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Surface Mount Fuse, PTC, 1812 footprint, 4.6 x 3.2 mm, 60 VDC




6.0 - 60.0 VDC · 0.1 - 2.6 A

See below:
**Approvals and Compliances**

## Description

- 100% compatible with the PFMD typeDirectly solderable on printed circuit boards

## Applications

- Hard disk drives
- PC motherboards
- PC peripherals
- PCMCIA cards
- USB port protection

## Weblinks

pdf data sheet, html datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product

## Technical Data

| | |
|---|---|
| V max | 6.0 - 60.0 VDC |
| Imax | 10 - 100 A |
| I hold | 0.1 - 2.6 A |
| Attachment | PCB,SMT |
| Allowable Operation Temperature | -40 °C to 85 °C |
| Material: Terminals | Electroless Nickel under Immerion Gold |
| Weight | 0.025 g |
| Storage Conditions | 0 °C to 40 °C, max. 70% r.h. |
| Product Marking | I hold, Data Code |

| | |
|---|---|
| Soldering Methods | Reflow<br>Soldering Profile |
| Solderability | 245 °C / 3 sec |
| Resistance to Soldering Heat | 260 °C / 10 sec |
| Moisture Sensitivity Level | MSL 1, J-STD-020 |
| Passing Aging | +85 °C, 1000 Hours -> +/- 5% Typical Resistance Change |
| Humidity Aging | +85 °C, 85% r.h., 1000 Hours -> +/- 5% Typical Resistance Change |
| Thermal Shock | +85 °C to -40 °C, 20 Times -> +/- 10% Typical Resistance Change |
| Vibration | MIL-STD-883C, Method 2007.1, Test Condition A |
| Resistance to Solvents | MIL-STD-202, Method 215 |

## 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: PFMF

| Approval Logo | Certificates | Certification Body | Description |
|---|---|---|---|
| | TUEV Approvals | TUEV | Technischer Überwachungsverein |
| c UL us | UL Approvals | UL | UL File Number: E172175 |

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## Product standards

Product standards that are referenced

| Organization | Design | Standard | Description |
|---|---|---|---|
| IEC | Designed according to | 62319-1-1 | Polymeric thermistors. Part 1-1: Current limiting application |
| IEC | Designed according to | IEC 62319-1-1 | Miniature fuses. Part 2. Cartridge fuse links |
| UL | Designed according to | UL 1434 | Thermistor-type devices |
| CSA Group | Designed according to | CSA 22.2 No. 0 TIL No. CA-3A | General requirements - Canadian electrical code, part II |

## Application standards

Application standards where the product can be used

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

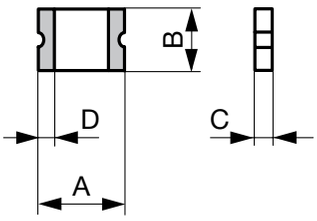
## Compliances

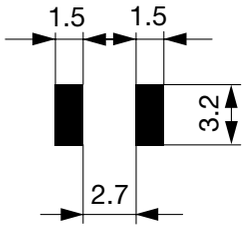
The product complies with following Guide Lines

