	UMF	Universal Modular Fuse meets the standard IEC 60127-4
	(Recognition)	UL	Underwriters Laboratories (USA, Canada)
	(Listing)	UL	Underwriters Laboratories (USA, Canada)
	(Recognition)	UL	Underwriters Laboratories (USA)
	(Listing)	UL	Underwriters Laboratories (USA, Canada)
		CSA	Canadian Standard Association, Component Acceptance Service
		CSA	Canadian Standard Association
		CCC	China Compulsory Certification
		PSE	Japan Electrical Safety & Environment technology Laboratories
		KTL	Korea Testing Laboratory
		TÜV	Technischer Überwachungs Verein
		NF	Norme française
		NNO	Numéro de nomenclature Otan (OTAN = NATO = North Atlantic Treaty Organisation)
		GAM T1	Liste interarmées AIR MER TERRE de composants électroniques

In addition to the combined UL/CSA approvals, most of the SCHURTER components are also approved by one of the European Certification Bodies like VDE (Germany), Electrosuisse (Switzerland) or SEMKO (Sweden). The safety testing of all these European Certification Bodies are based on the common European Safety Standards. With the harmonisation effort in Europe, the different National European Certification Bodies have lost their importance and SCHURTER has decided to maintain only one European approval (e.g. VDE, SEV or SEMKO) in future. The others will not be renewed once they have expired.

Because UL and CSA are not members of the CENELEC, the standards of UL and CSA are not harmonised yet with the European Standards. However, UL and CSA are trying to harmonize their standards with each other. Where possible, SCHURTER will apply for the combined cULus or cURus approval.

Further to development in Asia, SCHURTER has obtained national approvals from China, Japan and Korea.



## IP degrees of protection provided by enclosures (IP code)

Standards IEC 60529; EN 60529

### Scope

**These standards apply to the classification of degrees of protection provided by enclosures for electrical equipment with a rated voltage not exceeding 72.5 kV.**

### Object

**The object of these standards is to give:**

- a) Definitions** for degrees of protection provided by enclosures of electrical equipment as regards:
  1. Protection of persons against access to hazardous parts inside the enclosure
  2. Protection of the equipment inside the enclosure against ingress of solid foreign objects
  3. Protection of the equipment inside the enclosure against harmful effects due to the ingress of water.
- b) Designations** for these degrees of protection.
- c) Requirements** for each designation.
- d) Tests** to be performed to verify that the enclosure meets the requirements of these standards.

### Designations

**The degree of protection provided by an enclosure is indicated by the IP Code.**

### Elements of the IP Code and their meanings

A brief description of the IP Code elements is given in the following table.

IP xy	Meaning for the protection of equipment	Meaning for the protection of persons
	<b>Against ingress of solid foreign objectif</b>	<b>Against access to hazardous parts with</b>
x = 0	(non-protected)	(non-protected)
x = 1	50 mm diameter	back of hand
x = 2	12.5 mm diameter	finger
x = 3	2.5 mm diameter	tool
x = 4	1.0 mm diameter	wire
x = 5	dust-protected	wire
x = 6	dust-tight	wire
	<b>Against ingress of water with harmful effects</b>	
y = 0	(non protected)	
y = 1	vertically dripping	
y = 2	dripping (15° tilted)	
y = 3	spraying	
y = 4	splashing	
y = 5	jetting	
y = 6	powerful jetting	
y = 7	temporary immersion	
y = 8	continuous immersion	

## Protection against electric shock

### 1. Protection against direct and indirect contact General terms

The protection against electric shock on electric equipment as well as their components are divided into the following parts:

- Protection against direct contact with live parts concerns all measures for the protection of human beings and animals against hazards which result from direct contact with live parts of electric equipment and their components.
- Protection against indirect contact is the protection of human beings and animals against hazards which result from contact of live parts 1 of electric equipment as well as components thereof, which have become live due to an insulation failure.

<sup>1)</sup> Accessible, conductive part, which is not conductive normally but which may be conductive due to a failure.

