

# Surface Mountable PTC Resettable Fuse

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**RoHS  
Compliant**

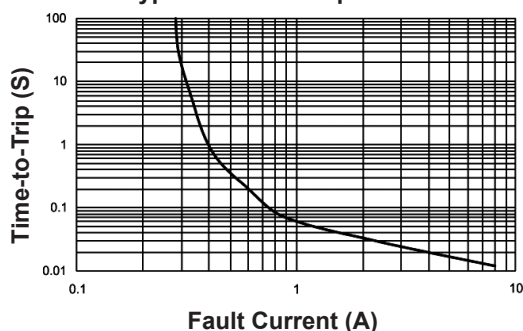


## Specifications:

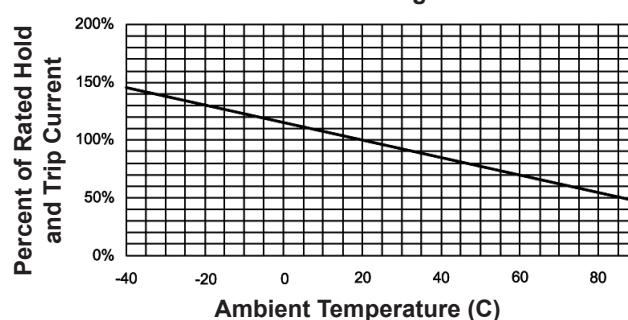
Terminal Pad Material	: Pure Tin
Soldering Characteristic	: Meets EIA specs. RS 186-9E, ANSI/J-std-002 Category 3
Series	: FSMD
PTC Fuse Case	: SMD
External Depth	: 1.35mm
External Length / Height	: 0.775mm
External Width	: 2.15mm
Operating Temperature	: -40°C to +85°C

Profile Feature	Pb-Free Assembly
<b>Average Ramp-Up Rate (T<sub>smax</sub> to T<sub>p</sub>)</b>	3°C/second max.
<b>Preheat:</b>	
Temperature Min. (T <sub>smin</sub> )	150°C
Temperature Max. (T <sub>smax</sub> )	200°C
Time (t <sub>smin</sub> to t <sub>smax</sub> )	60-180 seconds
<b>Time maintained above:</b>	
Temperature (T <sub>L</sub> )	217°C
Time (t <sub>L</sub> )	60-150 seconds
<b>Peak/Classification Temperature (T<sub>p</sub>)</b>	260°C
<b>Time within 5°C of actual Peak:</b>	
Temperature (t <sub>p</sub> )	20-40 seconds
<b>Ramp-Down Rate:</b>	6°C /second max.
<b>Time 25°C to Peak Temperature:</b>	8 minute max.

Typical Time-to-Trip at 23°C



Thermal Derating Curve



Hold Current	Trip Current	Max. Time-to-trip		Rated Voltage	Max. Current	Typical Power	Resistance Tolerance	
		Current	Time				R <sub>MIN</sub>	R <sub>1MAX</sub>
I <sub>H</sub> , A	I <sub>T</sub> , A	A	Sec	V <sub>MAX</sub> , V DC	I <sub>MAX</sub> , A	Pd, W	Ω	Ω
0.1	0.3	0.5	1.5	15	100	0.5	0.7	6

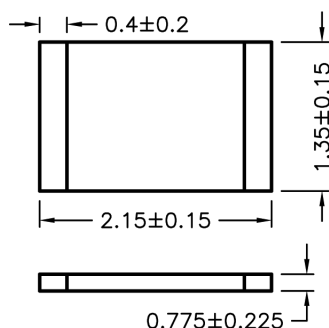
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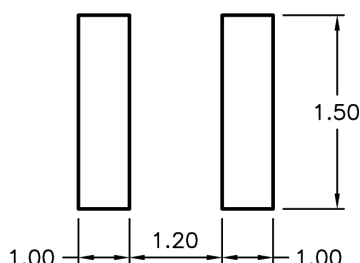
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## Dimension

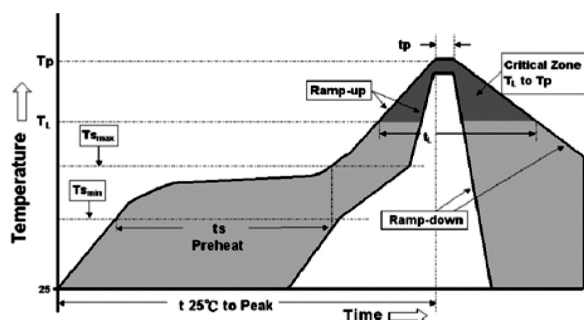


## Pad Layout



Dimensions : Millimetres

## Reflow Profile



## 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 max past thickness > 0.25mm.
2. Devices can be cleaned using standard methods and aqueous solvent.
3. Rework use standard industry practices.
4. Storage Environment: < 30°C / 60%RH

### Caution:

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

## Part Number Table

Description	Part Number
Fuse, Resettable, SMD, 0.1A	MC33186

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