

FUSES

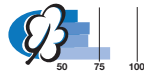
Resettable fuses

PFMT

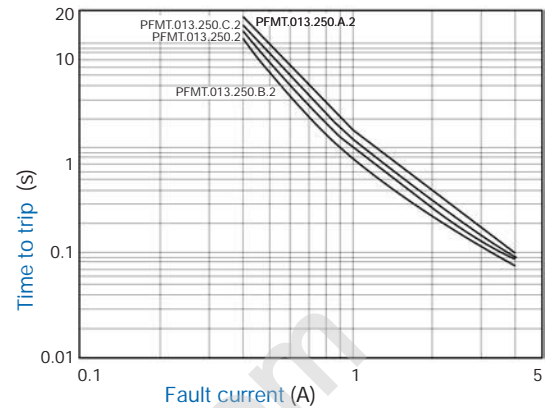
Surface Mount PTC-Fuses Type PFMT

5,4 x 8,5 mm
High voltage surge capabilities
Compliance to ITU K.20/K.21 specifications
Packaged per EIA 486-B

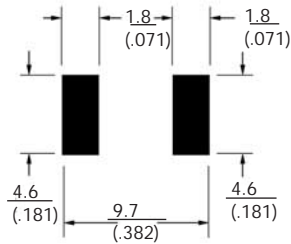
Agency recognition:
UL, CSA, TÜV



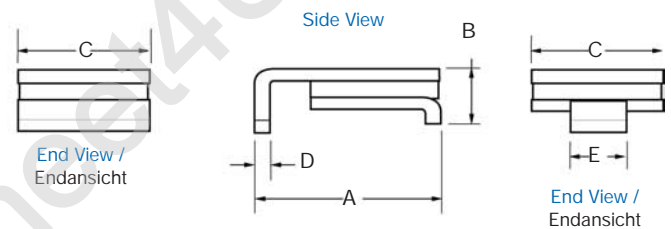
Typical Time to Trip at 23 °C



Solder pad layouts



Dimensions



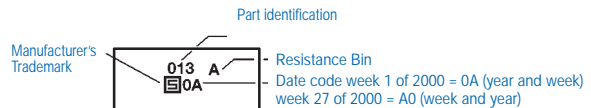
Applications

Used as a secondary overcurrent protection device in:

- Customer Premise Equipment (CPE)
- Central Office (CO)
- Subscriber Line Interface Cards (SLIC)

Typical Part Marking

Layout may vary



Environmental Characteristics

Operating/Storage Temperature	-45 °C to +85 °C	
Maximum Device Surface Temperature in Tripped State	125 °C	
Passive Aging	+85 °C, 1000 hours	± 2% typ. resist. change
	+60 °C, 1000 hours	± 3% typ. resist. change
Humidity Aging	+85 °C, 85% R.H. 500 hours	± 3% typ. resist. change
Thermal Shock	MIL-STD-202F, Method 107G	±10% typ. resist. change
	+125 °C/-55 °C 10 times	±15% typ. resist. change
Solvent Resistance	MIL-STD-202, Method 215B	No change
Lead Solderability	ANSI/J-STD-002	
Flammability	IEC 695-2-2	No Flame for 60 sec.
Vibration	MIL-STD-883C, Method 2007.1, Condition A	No change

Test Procedures And Requirements For Model PFMT Series

Test	Test Conditions	Accept/Reject Criteria
Visual/Mech.	Verify dimensions and materials	Per MF physical description
Resistance	In still air @ 23°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	At specified current, V_{max} 23 °C	$T \leq \text{max. time to trip (sec.)}$
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
Solderability	MIL-STD-202F, Method 208F	95% min. coverage