### 2. Protection against direct contact with live parts e.g. of a fuseholder

The data sheets of the relevant components inform about the taken measures.

### 3. Protection against indirect contact

Measures for the protection against indirect contact on electrical equipment are defined according to IEC 61140 by the 4 protection classes 0, I, II, III. Each protection class includes two protection measures. Even if one of these measures should fail, no electric shocks will occur.

Protection class	Main protective measures
0	1. Basic insulation between live parts and accessible conductive parts. 2. Earth-free location, non-conducting environment.
I	1. Basic insulation between live parts and accessible conductive parts. 2. Means are provided for the connection of accessible conductive parts of the equipment to the protective (earthing) conductor in the fixed wiring of the installation in such a way that accessible conductive parts cannot become live in the event of a failure of the basic insulation.
II	1. Basic insulation between live parts and accessible conductive parts. 2. Additional insulation. Basic and supplementary insulation are summarised under the term "double insulation". Under certain circumstances also a "reinforced insulation" (single insulation system) may guarantee an equivalent protection against electric shock as a "double-insulation" does. No terminal for a protective conductor is allowable. A possibly existing protective conductor must not be connected and has to be insulated like any live part.
III	1. Functional insulation. 2. Supply at safety extra-low voltage SELV (the circuit is isolated from the mains supply by such means as a safety isolating transformer). The protection against electric shock is in this case completely based on the supplying by SELV-circuits ( $U \leq 42\text{ V}$ ). Higher voltages are not generated in the equipment. No terminal for a protective conductor is allowable.



# general product-information

## Fuseholders

Explanations, thermal requirements, selection criteria

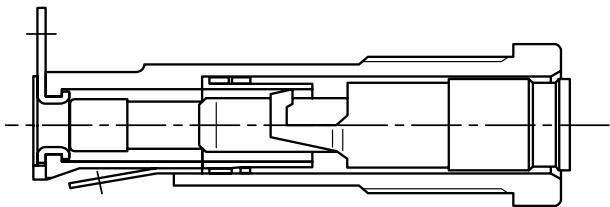
### 1. Protection against electric shock (against direct contact with live parts), for fuseholders

The assessment of the protection against electric shock assumes that the fuseholder is properly assembled, installed and operated as in normal use, e.g. on the front panel of the equipment.

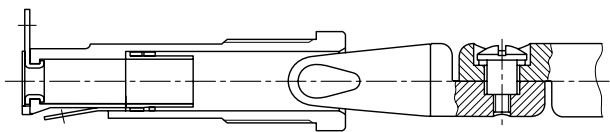
IEC 60127-6 and EN 60127-6 divides into three categories:

Category	Features
PC1	<b>Fuseholders without integral protection against electric shock.</b> They are only suitable for applications where corresponding additional means are provided to protect against electric shock.
PC2	<b>Fuseholders with integral protection against electric shock</b> live part is not accessible: - when the fuseholder is closed - after the fuse carrier (incl. fuse-link) has been removed - either during insertion or removal of the fuse carrier (incl. fuse-link) Compliance is checked by using the standard test finger specified in IEC 60529.
PC3	<b>Fuseholder with enhanced integral protection against electric shock</b> The requirements for this category are the same as those for category PC2, with the exception that the testing is carried out with a rigid test wire of 1 mm diameter according to IEC 60529, table VI, instead of the standard test finger.

