

SMD600H

Surface-Mount Low Resistance PTC Device
 Rev Letter: A/1
 Rev Date: 2020-3-8



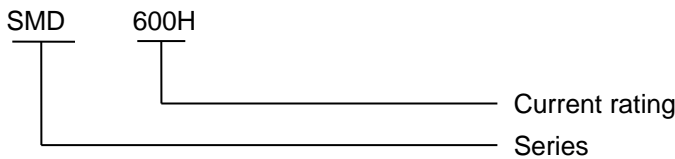
Feature

- Resettable overcurrent protection
- Very Low resistance
- Small size of 1210
- Fast time-to-trip
- Small footprint
- ROHS compliant and Halogen free

Application

- Mobile phone battery packs
- Cordless phone battery packs
- Mobile radio packs
- Computer battery packs
- Camcorder battery packs
- PDA battery packs

Part Number



Typical Ratings and Characteristics

- Maximum Operating Voltage: 12Vdc
- Maximum Interrupt Current: 50A

HOLD CURRENT & TRIP CURRENT (AMPS)						TIME-TO-TRIP (SECONDS)	REFERENCE RESISTANCE (OHMS)	TWO HOURS POST REFLOW RESISTANCE (OHMS)	TRIPPED STATE POWER DISSIPATION (WATTS)
0°C		25°C		60°C		25°C, 30A	25°C	25°C	25°C, 12V
HOLD	TRIP	HOLD	TRIP	HOLD	TRIP	MAX	MIN	MAX	MAX
6.3	12.8	6.0	12.0	3.8	7.2	5.0	0.001	0.010	1.5

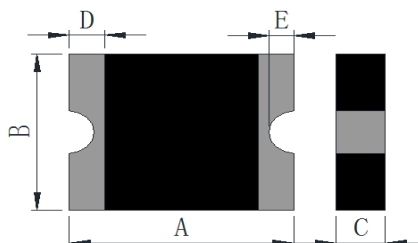
*The max resistance of two-hours post reflow is a reference value. The value maybe changes a little according to reflow conditions and soldering state

Thermal Derating [Hold Current (A) at Ambient Temperature(°C)]

	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
I_{hold}	7.0	6.6	6.3	6.0	4.4	4.2	3.8	3.3	2.7
I_{trip}	14.0	13.2	12.8	12.0	8.8	8.4	7.2	6.6	5.4

Product Dimension and Foot Print

A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
Max	Max	Max	Min	Min
3.45	2.80	1.3	0.25	0.1

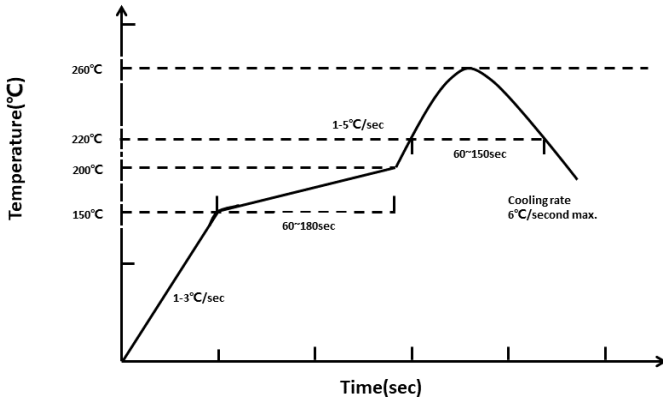


SMD600H

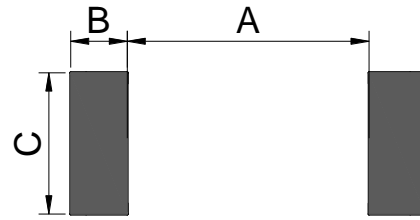
Surface-Mount Low Resistance PTC Device
 Rev Letter: A/1
 Rev Date: 2020-3-8



Solder Reflow Recommendation



Reflow-curve



footprint(mm)

Recommended reflow methods: IR, hot air oven, nitrogen oven

- * Recommended maximum paste thickness: 0.25mm (0.010 inch)
- * Devices can be cleaned using standard industry methods and solvents.
- * Solder temperature and time should be controlled strictly in recommended conditions.

Note:

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

Caution: Operation beyond the rated voltage or current may result in rupture electrical arcing or flame

Packaging and Marking Information

Part number	Tape & Reel		Part Marking	Recommended Pad Layout Figures(mm)		
	Quantity	Tape spc code		Dimension A	Dimension B	Dimension C
SMD600H	3500	1210B	S4	2.00	1.00	2.50



WARNING:

- Operation beyond the maximum ratings or improper use may result in device damage and possible electrical arcing and flame.
- The devices are intended for protection against occasional overcurrent or over-temperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.
- Contamination of the PPTC material with certain silicon based oils or some aggressive solvents can adversely impact the performance of the devices.
- Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal and mechanical procedures for electronic components.
- Operation in circuit with a large inductance can generate a circuit voltage (L di/dt) above the rated voltage of the PPTC device.
- When PTC is welded to the PCM in product application, please keep the surplus material in airtight environment to avoid long air exposure and use within 1 month.
- Surgwave SMD PTC humidity sensitivity grade 2, for sealed packaging. The shelf life is 1 year.

Prepare	Audit	Approve
JINXIN	FUXIANG	DAIWEIYANG