

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

new



Standard

PCB version

1000 VDC · gPV

**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

**Standards**

- IEC 60269-6
- UL 2579

**Approvals**

- VDE Certificate Number: 40033592
- UL File Number: E345791

**Applications**

- All photovoltaic applications
- Inverters
- Battery charge controllers
- In-line protection
- String fuse

**References**

Corresponding Fuseholder FSO; CSO; 231660

**Weblinks**

[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

**Technical Data**

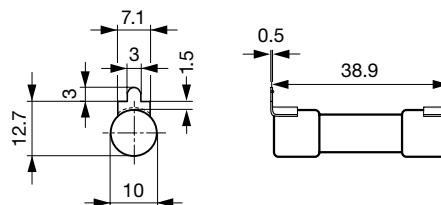
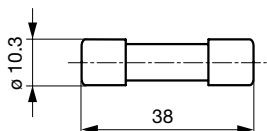
|                              |                                                                                                                                                                      |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Voltage                | 1000 VDC                                                                                                                                                             |
| Rated Current                | 1 - 30 A                                                                                                                                                             |
| Breaking Capacity            | 20 kA                                                                                                                                                                |
| 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, Current, Dielectric strength, Breaking Capacity, Characteristic, Approvals |

**Dimensions**

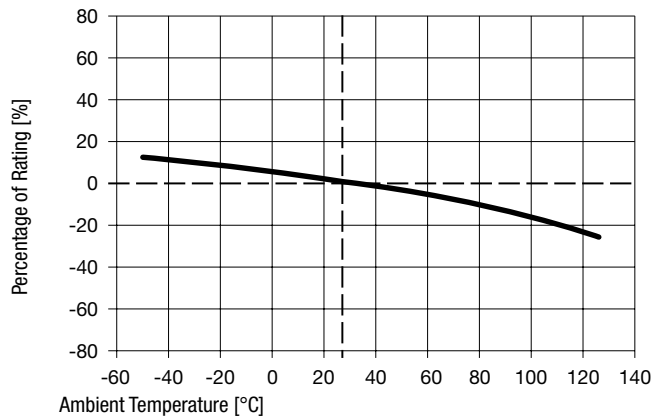
Standard

 10.3 mm

PCB



## Derating Curves



## Pre-Arcing Time

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

| Rated Current $I_n$ | 1.0 x $I_n$ min. | 1.13 x $I_n$ min. | 1.35 x $I_n$ min. | 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            |

## Variants

| Rated Current [A] | Mounting | Rated Voltage [VDC] | Breaking Capacity | Power Dissipation 1.0 $I_n$ typ. [mW] | Melting $I^2t$ 20 kA typ. [A²s] |  |  | 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)                | 1914                                  | 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    |

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

## Packaging Unit

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

## Time-Current-Curves

