Features

- Compact design, 0805 size, surface mount type
- Low-profile
- Fast response for fault protection
- Low thermal derating factor
- RoHS compliant [1]
- Halogen free [2]

Applications

- Resettable fault protection of general electronics equipment

Electrical Performance

Vmax (Vdc)	Imax (Amperes)	Current Rating**		Time to Trip**	Resistance		Tripped State Power Dissipation**
		Amperes @25˚C		Seconds @25˚C 0.50A	Ohms @25˚C		Watts @25˚C 30.0Vdc
		Ihold	Itrip	Max	Rmin	R1max*	Max
30.0	100.0	0.10	0.30	1.50	0.750	6.000	0.5

*Maximum Resistance is measured 1 hour after reflow
**Values specified were determined using PCB's with 0.020"x1.5oz copper traces.

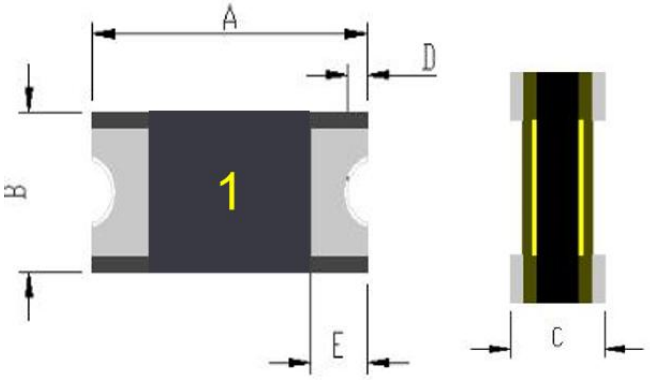
Thermal Derating--Hold current (A) at Ambient Temperature (°C) (for reference only)

Ambient Operation Temperature(°C)	-40°C	-20°C	0°C	+25°C	+40°C	+50°C	+60°C	+70°C	+85°C
Hold Current (A)	0.140	0.120	0.110	0.100	0.080	0.070	0.060	0.050	0.030

Environmental Characteristics

Test	Test Conditions	Accept/Reject Criterial
Operating Temperature	-40°C to +85°C	
Recommended Storage	+40°C max/70% R.H. max	
Maximum Device Surface Temperature in Tripped State	125°C	
Passive Aging	+85°C, 1000 hours	+/-5% typical resistance change
Humidity Aging	+85°C, 85% R.H.,100 hours	+/-5% typical resistance change
Thermal Shock	+85°C/-40°C 20 times	-30% typical resistance change
Solvent Resistance	MIL–STD–202, Method 215	No change
Vibration	MIL–STD–883, Method 2007, Condition A	No change
Moisture Sensitivity Level	J–STD–020	Level 1

Dimensions



Dimensions MM (INCH)

Dimension	Min	Max
A	2.00 (0.079)	2.20 (0.087)
B	1.20 (0.047)	1.50 (0.059)
C	0.40 (0.016)	0.90 (0.035)
D	0.10 (0.004)	-- (--)
E	0.20 (0.008)	-- (--)

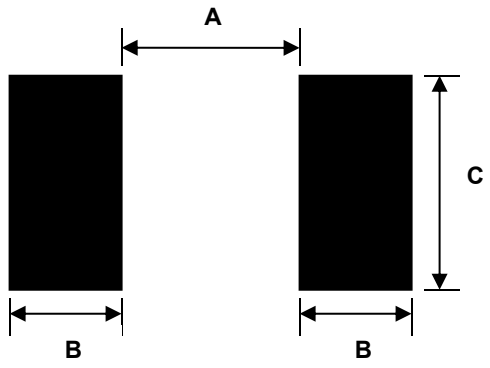
Terminal Material:

100% Matte Tin with Nickel Underplate

Lead Solderability:

Meets ANSI/J-STD-002, Category 3.

Pads Layout (Recommended)



Recommended Pad Layout Figures

	A	B	C
	NOM	NOM	NOM
mm:	1.20	1.00	1.50
inch	(0.047)	(0.039)	(0.059)

Can be soldered using standard Pb-free reflow profile.

Warnings:

- Electrical performance can differ according to installation condition of the device. Users shall independently assess the suitability of the device under actual using condition.
- Operation beyond the stated maximum ratings could result in damage to the devices and lead to electrical arcing and/or flame.
- These devices are intended to protect against the effects of temporary overcurrent or over-temperature fault conditions and are not intended to perform as protective devices where such conditions are expected to be repetitive or prolonged in duration.
- Avoid the exposure to silicon-based oils, solvents, electrolytes, acids, and similar materials.
- These devices undergo thermal expansion under fault conditions, and thus shall be provided with adequate space and be protected against mechanical stresses.
- Circuits with inductance may generate a voltage (L di/dt) above the rated voltage of the PTCs device.