

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



6.0 - 60.0VDC · 0.1 - 2.6A



Description

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

Standards

- UL 1434
- CSA C22.2 no. 0, TIL no. CA-3A

Approvals

- UL File Number: E172175
- CSA File Number: 702083

Applications

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

References

[Packaging Details](#)

Weblinks

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

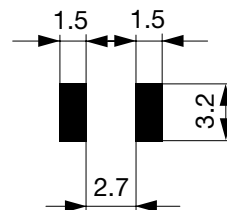
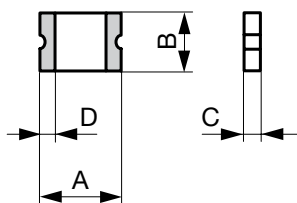
Technical Data

| | |
|---------------------------|---|
| V max | 6.0 - 60.0VDC |
| I max | 10 - 100A |
| I hold | 0.1 - 2.6A |
| Mounting | PCB, SMT |
| Allowable Operation Temp. | -40°C to 85°C |
| Material: Terminals | Electroless Nickel under Immersion 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 |
| Solderability | 245°C / 3sec |
| Resistance to Soldering Heat | 260°C / 10sec |
| 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, Methode 215 |

Dimensions

4.6 mm



Soldering pads

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 | 0.75 | 0.3 | PFMF.110.2 |
| 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 | 4.73 | 3.07 | 3.41 | 0.48 | 0.85 | 0.3 | PFMF.260.2 |

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 |
| 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.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.260.2 | 4 | 3.52 | 3.6 | 2.6 | 2.34 | 2.08 | 1.95 | 1.39 | 1.04 | PFMF.260.2 |

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 |
| 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 |
| 6.0 | 100 | 2.6 | 5.2 | 0.015 | 0.08 | 8 | 5 | 0.80 | PFMF.260.2 |

| Packaging Unit | PFMF.010.2 - PFMF.030.2 PFMF.050.2 + PFMF.260.2 | Blister Tape 18 cm Reel (1500 pcs.) Blister Tape 18 cm Reel (2000 pcs.) |
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Time-Current-Curves

