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PART NUMBER:

LP-NSM012

Polymer PTC Devices

Surface mount fuses

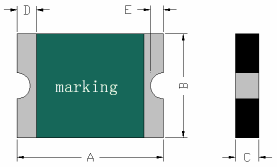
CYG Wayon Circuit Protection Co.,Ltd.
No.1001, Shiwan Qi Road, Shanghai 201207,China
Tel: 86-21-50968309 Fax: 86-21-50968310
E-mail: market@way-on.com Http://www.way-on.com

Features

- ☐ Small size of 1206
- ☐ Lead-free and compliant with the European Union RoHS Directive 2011/65/EU
- ☐ Fast tripping resettable circuit protection
- ☐ Surface mount packaging for automated assembly
- ☐ Agency Recognition: UL、CSA、TUV

Product Dimensions (mm)

Part number	A	B	C	D	E	Part marking
	Max.	Max.	Max.	Min.	Min.	
LP-NSM012	3.50	1.80	0.85	0.25	0.10	P



Top View Side View

Electrical Characteristics

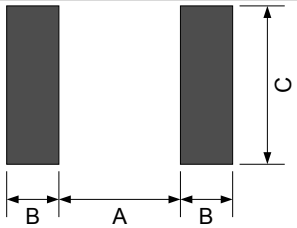
Part number	I_H	I_T	V_{max}	I_{max}	T_{trip}		Pd_{typ}	R_{min}	R_{1max}
	(A)	(A)	(V)	(A)	Current(A)	Time(S)	(W)	(Ω)	(Ω)
LP-NSM012	0.125	0.29	30	20	1.0	0.20	0.6	1.50	6.00

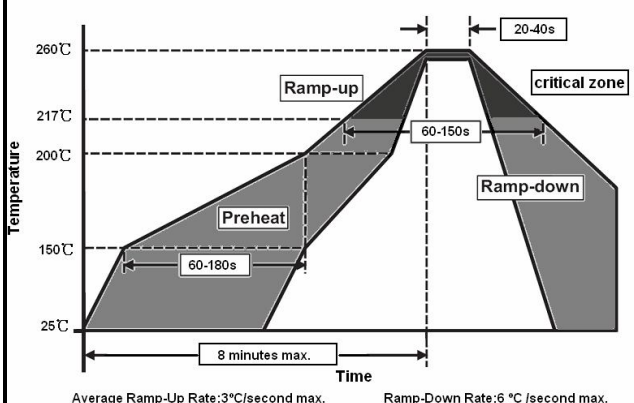
I_H=Hold current: maximum current at which the device will not trip at 25℃ still air.
I_T=Trip current: minimum current at which the device will always trip at 25℃ still air.
V_{max}=Maximum voltage device can withstand without damage at rated current.
I_{max}=Maximum fault current device can withstand without damage at rated voltage.
T_{trip}=Maximum time to trip(s) at assigned current.
Pd_{typ}=Typical power dissipation: typical amount of power dissipated by the device when in state air environment.
R_{min}=Minimum device resistance at 25℃ prior to tripping.
R_{1max}=Maximum device resistance measured in the nontripped state 1 hour post reflow.

Thermal Derating

LP-NSM012	Maximum ambient operating temperature(℃)									
	-40	-20	0	20	25	40	50	60	70	85
Hold Current (A)	0.19	0.16	0.14	0.13	0.125	0.10	0.09	0.08	0.07	0.04

Solder Reflow Recommendations





Average Ramp-Up Rate:3℃/second max. Ramp-Down Rate:6 ℃ /second max.

Solder Pad Layouts

Part number	A	B	C
	(mm)	(mm)	(mm)
LP-NSM012	1.80	1.00	1.80

* Recommended reflow methods: IR, Vapor phase, hot air oven.
* Devices can be cleaned using standard industry methods and solvents.

Notes:

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

Package Information

Tape & Reel: 4000pcs per reel.

Effectivity: Reference documents shall be the issue in effect on the date of invitation for bid.

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

Specifications are subject to change without notice