



Features

- Very small size 1210 footprint - 44% smaller design than PFMD Series
- Fast tripping resettable circuit protection
- Surface mount packaging for automated assembly
- Agency recognition: (pending)



Applications

- PC motherboards
- PC modems
- USB
- Analog and digital line cards
- IEEE 1394
- General electronics: Phones, fax machines, televisions, printers, video equipment

PFMU Series - PTC Resettable Fuses

Electrical Characteristics

Model	V max. Volts	I max. Amps	I _{hold}	I _{trip}	Resistance		Max. Time To Trip		Tripped Power Dissipation
			Amperes at 23°C		Ohms at 23°C		Amperes at 23°C	Seconds at 23°C	Watts at 23°C
			Hold	Trip	R _{Min.}	R _{1Max.}			
* PFMU.005.2	30.0	10	0.05	0.15	3.60	50.0	0.5	0.03	0.6
* PFMU.010.2	30.0	10	0.10	0.30	1.36	15.0	5.0	0.002	0.6
PFMU.035.2	6.0	40	0.35	0.75	0.32	1.30	5.0	0.005	0.6
PFMU.050.2	13.2	40	0.50	1.00	0.23	0.80	5.0	0.02	0.6
PFMU.075.2	6.0	40	0.75	1.50	0.13	0.195	5.0	0.05	0.6
* PFMU.110.2	6.0	40	1.10	2.20	0.07	0.105	5.0	0.10	0.6

* preliminary

Environmental Characteristics

Operating/Storage Temperature-40°C to +85°C
Maximum Device Surface Temperature
in Tripped State125°C
Passive Aging.....+85°C, 1000 hours±5% typical resistance change
Humidity Aging.....+85°C, 85% R.H. 1000 hours.....±10% typical resistance change
Thermal Shock+85°C to -40°C, 20 times±10% typical resistance change
Solvent ResistanceMIL-STD-202, Method 215No change
VibrationMIL-STD-883C, Method 2007.1,No change
Condition A
Stocking RecommendationsSix months with prepackaged desiccant

Test Procedures And Requirements For Model PFMU Series

Test	Test Conditions	Accept/Reject Criteria
Visual/Mech.	Verify dimensions and materials	Per MF physical description
Resistance	In still air @ 23°C	R _{min} ≤ R ≤ R _{max}
Time to Trip	At specified current, V _{max} , 23°C	T ≤ max. time to trip (seconds)
Hold Current	30 min. at I _{hold}	No trip
Trip Cycle Life	V _{max} , I _{max} , 100 cycles	No arcing or burning
Trip Endurance	V _{max} , 48 hours	No arcing or burning

UL File NumberE 174545S
CSA File NumberCA 110338
TUV File NumberR2057213

Thermal Derating Chart - I_{hold} (Amps)

Model	Ambient Operating Temperature								
	-40°C	-20°C	0°C	23°C	40°C	50°C	60°C	70°C	85°C
* PFMU.005.2	0.08	0.07	0.06	0.05	0.04	0.04	0.03	0.03	0.02
* PFMU.010.2	0.16	0.14	0.12	0.10	0.08	0.07	0.06	0.05	0.03
PFMU.035.2	0.47	0.45	0.40	0.35	0.33	0.28	0.24	0.21	0.18
PFMU.050.2	0.76	0.67	0.58	0.50	0.43	0.40	0.36	0.32	0.28
PFMU.075	1.00	0.97	0.86	0.75	0.64	0.59	0.54	0.48	0.40
* PFMU.110.2	1.55	1.37	1.20	1.10	0.83	0.72	0.61	0.54	0.39

