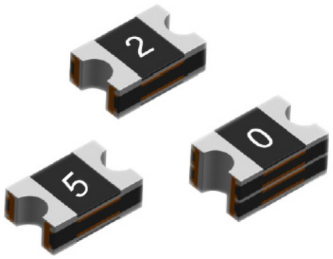
Surface Mount PPTC Fuses
0805

multicomp PRO

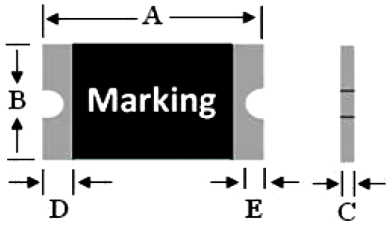


Features

- Faster tripping, 0805 Dimension
- Surface mountable, solid state
- Holding Current: 0.25A to 1.1A, @ 25°C
- Maximum Voltage: 6V
- Operating Temperature: -40°C to +85°C
- Lead-free and Halogen-free

RoHS Compliant

Dimension



Part Number	Marking	A		B		C		D	E
		Min. (mm)	Max. (mm)	Min. (mm)	Max. (mm)	Min. (mm)	Max. (mm)	Min. (mm)	Min. (mm)
MP001586	2	2	2.2	1.2	1.5	0.4	1	0.2	0.1
MP001587	5	2	2.2	1.2	1.5	0.4	1	0.2	0.1
MP001588	0	2	2.2	1.2	1.5	0.5	1.2	0.2	0.1

Electrical Specifications

Part Number	$V_{Max.}$ (V)	$I_{Max.}$ (A)	I_H (A)	I_T (A)	P_D (W)	Maximum Time-to-Trip		Resistance	
						Current (A)	Time (Sec)	Ri_{Min} (Ω)	$R1_{Max.}$ (Ω)
MP001586	6	100	0.25	0.55	0.5	8	0.02	0.45	3.2
MP001587	6	100	0.5	1	0.6	8	0.1	0.15	0.85
MP001588	6	100	1.1	2.2	0.6	8	0.3	0.05	0.16

I_H: Holding current, maximum current at which the device will not interrupt in 25°C still air.
I_T: Tripping current, minimum current at which the device from low resistance to high resistance in 25°C still air.
V_{MAX}: Maximum continuous voltage device can withstand without damage at rated current.
I_{MAX}: Maximum fault current device can withstand without damage at rated voltage.
Maximum Time-to-trip: Maximum time to trip at assigned current.
P_D: Typical amount of power dissipated from the device when in 25°C still air environment.
Ri_{Min}: Minimum resistance of device at 25°C prior to tripping.
$R1_{Max}$: Maximum resistance of device is measured one hour post reflow.

Thermal Derating Chart-I_H (A)

Part Number	Maximum holding current at assigned ambient temperature (A)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
MP001586	0.35	0.31	0.29	0.25	0.21	0.18	0.15	0.13	0.09
MP001587	0.68	0.62	0.55	0.5	0.4	0.37	0.33	0.29	0.23
MP001588	1.45	1.35	1.2	1.1	0.92	0.84	0.75	0.65	0.52

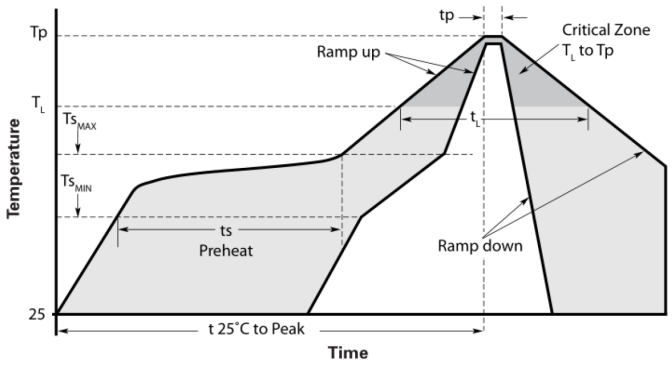
Physical Characteristics

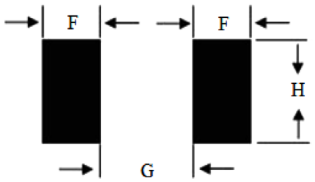
Terminal Pad Materials	Tin-Plated Nickle-copper
Soldering Characteristics	EIA specification RS 186-9E, ANSI/J-STD-002
Moisture Sensitivity	Level 2a, per IPC/JEDEC J-STD 020C

