PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: AGRF1100

DOCUMENT: SCD25238
REV LETTER: D
REV DATE: JULY 26, 2016

Specification Status: Released

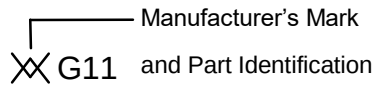
Electrical Rating

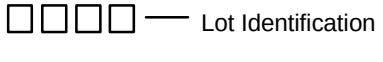
Voltage: 16V_{DC} MAX

Insulating Material:
Cured, Flame Retardant Epoxy Polymer

Lead Material:
20 AWG Tin Plated Copper
(0.8 mm [0.032] nom. diameter)

Part Marking:





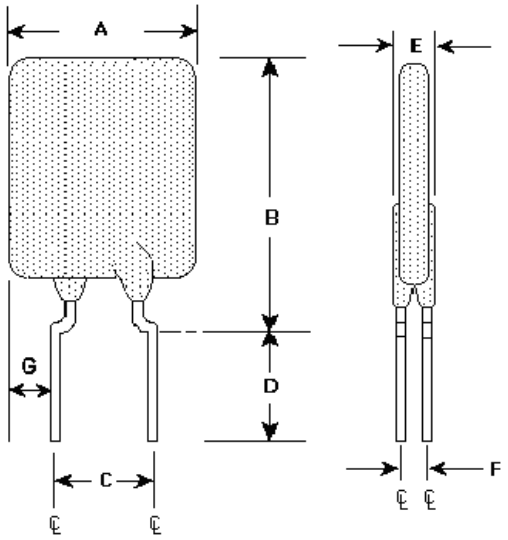


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	A		B		C		D		E		F	G	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
mm:	--	17.5	--	26.5	4.3	5.8	7.6	--	--	3.0	1.2	--	7.47
in*:	--	(0.69)	--	(1.04)	(0.17)	(0.23)	(0.30)	--	--	(0.12)	(0.05)	--	(0.294)

*Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

CURRENT RATINGS			TIME TO TRIP	INITIAL RESISTANCE		$R_{1\ MAX}$ 1 HR. POST TRIP RESISTANCE STANDARD TRIP	$R_{A\ MAX}$	TRIPPED-STATE POWER DISSIPATION
AMPS AT 25°C			SECONDS AT 25°C, 55 A	OHMS AT 25°C		OHMS AT 25°C	OHMS AT 25°C	WATTS AT 25°C
HOLD AT $R_{1\ MAX}$	HOLD AT $R_{A\ MAX}$	TRIP	MAX	MIN	MAX			TYP
11.0	10.5	20.3	7.5	0.0033	0.0060	0.0089	0.0093	3.7

Reference Documents: PS400, PS300 (reference for $R_{1\ MAX}$)
Precedence: 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

ROHS Compliant — Directive 2002/95/EC Compliant

ELV Compliant — Directive 2000/53/EC Compliant

Pb-Free

Halogen Free*

HF

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

© 2016 Littelfuse,Inc.
Specifications are subject to change without notice
Revised July 26,2016

TABLE III. AUTOMOTIVE SPECIFIC STRESS TESTS AND TEST CONDITIONS:

ELECTRICAL STRESS TESTS	TEST CONDITIONS (see note 2)
ESD Voltage Withstand (see note 1)	25kV
Short Circuit Fault Current Durability	25 cycles, 16V, 200A
Fault Current Durability	350 cycles, 16V/100A
End-of-life Mode Verification	1750 cycles, 16V/100A
Jump Start Endurance (see note 1)	3 cycles, 26V, 1 minute duration
Load Dump Endurance (see note 1)	10 cycles, 86.5V

Note 1: The PolySwitch devices are tested in series with a load resistance and the voltages specified in the test conditions are shared between the PolySwitch device and the load resistance as specified in PS400.

Note 2: Please refer to Appendix A of PS400 for the detailed test procedures

Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, military, aerospace, medical, lifesaving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.