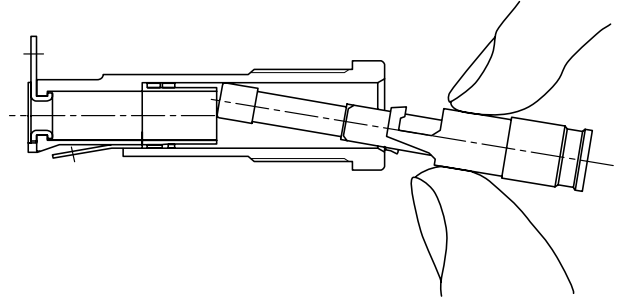
a) Closed fuseholder



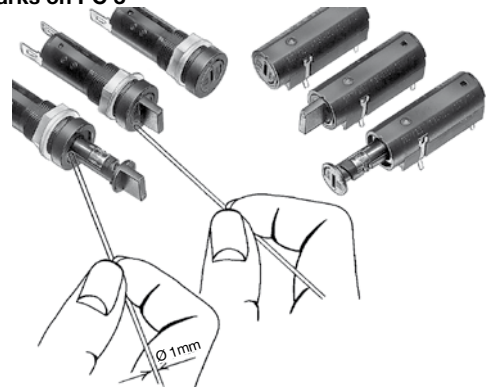
b) When the fuse carrier is removed, no live parts can be touched.



c) During insertion or removal of a fuse-link no live parts can be touched neither through the fuse-link nor the fuse carrier.



### Remarks on PC 3



## 2. Thermal requirements of the fuseholder

### 2.1. Influencing factors

The design engineer of electrical equipment is responsible for its safety and functioning to humans, animals and real values. Above all, it is his task to make sure that the state of the art as well as the valid national and international standards and regulations be observed.

In view of the safety of electrical equipment the selection of the most suitable fuseholder is of great importance. Among other parameters, one has to make sure that the maximum admissible power acceptances and temperatures defined by the manufacturer are followed. Differing definitions and requirements in the most important standards for fuse-links and fuseholders are time and again origin for the incorrect selection of fuseholders.

**To equate the rated current of a fuse-link with the rated current of the fuseholder, may, especially at higher currents, cause high, not admissible temperatures, when the influence of the power dissipation in the contacts of the fuseholder was not taken into consideration.**

For a correct selection the following influence factors depending on the application and mounting method, have to be taken into consideration.

**It is recommended testing the fuseholder with the chosen fuse-link in the worst case operating condition.**

1. Rated power dissipation of the suitable fuse-link.
2. Admissible power acceptance, operating current and temperatures of the suitable fuseholder.
3. Differing ambient air temperature outside and inside of the equipment.
4. Electrical load alternation
5. Long time (> 500 h) operation with load > 0.7 I<sub>n</sub>.
6. Heat dissipation/cooling and ventilation. Heat influence of adjacent components.
7. Length and cross section of the connecting wire.



## 2.2 Rated current of a fuseholder

The value of current assigned by the manufacturer of the fuseholder and to which the rated power acceptance is referred.

## 2.3 Rated power dissipation of the fuse-link

(power dissipation at rated current)

## 2.4 Rated power acceptance and admissible temperatures of a fuseholder.

The rated power acceptance of a fuseholder is determined by a standardised testing procedure according to IEC 60127-6. It is intended to be the power dissipation caused by the inserted dummy fuse-link at the rated current of the fuseholder and at an ambient air temperature of  $T_{A1} = T_{A2} = 23\text{ °C}$  (over a long period). During this test the following temperatures must not be exceeded on the surface of the fuseholder:

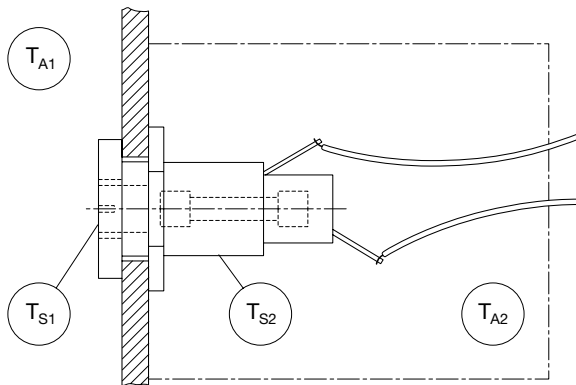
Fuseholder surface area	Maximum allowable temperature measuring points	
	(see figure 1)	°C
1. Accessible parts <sup>1)</sup>	$T_{S1}$	85
2. Inaccessible parts <sup>1)</sup> Insulating parts	$T_{S2}$	2)

Notes:

<sup>1)</sup> When the fuse-holder is properly assembled, installed and operated as in normal use, e.g. on the front panel of equipment.

