

Midget Fuse, 10.3 x 38 mm, 1000 VDC, Photovoltaic, gPV



Standard

PCB version

1000VDC · gPV

See below:

[Approvals and Compliances](#)

### Description

- Meets the new UL and IEC photovoltaic standards
- UL Recognized for 1000 VDC
- High breaking capacity of 20 kA @ 1000 VDC
- Low min. interrupting rating of 1.35 x I<sub>n</sub>
- Meets the requirements of IEC 61730-2 for PV module safety

### Applications

- Photovoltaic applications
- Inverters
- Battery charge controllers
- In-line protection
- String fuses

### References


Corresponding Fuseholder [FSO](#); [CFO](#); [CSO](#); [231660](#)

Corresponding Cover [ESO 10.3x38](#)

### Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#)

### Technical Data

Rated Voltage	1000VDC
Rated current	1 - 30A
Breaking Capacity	20kA
Characteristic	gPV
Mounting	Insert, PCB/THT
Admissible Ambient Air Temp.	-50°C to 125°C
Unit Weight	8.3 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	 Type, Rated current, Rated Voltage, Breaking Capacity, Characteristic, Approvals

### Approvals and Compliances



Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

### Approvals


The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: ASO 10.3x38

Approval Logo	Certificates	Certification Body	Description
	<a href="#">UL Approvals</a>	UL	UL File Number: E345791
	<a href="#">CSA Approvals</a>	CSA	CSA Certification Record: 248899






## Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements


## Compliances

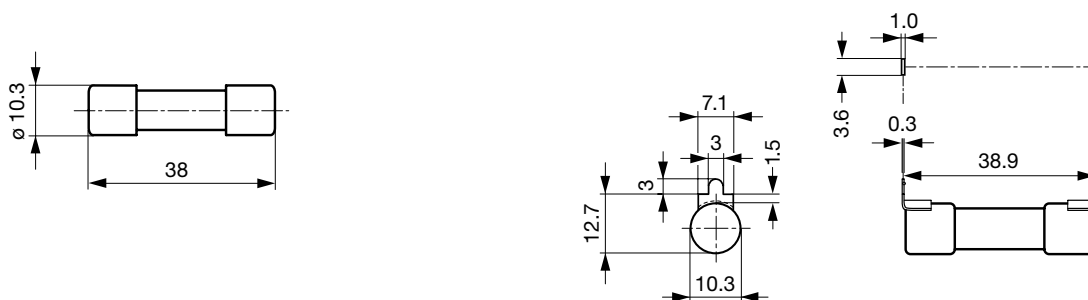
The product complies with following Guide Lines

Identification	Details	Initiator	Description
	<a href="#">CE declaration of conformity</a>	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
	<a href="#">UKCA declaration of conformity</a>	SCHURTER AG	The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.
	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

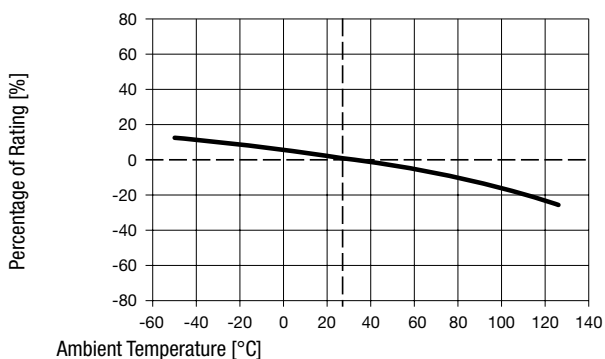
## Dimension [mm]

