

PolySwitch® PTC Devices Overcurrent Protection Device

PRODUCT: AGRF1400

DOCUMENT: SCD25240
REV LETTER: E
REV DATE: JANUARY 25, 2013
PAGE NO.: 1 OF 2

Specification Status: Released

Electrical Rating

Voltage: 16V_{DC} MAX

Insulating Material:

Cured, Flame Retardant Epoxy Polymer

Lead Material:

18 AWG Tin Plated Copper
(1.0 mm [0.040] nom. diameter)

Part Marking:

— Manufacturer's Mark
XX G14 and Part Identification

□□□□ — Lot Identification

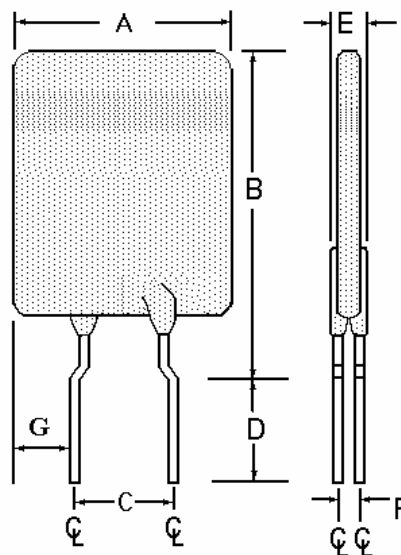


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	A		B		C		D		E		F	G	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
mm:	--	23.5	--	28.7	9.4	10.9	7.6	--	--	3.5	1.4	--	7.82
in*:	--	(0.925)	--	(1.13)	(0.37)	(0.43)	(0.30)	--	--	(0.14)	(0.06)	--	(0.308)

*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
HOLD AT R ₁ MAX	HOLD AT R _A MAX	TRIP	SECONDS AT 25°C, 70 A MAX	OHMS AT 25°C MIN	OHMS AT 25°C MAX	OHMS AT 25°C	OHMS AT 25°C	WATTS AT 25°C TYP
14.0	13.0	27.3	9.0	0.0022	0.0043	0.0064	0.0067	4.6

Reference Documents:

Precedence:

Effectivity:

CAUTION:

PS400, PS300 (reference for R₁ MAX)

This specification takes precedence over documents referenced herein.

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

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

Materials Information

ROHS Compliant

ELV Compliant

Pb-Free

Halogen Free*

Directive 2002/95/EC
Compliant

Directive 2000/53/EC
Compliant



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

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Overcurrent Protection Device

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PAGE NO.: 2 OF 2**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