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

## Dimension [mm]

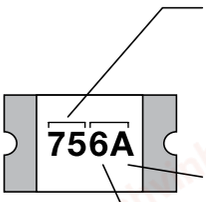
4.6 mm




Soldering pads

Part marking




*Part Identification Examples:*

PFMF.020 = 02
PFMF.075 = 75
PFMF.150 = 15
PFMF.200 = 20

*Biweekly Date Code:*

Week 1 and 2 = A
Week 51 and 52 = Z

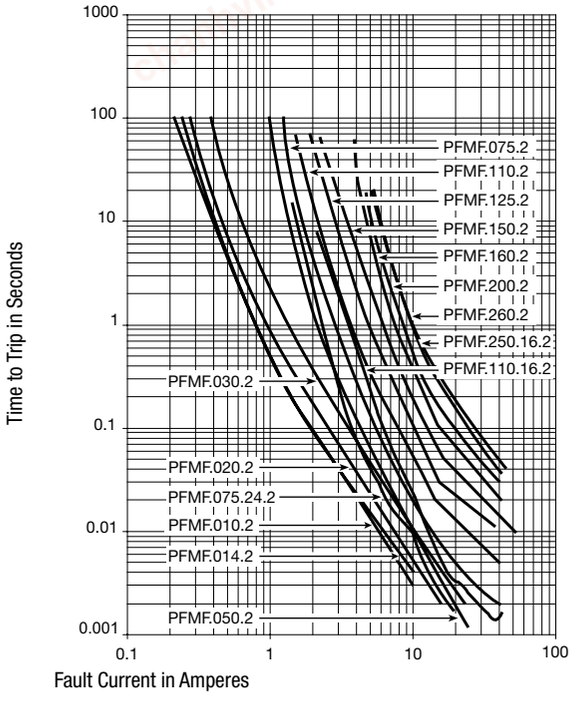
*Year Code:*

6 = 2016

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## Time-Current-Curves




## Dimensions

| A min [mm] | A max [mm] | B min [mm] | B max [mm] | C min [mm] | C max [mm] | D min [mm] | Order Number | |
|---|---|---|---|---|---|---|---|---|
| 4.37 | 4.73 | 3.07 | 3.41 | 0.7 | 1.1 | 0.3 | PFMF.010.2 | ■ |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.7 | 1.1 | 0.3 | PFMF.014.2 | ■ |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.7 | 1.1 | 0.3 | PFMF.020.2 | ■ |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.7 | 1.1 | 0.3 | PFMF.030.2 | ■ |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.55 | 0.85 | 0.3 | PFMF.050.2 | ■ |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.55 | 0.85 | 0.3 | PFMF.075.2 | ■ |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.55 | 0.85 | 0.3 | PFMF.075.24.2 | |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.45 | 0.85 | 0.3 | PFMF.110.2 | |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.45 | 0.85 | 0.3 | PFMF.110.16.2 | |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.55 | 0.85 | 0.3 | PFMF.125.2 | |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.55 | 0.85 | 0.3 | PFMF.150.2 | |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.55 | 0.85 | 0.3 | PFMF.160.2 | |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.55 | 0.85 | 0.3 | PFMF.200.2 | |
| 4.37 | 4.83 | 3.07 | 3.41 | 0.7 | 1.6 | 0.3 | PFMF.250.16.2 | |
| 4.37 | 4.73 | 3.07 | 3.41 | 0.48 | 0.85 | 0.3 | PFMF.260.2 | |

■ Most Popular.

Availability for all products can be searched real-time:https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER

## Thermal Derating Chart Ihold [A]

| Order Number | -40 °C | -20 °C | 0 °C | 23 °C | 40 °C | 50 °C | 60 °C | 70 °C | 85 °C | Order Number | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PFMF.010.2 | 0.16 | 0.14 | 0.12 | 0.1 | 0.08 | 0.07 | 0.06 | 0.05 | 0.03 | PFMF.010.2 | ■ |
| PFMF.014.2 | 0.23 | 0.19 | 0.17 | 0.14 | 0.12 | 0.1 | 0.09 | 0.08 | 0.06 | PFMF.014.2 | ■ |
| PFMF.020.2 | 0.29 | 0.26 | 0.23 | 0.2 | 0.17 | 0.15 | 0.14 | 0.12 | 0.1 | PFMF.020.2 | ■ |
| PFMF.030.2 | 0.44 | 0.39 | 0.35 | 0.3 | 0.26 | 0.23 | 0.21 | 0.18 | 0.15 | PFMF.030.2 | ■ |
| PFMF.050.2 | 0.77 | 0.68 | 0.59 | 0.5 | 0.44 | 0.4 | 0.37 | 0.33 | 0.29 | PFMF.050.2 | ■ |
| PFMF.075.2 | 1.15 | 1.01 | 0.88 | 0.75 | 0.65 | 0.6 | 0.55 | 0.49 | 0.43 | PFMF.075.2 | ■ |
| PFMF.075.24.2 | 1.15 | 1.01 | 0.88 | 0.75 | 0.65 | 0.6 | 0.55 | 0.49 | 0.43 | PFMF.075.24.2 | |

