

SML1210-700

Surface-Mount Low Resistance PTC Device

Rev Letter: A/0

Rev Date: 2015-12-25



Feature

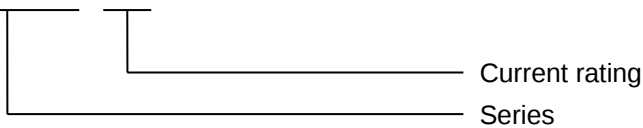
- Resettable overcurrent protection
- Very Low resistance
- High current rating
- Fast time-to-trip
- Small footprint
- ROHS compliant and Halogen free

Application

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

Part Number

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Typical Ratings and Characteristics

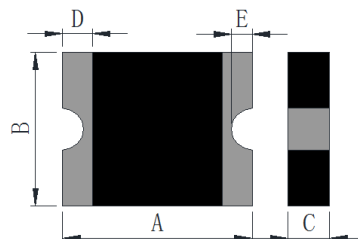
- Maximum Operating Voltage: 6Vdc
- Maximum Interrupt Current: 50A

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, 35.0A	25°C	25°C	25°C, 6V
HOLD	TRIP	HOLD	TRIP	HOLD	TRIP	MAX	MIN	MAX	MAX
7.8	15.6	7.0	14.0	5.0	10.0	5.0	0.001	0.009	1.4

*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.

Product Dimension and Foot Print

A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
Max	Max	Max	Min	Min
3.45	2.8	1.1	0.25	0.1



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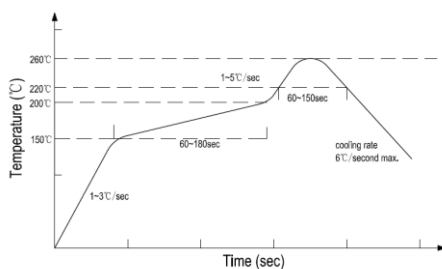
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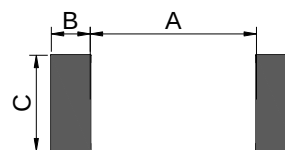
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Solder Reflow Recommendation



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	code		Dimension A(Nom.)	Dimension B(Nom.)	Dimension C(Nom.)
SML1210-700	3500	1210B	x	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.

Prepare	Audit	Approve