<sup>2)</sup> The maximum allowable temperature of the used insulating materials corresponds to the Relative Temperature Index (RTI) according to IEC 60216-1 or UL 746 B.

### Illustration of temperatures experienced in practice

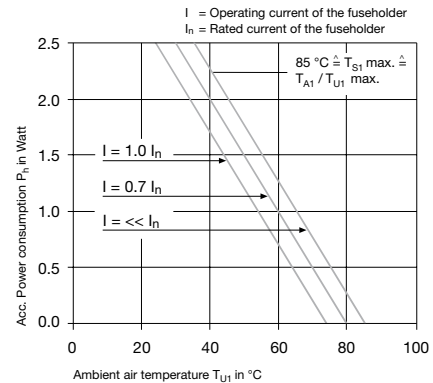


$T_{A1}$  = ambient air temperature, surrounding the equipment  
 $T_{A2}$  = ambient air temperature in the equipment  
 $T_{S1}$  = temperature of accessible parts on fuseholder surface  
 $T_{S2}$  = temperature of inaccessible parts on fuseholder surface

## 2.5 Correlation between operating current I, ambient air temperature $T_{A1}$ and the power acceptance $P_h$ of the fuseholder.

This correlation is demonstrated by derating curves.

### Example of a derating curve



$I$  = operating current of the fuseholder  
 $I_n$  = rated current of the fuseholder

The derating curves demonstrate the admissible power acceptance of a fuseholder depending on the ambient air temperature  $T_{A1}$  for the following fuseholder operating currents:  $I << I_n$ ,  $I = 0.7 \cdot I_n$  and  $I = 1.0 \cdot I_n$ . This power acceptance corresponds to the max. admissible power dissipation of a fuse-link.

The corresponding values for other operating currents can be interpolated between the existing curves or calculated as follows:

$$P_h = P_o - P_c = P_o - (R_c \cdot I^2)$$

$P_h$  = admissible power acceptance in watt of the fuseholder, depending on  $T_{A1}$ .

$P_o$  = admissible power acceptance in watt of a fuseholder at  $I << I_n$ , depending on  $T_{A1}$ . The values can be taken from the derating curve  $I << I_n$  of the corresponding fuseholder.

$P_c$  = power dissipation in watt in the fuseholder contacts at the operating current in ampere.

$I$  = operating current in ampere of the fuseholder.

$R_c$  = contact resistance in ohm between the fuseholder terminals according to SCHURTER's catalogue.

## 3. Selection of a suitable fuseholder with respect to the power acceptance at the corresponding ambient air temperature.

### Summary

The adherence to the limits, indicated by SCHURTER, in particular the power acceptance limits at the corresponding ambient air temperatures and mounting conditions of the fuseholder, is important for the safety of the product. It is therefore necessary to observe the following two steps:

#### Step 1

Selection of the fuseholder based on the power acceptance  $P_h$  at operating current  $I$  and maximum ambient air temperature  $T_{A1}$ .

$$P_f \leq P_h = P_o - P_c = P_o - (R_c \cdot I^2)$$

$P_f$  = rated power dissipation in watt of the fuse-link, calculated from  $(I_n \cdot U)$ , whereas:

$I_n$  = rated current in ampere of the fuse-link

$\Delta U$  = voltage drop in volt at  $I_n$ ; values according to SCHURTER's catalogue.

$P_h, P_o, P_c, R_c$  = see pos. 2.5

#### Step 2

The reduction of the power acceptance of the fuseholder (from step 1) based on the different conditions at the mounting place etc. have to be determined by the design engineer responsible.



