

PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: AGRF700

DOCUMENT: SCD25234 **REV LETTER: D**

REV DATE: JULY 26, 2016

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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:

Manufacturer's Mark and Part Identification

Lot Identification

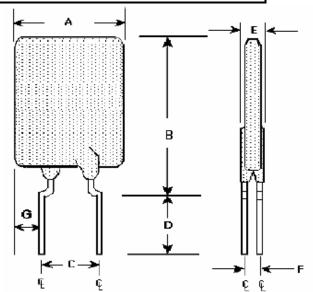


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	Α		В		С		D		E		F	G	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
mm:		11.2		21.0	4.3	5.8	7.6			3.0	1.2		4.49
in*:		(0.44)		(0.83)	(0.17)	(0.23)	(0.30)			(0.12)	(0.05)		(0.177)

^{*}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 HOLD HOLD TRIP AT AT R ₁ MAX R _A MAX			SECONDS AT 25°C, 35 A MAX	OHMS AT 25°C MIN MAX		OHMS AT 25°C	OHMS AT 25°C	WATTS AT 25°C TYP
7.0	6.5	13.2	4.0	0.0066	0.0131	0.020	0.022	3.0

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

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 ELV Compliant

Halogen Free*

Directive 2002/95/EC Compliant

Directive 2000/53/EC Compliant



Pb-Free



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



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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

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