

Expertise Applied Answers Delivered

PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: nanoSMD270LR-2

DOCUMENT: SCD28284 REV LETTER: F REV DATE: JULY 26, 2016 PAGE NO.: 1 OF 3

Specification Status: Released

Maximum Electrical Rating Voltage: 6.0V_{DC} Short Circuit Current: 50A

Notes:

- 1. Termination Finish: NiAu
- 2. Drawing not to scale
- 3. For battery application only



Marking:

TABLE I. DIMENSIONS:

	A		В		С		D					
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX				
mm:	3.00	3.43	0.50	1.00	1.37	1.85	0.25	0.75				
in:	(0.118)	(0.135)	(0.019)	(0.039)	(0.054)	(0.073)	(0.010)	(0.030)				

TABLE II. PERFORMANCE RATINGS:

CURRENT RATINGS**						TIME TO	RESISTANCE		TRIPPED-STATE	
						TRIP**	VALUES		POWER	
									DISSIPATION**	
AMPERES		AMPERES AMP		ERES	SECONDS	OHMS		WATTS AT		
AT 0°C		AT 20°C		AT 60°C		AT 20°C, 8.0A	AT 20°C		20°C, 6.0V	
HOLD	TRIP	HOLD	TRIP	HOLD	TRIP	MAX	MIN	MAX*	MAX	
3.0	7.5	2.7	6.3	1.6	4.5	5.0	.005	.018	1.0	

* Maximum resistance is measured 24 hour after reflow.

**Values specified were determined using PCB's with 0.105"X1.0 ounce copper traces.

Agency Recognition:UL, CSA, TÜVReference Document:PS300Precedence:This specification takes precedence over documents referenced herein.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.

Materials Information

Compliant

ROHS Compliant Directive 2002/95/EC









* Halogen Free refers to: Br≤900ppm, Cl≤900ppm, Br+Cl≤1500ppm.



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Note: All temperatures refer to top side of the package, measured on the package body surface.

Solder reflow recommendation

- Recommended reflow methods: IR, hot air and Nitrogen
- Recommended maximum solder paste thickness: 0.25mm
- Recommended minimum stencil thickness: 0.1mm
- Devices can be cleaned using standard methods and aqueous solvents.
- LF believes the optimum conditions for forming acceptable solder fillets occur when a reasonable amount of solder paste is placed underneath each device's termination. As such, we request that customers comply with our recommended solder pad layouts.
- Customer should validate that the solder paste amount and reflow recommendations meet its application.
- LF requests that customer board layouts refrain from placing raised features (e.g. vias, nomenclature, traces, etc.) underneath PolySwitch devices. It is possible that raised features could negatively impact solderability performance of our devices.



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