# general product-information

## Examples:

- ambient air temperature is considerably higher inside of an equipment than outside ( $T_{A2} > T_{A1}$ )
- cross-section of the conductor, unfavourable heat dissipation
- heat influence of adjacent components

**Therefore, temperature measurements on the appliance under normal and faulty conditions are absolutely necessary.**

## 4. Example

### 4.1 What's given?

- Fuse-link FSF 0034.1523, rated current  $I_n = 5$  A. Voltage drop  $\Delta U$  at  $I_n = 80$  mV, typ. Rated power dissipation  $P_f = (I_n \cdot \Delta U) = (5 \text{ A} \cdot 0.08 \text{ V}) = 0.4 \text{ W}$ .
- Fuseholder FEF 0031.1081, rated current  $I_n = 10$  A. Rated power acceptance at  $T_{A1} 23$  °C = 3,2 W.
- Ambient air temperature = 50 °C. Admissible power acceptance  $P_h$  at an ambient air temperature  $T_{A1} 50$  °C according to the derating curve:

$$P_h \text{ at } I \ll I_n = 2.5 \text{ W}$$

$$I = 0.7 \cdot I_n = 7 \text{ A} = 2.2 \text{ W}$$

$$I = 1.0 \cdot I_n = 10 \text{ A} = 2 \text{ W}$$

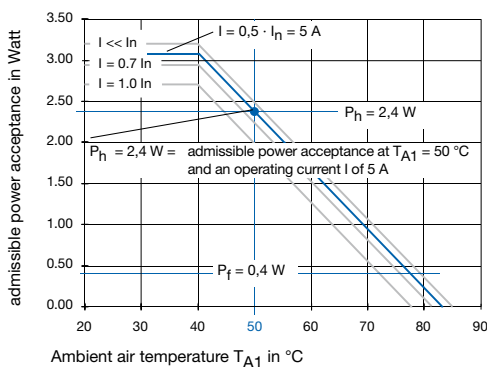
- Contact resistance  $R_c = 5$  mΩ

### 4.2 What is the admissible power acceptance $P_h$ of the fuseholder?

#### Solutions

- 4.2.1 The result of the interpolation for the rated current  $I = 5$  A is a  $P_h$  of approx. 2,4 W.
- 4.2.2 The result of the calculation is  $P_h = P_o \cdot (R_c \cdot I^2) = 2.5 \cdot (0.005 \cdot 5^2) = 2.37 \text{ W} \approx 2.4 \text{ W}$ .

### 4.3 Derating curves of the fuseholder, type FEF, rated current $I_n = 10$ A



## 4.4 Verification of the thermal requirements

### Step 1

The following condition must be fulfilled:

$P_f \leq P_h$  this means: the rated power dissipation  $P_f$  of the fuse-link must be less/equal than the admissible power acceptance  $P_h$  of the fuseholder.

$$P_f = 0.4 \text{ W}; P_h = 2.4 \text{ W at } T_{A1} = 50 \text{ °C}$$

### Step 2

To consider the different conditions at the mounting place

### 4.5 Conclusion (without consideration of step 2)

- The value  $P_f$  is less than  $P_h$ . The condition according to formula is fulfilled. It has been chosen a suitable fuseholder.
- If the value  $P_f$  were greater than  $P_h$  the condition wouldn't be fulfilled. In that case, do select another fuseholder with a higher power acceptance or change the thermal conditions at the fuseholder mounting place.

## 5. Standards for fuseholders

IEC 60127-6	Fuseholders for miniature fuse-links
NF C93-436	Fuseholders for professional purposes
UL 512	Fuseholders
CSA C22.2 no. 39	Fuseholder assemblies

IEC: International Electrotechnical Commission  
 UL: Underwriters Laboratories Inc. USA  
 CSA: Canadian Standards Association  
 NF: French Standard

## 6. Explanation to the main fuseholder standards

As mentioned in section 2, the most relevant standards define rated current and rated power acceptance differently. This lead in the past often to confusion or even to a wrong fuseholder design-in.