Standard

 10.3 mm



## Derating Curves

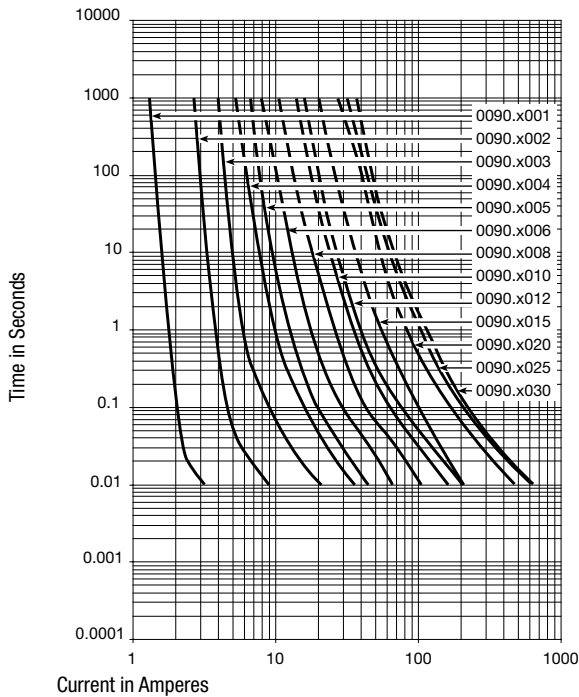


## Pre-Arcing Time

Rated Current  $I_n$     1.0 x  $I_n$  min.    1.13 x  $I_n$  min.    1.35 x  $I_n$  max.    1.45 x  $I_n$  max.    2.0 x  $I_n$  max.

1 A - 30 A	60 min	60 min	60 min	60 min	4 min
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Time-Current-Curves



All Variants

Rated Current [A]	Mounting	Rated Voltage [VDC]	Breaking Capacity	Power Dissipation 1.0 I <sub>n</sub> typ. [mW]	Melting I <sup>2</sup> t 20 kA typ. [A <sup>2</sup> s]	UL	SA	Order Number
1	Standard	1000	1)	602	0.554	●	●	0090.0001
2	Standard	1000	1)	1586	4.755	●	●	0090.0002
3	Standard	1000	1)	1504	7.882	●	●	0090.0003
4	Standard	1000	1)	1491	23.03	●	●	0090.0004
5	Standard	1000	1)	1465	42.6	●	●	0090.0005
6	Standard	1000	1)	1348	80.25	●	●	0090.0006
8	Standard	1000	1)	1610	199	●	●	0090.0008
10	Standard	1000	1)	1760	401	●	●	0090.0010
12	Standard	1000	1)	1965	642	●	●	0090.0012
15	Standard	1000	1)	1914	505	●	●	0090.0015
20	Standard	1000	1)	2810	1313	●	●	0090.0020
25	Standard	1000	1)	2981	2371	●	●	0090.0025
30	Standard	1000	1)	3923	2679	●	●	0090.0030
1	PCB	1000	1)	602	0.554	●	●	0090.1001
2	PCB	1000	1)	1586	4.755	●	●	0090.1002
3	PCB	1000	1)	1504	7.882	●	●	0090.1003
4	PCB	1000	1)	1491	23.03	●	●	0090.1004
5	PCB	1000	1)	1465	42.6	●	●	0090.1005
6	PCB	1000	1)	1348	80.25	●	●	0090.1006
8	PCB	1000	1)	1610	199	●	●	0090.1008
10	PCB	1000	1)	1760	401	●	●	0090.1010
12	PCB	1000	1)	1965	642	●	●	0090.1012
15	PCB	1000	1)	2282	505	●	●	0090.1015
20	PCB	1000	1)	2810	1313	●	●	0090.1020
25	PCB	1000	1)	2981	2371	●	●	0090.1025
30	PCB	1000	1)	3923	2679	●	●	0090.1030

Most Popular.

Rated Current [A]	Mounting	Rated Voltage [VDC]	Breaking Capacity	Power Dissipation 1.0 I <sub>n</sub> typ. [mW]	Melting I <sup>2</sup> t 20 kA typ. [A <sup>2</sup> s]	UL	SP	Order Number
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Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

1) 20 kA @ 1000 VDC, L/R < 2ms

Packaging Unit	Standard version	Bulk (10 pcs.)
	PCB version	Bulk (100 pcs.)

## Accessories

### Description



#### ESO\_10.3x38

Fuse Inserter/Extractor with Cover Function for 10.3x38 mm Fuses in Clips, Patent Pending

10.3 x 38 mm, IP20	0853.1250
10.3 x 38 mm, IP20	0853.1251