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| Order Number | -40 °C | -20 °C | 0 °C | 23 °C | 40 °C | 50 °C | 60 °C | 70 °C | 85 °C | Order Number |
|---|---|---|---|---|---|---|---|---|---|---|
| PFMF.110.2 | 1.59 | 1.43 | 1.26 | 1.1 | 0.95 | 0.87 | 0.8 | 0.71 | 0.6 | PFMF.110.2 |
| PFMF.110.16.2 | 1.59 | 1.43 | 1.26 | 1.1 | 0.95 | 0.87 | 0.8 | 0.71 | 0.6 | PFMF.110.16.2 |
| PFMF.125.2 | 1.8 | 1.63 | 1.43 | 1.25 | 1.08 | 0.99 | 0.91 | 0.81 | 0.68 | PFMF.125.2 |
| PFMF.150.2 | 2.17 | 1.95 | 1.72 | 1.5 | 1.3 | 1.18 | 1.09 | 0.97 | 0.82 | PFMF.150.2 |
| PFMF.160.2 | 2.3 | 2.2 | 1.9 | 1.6 | 1.45 | 1.3 | 1.15 | 1.03 | 0.91 | PFMF.160.2 |
| PFMF.200.2 | 3.08 | 2.71 | 2.35 | 2 | 1.8 | 1.6 | 1.5 | 1.4 | 1.25 | PFMF.200.2 |
| PFMF.250.16.2 | 3.9 | 3.42 | 2.96 | 2.5 | 2.24 | 1.98 | 1.85 | 1.29 | 0.94 | PFMF.250.16.2 |
| PFMF.260.2 | 4 | 3.52 | 3.06 | 2.6 | 2.34 | 2.08 | 1.95 | 1.39 | 1.04 | PFMF.260.2 |

Most Popular.

Availability for all products can be searched real-time:https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER

## Electrical Characteristics at 23 °C

| V max [VDC] | I max [A] | I hold [A] | I trip [A] | R initial min [Ω] | R 1hour max [Ω] | Max Time to trip [A] | Max Time to Trip [s] | Tripped Power Dissipation [W] | Order Number | |
|---|---|---|---|---|---|---|---|---|---|---|
| 60.0 | 40 | 0.1 | 0.3 | 0.7 | 15 | 0.5 | 1.5 | 0.80 | PFMF.010.2 | ■ |
| 60.0 | 40 | 0.14 | 0.34 | 0.4 | 6.5 | 1.5 | 0.15 | 0.80 | PFMF.014.2 | ■ |
| 30.0 | 80 | 0.2 | 0.4 | 0.4 | 6 | 6 | 0.06 | 0.80 | PFMF.020.2 | ■ |
| 30.0 | 10 | 0.3 | 0.6 | 0.3 | 3 | 8 | 0.1 | 0.80 | PFMF.030.2 | ■ |
| 15.0 | 100 | 0.5 | 1 | 0.15 | 1 | 8 | 0.15 | 0.80 | PFMF.050.2 | ■ |
| 13.2 | 100 | 0.75 | 1.5 | 0.11 | 0.45 | 8 | 0.2 | 0.80 | PFMF.075.2 | ■ |
| 24.0 | 40 | 0.75 | 1.5 | 0.11 | 0.45 | 8 | 0.2 | 0.80 | PFMF.075.24.2 | |
| 6.0 | 100 | 1.1 | 2.2 | 0.04 | 0.21 | 8 | 0.3 | 0.80 | PFMF.110.2 | |
| 16.0 | 100 | 1.1 | 2.2 | 0.04 | 0.21 | 8 | 0.3 | 0.80 | PFMF.110.16.2 | |
| 6.0 | 100 | 1.25 | 2.5 | 0.035 | 0.14 | 8 | 0.4 | 0.80 | PFMF.125.2 | |
| 6.0 | 100 | 1.5 | 3 | 0.03 | 0.12 | 8 | 0.5 | 0.80 | PFMF.150.2 | |
| 8.0 | 100 | 1.6 | 2.8 | 0.035 | 0.099 | 8 | 2 | 0.80 | PFMF.160.2 | |
| 8.0 | 40 | 2 | 4 | 0.02 | 0.08 | 8 | 3 | 0.80 | PFMF.200.2 | |
| 16.0 | 100 | 2.5 | 5 | 0.015 | 0.1 | 8 | 5 | 1.20 | PFMF.250.16.2 | |
| 6.0 | 100 | 2.6 | 5.2 | 0.015 | 0.08 | 8 | 5 | 0.80 | PFMF.260.2 | |

■ Most Popular.

Availability for all products can be searched real-time:https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER

**Packaging Unit**
acc. IEC 60286-3 Type 2a

| | |
|---|---|
| PFMF.010.2 - PFMF.030.2 | 1500 pcs. in tape [W: 12mm and P1: 8mm] on reel [A: 18cm] |
| PFMF.050.2 + PFMF.260.2 | 2000 pcs. in tape [W: 12mm and P1: 8mm] on reel [A: 18cm] |

04.01.2022



The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.