Environmental Specifications

Test Item	Test Conditions	Resistance Change
Storage life	85°C,1000 hours	±10% typical
Humidity Aging	85°C/85%RH.100 hours	±5% typical
Thermal Shock	MIL-STD-202, Method 107G +85°C/-40°C,20 times	-30% typical
Solvent Resistance	MIL-STD-202, Method 215	No change
Vibration	ML-STD-883C	No change

Solder Reflow Profiles and Pad Layout Dimensions





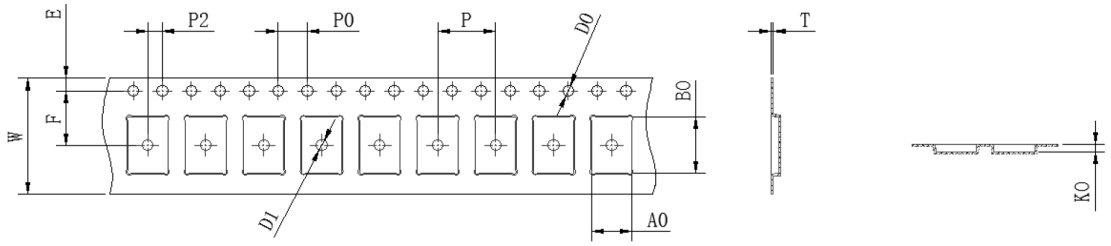
Solder pad layout dimensions

F	G	H
1mm	1.2mm	1.5mm

Profile Feature		Pb-Free Assembly
Average Ramp-UP Rate(Tsmax to Tp)		3°C/s Max.
Preheat	Temperature Min (Ts min)	150°C
	Temperature Max (Ts max)	200°C
	Time (Tsmin to Ts max)	60sec to 120sec

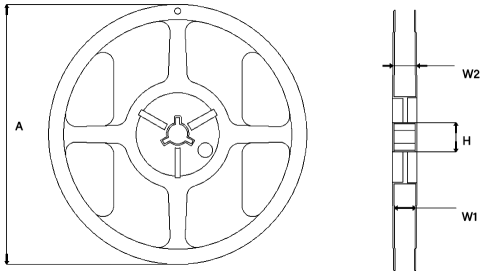
Peak Temperature (T_P)	260°C
Time maintained above Temperature (T_L) Time (t_L)	217°C 60-150 seconds
Time within 5°C of actual peak temperature Time 30 seconds max	
Ramp down rate 3°C / second max	
Time 25°C to peak temperature 8 minutes max.	

Packing Information



W	P0	P1	P2	A0	B0	D0	D1	F	E	T	K0
8 ±0.3	4 ±0.1	4 ±0.1	2 ±0.1	1.65 ±0.1	2.35 ±0.1	1.55 ±0.05	1 ±0.1	3.5 ±0.05	1.75 ±0.1	0.25 ±0.1	0.9 ±0.1 1.05 ±0.1 1.5 ±0.1

Reel Dimensions



A	N	W1	W2
178 ±1	59 ±1	8.5 +1 / -0.2	12 ±1

Part Number Table

Description	Part Number
PPTC Fuse, 0.25A, 6V, 0805	MP001586
PPTC Fuse, 0.5A, 6V, 0805	MP001587
PPTC Fuse, 1.1A, 6V, 0805	MP001588

Dimensions : Millimetres