

PolySwitch® **PTC Devices**

Overcurrent Protection Device

PRODUCT: AGRF400

DOCUMENT: SCD 25231 PCN: D54114

REV LETTER: B

REV DATE: MAY 8, 2007 PAGE NO.: 1 OF 2

308 Constitution Drive Menlo Park, CA 94025-1164 Phone: 800-227-4856 www.circuitprotection.com

Raychem Circuit Protection Products

Specification Status: RELEASED

Electrical Rating Voltage: 16V_{DC} MAX

Insulating Material:

Cured, Flame Retardant Epoxy Polymer

Lead Material:

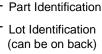
20 AWG Tin Plated Copper (0.8 mm [0.032] nom. diameter)

Part Marking:

mm in*:

Manufacturer's Mark and Voltage \times 16

GF4



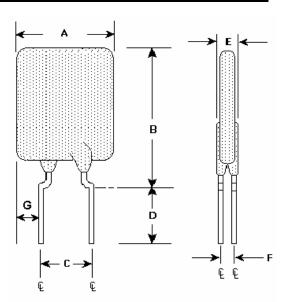


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	А		В		С		D		E		F	G	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
n:	-	8.9		14.1	4.3	5.8	7.6			3.0	1.2		3.1
:	-	(0.35)		(0.56)	(0.17)	(0.23)	(0.30)			(0.12)	(0.05)		(0.12)

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

CURR	CURRENT RATINGS TIME TO TRIP			INITIAL RESISTANCE		R _{1 MAX} POST TRIP RESISTANCE STANDARD TRIP	R _{A MAX}	TRIPPED-STATE POWER DISSIPATION
	AMPS		SECONDS	OHMS		OHMS	OHMS	WATTS AT
	AT 25°C		AT 25°C, 20 A	AT 25°C		AT 25°C	AT 25°C	25°C
HOLD	HOLD	TRIP	MAX	MIN	MAX			TYP
AT	AT							
R _{1 MAX}	R _{A MAX}							
4.0	3.0	7.6	2.0	0.0186	0.0390	0.061	0.085	2.5

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

This specification takes precedence over documents referenced herein. Precedence:

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

> Directive 2000/53/EC Compliant

Pb-Free

Directive 2002/95/EC Compliant

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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