For example the standard UL 512 does not define a maximum power acceptance value, but sets a certain value of temperature rise for the fuseholder. For this reason the marked amperage values on the fuseholder, defined by UL and CSA, are not suggested to be used except in special cases.

In order to eliminate such confusion, SCHURTER new decided to define the rated current and rated power acceptance values according to IEC 60127-6 and EN 60127-6.

The most important definitions are to be found in section 2.

### Conclusion

- The high UL and CSA current ratings are replaced by more realistic rated currents defined by SCHURTER.
- Focused on the new fuseholder standard IEC 60127-6 and EN 60127-6, the power acceptance of several fuseholders had to be reduced.
- The design-in procedure and in particular to choose the correct fuseholder in terms of thermal requirements (refer to section 2-4) is now made much easier.

Your advantages:

- **More security for your equipment**
- **Faster and much easier selection of the correct fuseholder**

Web Reference or Type	Product group	page
<b>2</b>		
23162	Fuses	32
231660	Fuses	42
231683	Fuses	38
231685	Fuses	39
231756R	Fuses	33
231786	Fuses	44
231787	Fuses	43
231828	Fuses	37
23211B	Fuses	26
23351B	Fuses	31
23748B	Fuses	25
<b>C</b>		
CQM	Fuses	36
<b>F</b>		
FMR	Fuses	47
FMS (125V)	Fuses	46
FMS (250V)	Fuses	48
<b>O</b>		
OG (Clip) 5x20	Fuses	34
OG (Clip) 5x20 / 6.3x32	Fuses	40
OG (Holder) 5x20	Fuses	15
OG (Holder) 6.3x32	Fuses	21
OGD	Fuses	27
OGD-SMD	Fuses	29
OGN	Fuses	10
OGN-SMD	Fuses	12
OMH 125	Fuses	45
<b>R</b>		
RSH	Fuses	23
<b>U</b>		
UH	Fuses	17
UHB	Fuses	19



# index by order numbers

Order Number from	to	Web Reference or Type	page
0031.1611	0031.1616	Caps to FEC	53
0031.1661	0031.1666	Caps to FEU, FAU, FAC	55
0031.1812	0031.1811	Cap to FEU (Grip)	54
0031.2320	0031.2322	Caps to FUL (IP 67)	57
0031.2321	0031.2323	Caps to FUL, FUP, FUA	56
0031.5001	0853.9562	UH	17
0031.5101	0853.9562	UHB	1)
0031.6001	0031.6010	RSH	1)
0031.7501		FMS (125V)	46
0031.7505		FMR	1)
0031.7601		FMS (250V)	48
0031.7701.11	0031.7701.23	OMH 125	45
0031.8001	0853.9562	OG (Holder) 5x20	15
0031.8002	0853.9562	OG (Holder) 6.3x32	1)
0031.8201	0853.0576	OGN	10
0031.8221	0853.0576	OGN-SMD	12
0031.8231	0853.0917	OGD	27
0031.8241	0853.0917	OGD-SMD	29
0751.0052	0751.0231	OG (Clip) 5x20	34
0751.0099	0751.0056	OG (Clip) 5x20 / 6.3x32	40
0752.1242	0752.1243	CQM	1)
0853.0551	0853.0576	Covers OGN, OGN-SMD	51
0853.0917		Cover OGD, OGD-SMD	50
0853.9561	0853.9562	Cover to OG, UHB, UH	52
0859.0041	0859.0043	Cover for FEU, FEU (Med)	60
0859.0046		Cover for FIZ, FUL	59
7082.1110	7170.0480	23351B	1)
7083.1110		23211B	1)
7083.2110		23748B	1)
7085.1910	7085.3910	23162	1)
7085.4910		231756R	1)
7090.9010.03	7090.9010.55	231786	44
7090.9020.03	7090.9020.55	231787	43
7091.7120	7091.7130	Caps to 231618	58
7170.0470		231660	42
7181.5001		231683	1)
7181.5003		231685	1)

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