* preliminary

PFMU Series - PTC Resettable Fuses



Product Dimensions

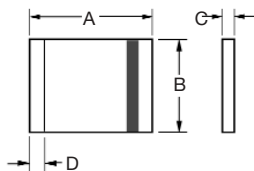
Model	A		B		C		D
	Min.	Max.	Min.	Max.	Min.	Max.	Min.
* PFMU.005.2	$\frac{3.00}{(0.118)}$	$\frac{3.43}{(0.135)}$	$\frac{2.35}{(0.092)}$	$\frac{2.80}{(0.110)}$	$\frac{0.38}{(0.015)}$	$\frac{0.62}{(0.025)}$	$\frac{0.30}{(0.012)}$
* PFMU.010.2	$\frac{3.00}{(0.118)}$	$\frac{3.43}{(0.135)}$	$\frac{2.35}{(0.092)}$	$\frac{2.80}{(0.110)}$	$\frac{0.38}{(0.015)}$	$\frac{0.62}{(0.025)}$	$\frac{0.30}{(0.012)}$
PFMU.035.2	$\frac{3.00}{(0.118)}$	$\frac{3.43}{(0.135)}$	$\frac{2.35}{(0.092)}$	$\frac{2.80}{(0.110)}$	$\frac{0.38}{(0.015)}$	$\frac{0.62}{(0.025)}$	$\frac{0.30}{(0.012)}$
PFMU.050.2	$\frac{3.00}{(0.118)}$	$\frac{3.43}{(0.135)}$	$\frac{2.35}{(0.093)}$	$\frac{2.80}{(0.110)}$	$\frac{0.38}{(0.015)}$	$\frac{0.62}{(0.024)}$	$\frac{0.30}{(0.012)}$
PFMU.075.2	$\frac{3.00}{(0.118)}$	$\frac{3.43}{(0.135)}$	$\frac{2.35}{(0.092)}$	$\frac{2.80}{(0.110)}$	$\frac{0.38}{(0.015)}$	$\frac{0.62}{(0.025)}$	$\frac{0.30}{(0.012)}$
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Packaging: 3000 pcs. per reel.

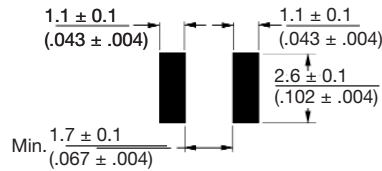
* preliminary

DIMENSIONS = $\frac{\text{MM}}{(\text{INCHES})}$

Top and Bottom View Side View



Recommended Pad Layout

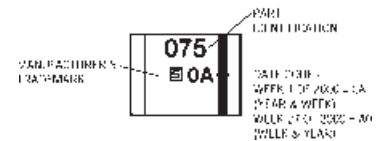


Terminal material: solder-plated copper

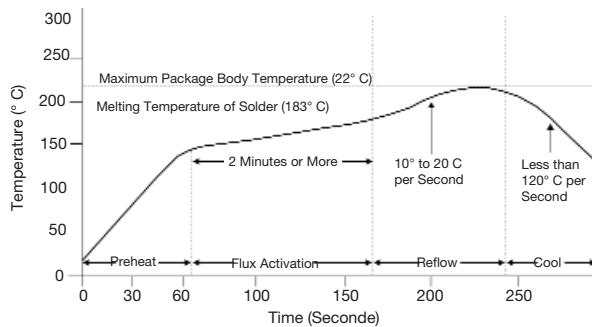
Termination pad solderability: Meets EIA Specification RS-186-9E, ANSI/J-STD-002 Category 3.

Typical Part Marking

Represents total content. Layout may vary.



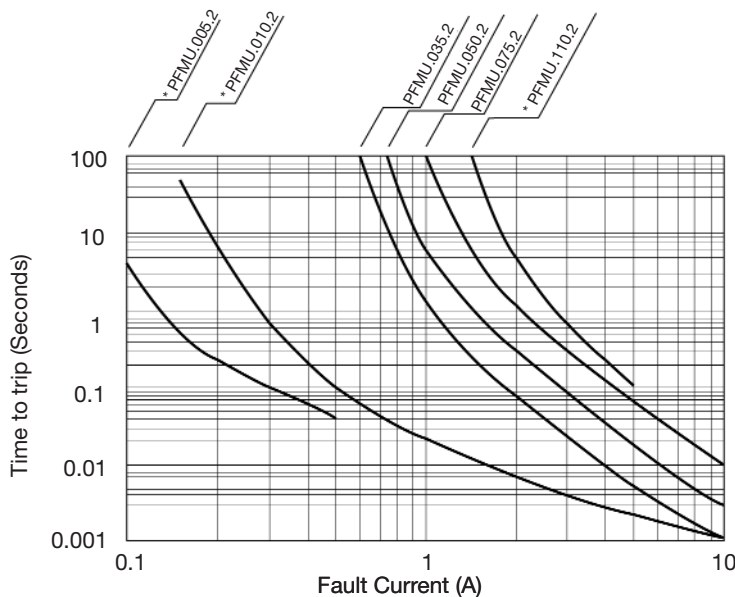
Solder Reflow Recommendations



Note:

- PFMU models can be wave soldered and reworked.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Typical Time to Trip at 23°C



How to Order

PTC-Fuse **PF** **MU** **.xxx** **.x**

Series **MU = 1210 Surface Mount Component**

Hold Current, I_{hold} **005-110 (0.05 Amps - 1.10 Amps)**

Packaging **Packaged per EIA 481-1**
.2 = Tape and Reel