



Features

- Fast tripping resettable circuit protection
- Surface mount packaging for automated assembly
- Very low internal resistance
- Patents pending
- 100°C trip temperature
- Agency recognition:



Applications

- Battery cell protection

PFME Series - PTC Resettable Fuses

Electrical Characteristics

Model	V max. Volts	I max. Amps	I _{hold}	I _{trip}	Initial 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	Min.	R ₁ Max.	Max.		
PFME.190.2	16	100	1.9	3.8	0.017	0.08	10	2.0	1.5
* PFME.450.2	16	100	4.5	9.0	0.016	0.029	22.5	10.0	0.8

* 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.....±5% 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 PFME 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 Number	E 174545S	
CSA File Number	CA 110338	
TÜV File Number	R2057213	

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
PFME.190.2	3.04	2.7	2.2	1.9	1.44	1.23	1.00	0.78	0.49
* PFME.450.2	8.55	7.2	5.85	4.50	3.90	3.30	2.70	2.10	1.80

* preliminary

PFME Series - PTC Resettable Fuses



Product Dimensions

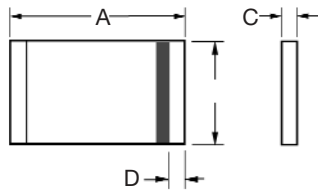
Model	A		B		C		D	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
PFME.190.2	11.15 (0.439)	11.51 (0.453)	4.83 (0.190)	5.33 (0.210)	0.33 (0.013)	0.63 (0.025)	0.53 (0.021)	1.02 (0.040)
* PFME.450.2	11.15 (0.439)	11.51 (0.453)	4.83 (0.190)	5.33 (0.210)	0.90 (0.035)	1.10 (0.043)	0.51 (0.020)	1.02 (0.040)

Packaging: 2000 pcs. per reel.

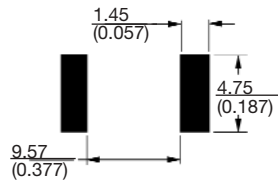
* preliminary

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

Top and Bottom View Side View

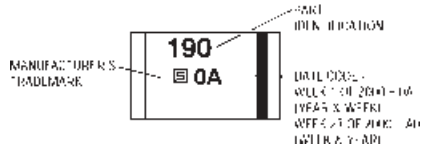


Recommended Pad Layout

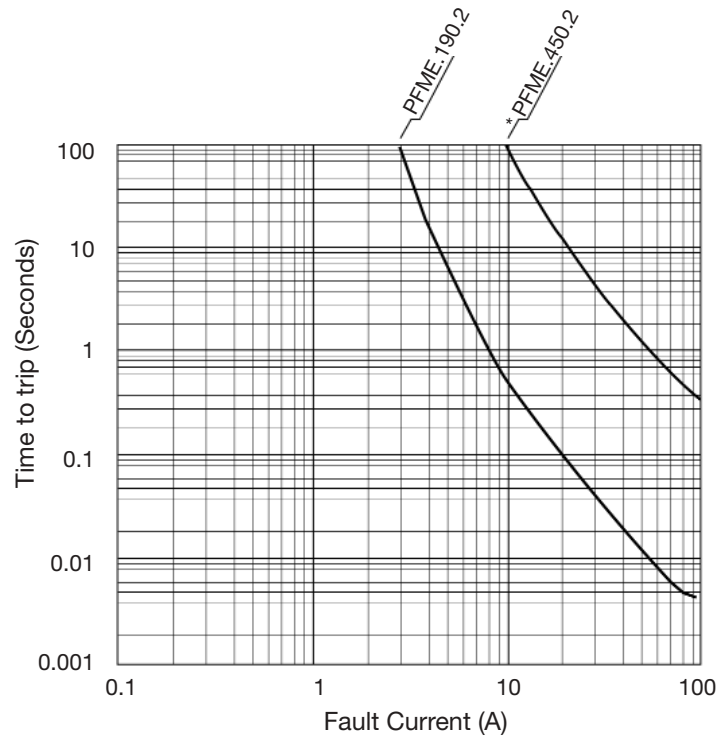


Typical Part Marking

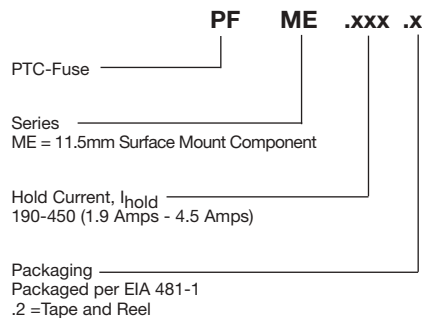
Represents total content. Layout may vary.



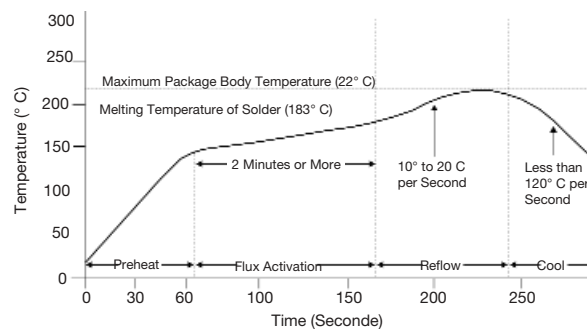
Typical Time to Trip at 23°C



How to Order



Solder Reflow Recommendations



Note:

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