

# Surface Mount PPTC FSMD 0805 Series



### FEATURES

• 0805 size Surface Mount

Application: All high-density boards
Operation Current: 100mA ~ 350mA
Maximum Voltage: 6V ~ 15V
Temperature Range: -40°C to 85°C

RoHS Compliant

#### AGENCY RECOGNITION

•UL (Pending)

•C-UL (Pending)

•TÜV (Pending)

## ■ ELECTRICAL CHARACTERISTICS (23°C)

Part Number	Hold	Trip Current	Rated Voltage	Maximum Current	Typical Power	Max Time to Trip		Resistance Tolerance	
	Current					Current	Time	RMIN	R1max
	Ін, А	IT, A	VMAX, Vdc	Імах, А	Pd, W	Amp	Sec	OHMS	OHMS
FSMD010-0805	0.10	0.30	15	100	0.5	0.50	1.500	0.70	6.000
FSMD020-0805	0.20	0.50	9	100	0.5	8.00	0.02	0.40	3.500
FSMD035-0805	0.35	0.75	6	100	0.5	8.00	0.10	0.25	1.200

I<sub>H</sub>=Hold current-maximum current at which the device will not trip at 23°C still air.

I<sub>T</sub>=Trip current-maximum current at which the device will always trip at 23°C still air.

V MAX=Maximum voltage device can withstand without damage at its rated current (I MAX).

I MAX=Maximum fault current device can withstand without damage at rated voltage (V MAX).

Pd=Typical power dissipated-type amount of power dissipated by the device when in the tripped state in 23°C still air environment.

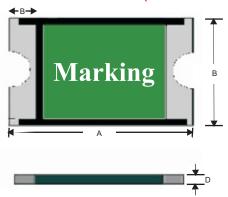
R MIN=Minimum device resistance at 23°C prior to tripping.

R1<sub>MAX</sub>=Maximum device resistance at 23°C measured 1 hour post trip.

Termination pad characteristics

Termination pad materials: solder-plated copper

# ■ FSMD PRODUCT DIMENSIONS (MILLIMETERS)



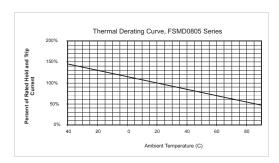
Part	Α		В		С		D
Number	Min	Max	Min	Max	Min	Max	Min
FSMD010-0805	2.00	2.2	1.20	1.5	0.20	0.55	1.00
FSMD020-0805	2.00	2.2	1.20	1.5	0.20	0.55	1.00
FSMD035-0805	2.00	2.2	1.20	1.5	0.20	0.47	0.75



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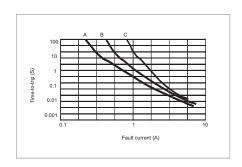


## ■ THERMAL PRODUCT DIMENSIONS (MILLIMETERS)



A= FSMD 075, 100 B= FSMD 014, 020, 035 & 050

## ■ TYPICAL TIME-TO-TRIP AT 23°C

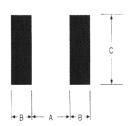


A = FSMD010 - 0805 B = FSMD020 - 0805 C = FSMD035 - 0805

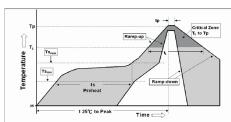
## ■ PAD LAYOUTS, SOLDER REFLOW AND REWORK RECOMMENDATIONS

The dimensions in the table below provide the recommended pad layout for each FSMD 1812 device

#### NOMINAL PAD DIMENSIONS (MILLIMETERS)



### **SOLDER RELOW**



#### Solder Reflow

Due to "Lead Free" nature, Temperature and Dwelling time for the soldering zone is higher than those for regular. This may cause damage to other components.

- 1. Recommended maximum past thickness is 0.25mm.
- 2. Devices can be cleaned by using standard industry methods and solvents.
- 3. Storage Environment: <30°C / 60% RH solvents.

## Caution:

If reflow temperatures exceed the recommended profile, devices may not meet performance requirements. Devices are not designed to be wave soldered to the bottom side of the board.

#### Rework:

Use standard industry practices.

NOTE: All Specification subject to change without notice.