Electrical Characteristics

Type	Max. Oper. Voltage	Max. Interrupt Ratings		Hold Current	Initial Resistance		One Hour Post-Trip Resistance	Nom. Power Dissipation
		Volts	Amps		Amps at 23 °C	Ohms at 23 °C		
	Volts	max.	max.	I_h	min.	max.	max.	Watts at 650 V / 23 °C
PFMT.013.250.2	60	250	3.0	0.13	6.5	12.0	20.0	3.3
PFMT.013.250.A.2	60	250	3.0	0.13	6.5	9.0	20.0	3.3
PFMT.013.250.B.2	60	250	3.0	0.13	9.0	12.0	20.0	3.3
PFMT.013.250.C.2	60	250	3.0	0.13	7.0	10.0	20.0	3.3

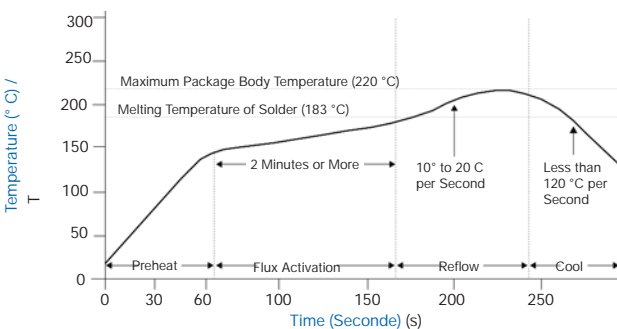
Dimensions

Type	A		B	C	D	E
	min.	max.	max.	max.	nom.	nom.
PFMT.013.250.2	8.5 (0.335)	9.4 (0.370)	3.4 (0.134)	7.4 (0.291)	0.3 (0.011)	3.75 (0.148)
PFMT.013.250.A.2	8.5 (0.335)	9.4 (0.370)	3.4 (0.134)	7.4 (0.291)	0.3 (0.011)	3.75 (0.148)
PFMT.013.250.B.2	8.5 (0.335)	9.4 (0.370)	3.4 (0.134)	7.4 (0.291)	0.3 (0.011)	3.75 (0.148)
PFMT.013.250.C.2	8.5 (0.335)	9.4 (0.370)	3.4 (0.134)	7.4 (0.291)	0.3 (0.011)	3.75 (0.148)

Packaged: Tape and reel: 2000 pcs. per reel

Dimensions in mm/inches

Soldering Profile



Solder reflow

- Recommended reflow methods: I_R , vapor phase oven, hot air oven.
- Devices are not designed to be wave soldered to the bottom side of the board.
- Gluing the devices is not recommended.
- Recommended maximum paste thickness is 0,25 mm (.010 inch).
- Devices can be cleaned using standard industry methods and solvents.

Note:

- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Rework

- A device should not be reworked.

How To Order

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

Style
MT = Surface Mount/
Telecom Component

Hold Current, I_{hold}
013 (0.13 Amps)

Max. Interrupt Voltage, V
250 (250 V)

Resistance Sorted
Ω
A = 6.5-9Ω
B = 9-12Ω
C = 7-12Ω

Packaging Options
Packaged per EIA 486-B
2 = Tape and reel

Thermal Derating Chart- I_{hold}/I_{trip} (Amps)

Type	Ambient Operating Temperature								
	-40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C
PFMT.013.250.2	0.21/0.42	0.18/0.37	0.16/0.31	0.13/0.26	0.10/0.23	0.09/0.18	0.08/0.15	0.07/0.12	0.05/0.10
PFMT.013.250.A.2	0.21/0.42	0.18/0.37	0.16/0.31	0.13/0.26	0.10/0.23	0.09/0.18	0.08/0.15	0.07/0.12	0.05/0.10
PFMT.013.250.B.2	0.21/0.42	0.18/0.37	0.16/0.31	0.13/0.26	0.10/0.23	0.09/0.18	0.08/0.15	0.07/0.12	0.05/0.10
PFMT.013.250.C.2	0.21/0.42	0.18/0.37	0.16/0.31	0.13/0.26	0.10/0.23	0.09/0.18	0.08/0.15	0.07/0.12	0.05/0.10