Surface Mount Fuse, PTC, 2018 footprint, 5.1 x 4.6 mm, 60 VDC



## $60.0\,\text{VDC}\cdot0.55\,\text{A}$

#### Description

- Directly solderable on printed circuit boards

#### See below: Approvals and Compliances

#### Applications

- Power Over Ethernet (IEEE 802.3 af) port protection
- Automotive electronic control module protection
- Telecom equipment low voltage protection

#### Weblinks

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

PFDF

## **Technical Data**

V max	60.0 VDC
Imax	10A
l hold	0.55A
Attachment	PCB,SMT
Allowable Operation Tempe-	-40 °C to 85 °C
rature	
Material: Terminals	Electroless Nickel under Immerion Gold
Weight	0.03 g
Storage Conditions	0 °C to 40 °C, max. 70% r.h.
Product Marking	l hold, Data Code

Soldering Methods	Reflow
	Soldering Profile
Solderability	245°C/3sec
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: PFDF

Approval Logo	Certificates	Certification Body	Description
Nor TOY Participant	TUEV Approvals	TUEV	Technischer Überwachungsverein
c <b>FN</b> <sup>°</sup> us	UL Approvals	UL	UL File Number: E172175

ELECTRONIC COMPONENT:

## PFDF

## **Product standards**

Product standards that are referenced

Design	Standard	Description						
Designed according to	62319-1-1	Polymeric thermistors. Part 1-1: Current limiting application						
Designed according to	IEC 62319-1-1	Miniature fuses. Part 2. Cartridge fuse links						
Designed according to	UL 1434	Thermistor-type devices						
Designed according to	CSA 22.2 No. 0 TIL No. CA-3A	General requirements - Canadian electrical code, part II						
	Designed according to Designed according to Designed according to	DesignStandardDesigned according to62319-1-1Designed according toIEC 62319-1-1Designed according toUL 1434						

## **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

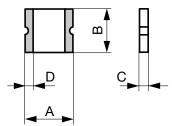
## Compliances

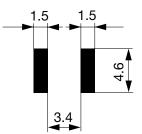
The product complies with following Guide Lines

- 1 1-	5		
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.
UK CA	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.
COMPLIANT	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	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]

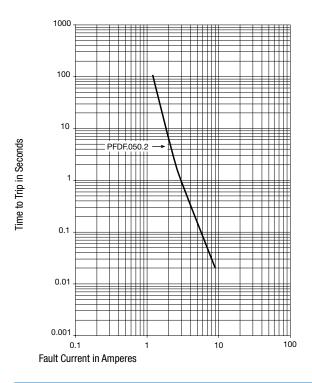
5.1 mm





Soldering pads

### **Time-Current-Curves**



## Dimensions

A min	A max	B min	B max	C min	C max	D min	Order Number
[mm]							
4.72	5.44	4.22	4.93	0.79	1.09	0.3	PFDF.050.2

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
PFDF.050.2	0.86	0.77	0.7	0.55	0.48	0.43	0.38	0.36	0.26	PFDF.050.2

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]	l trip [A]	R initial min $[\Omega]$	R 1hour max [Ω]	Max Time to trip [A]	Max Time to Trip [s]	Tripped Power Dissipation [W]	Order Number
60.0	10	0.55	1.2	0.2	1	2.5	3	1.00	PFDF.050.2

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 6000 pcs. in tape [W: 16mm and P1: 8mm] on reel [A: 36cm]

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.

# **Mouser Electronics**

Authorized Distributor

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