



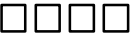
**Specification Status: RELEASED**

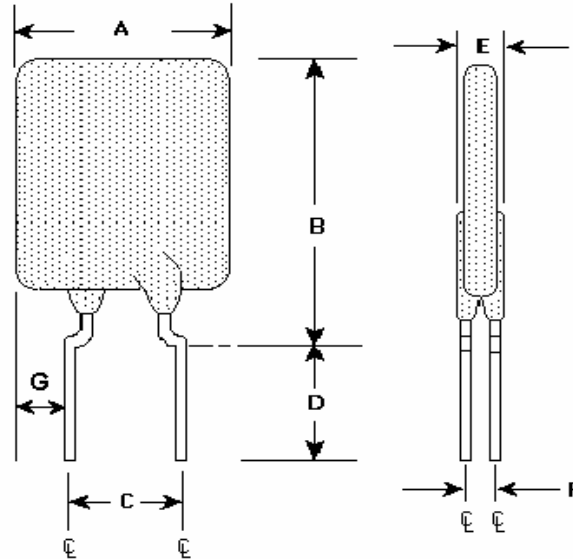
**Electrical Rating**  
**Voltage: 16V<sub>DC</sub> MAX**

Insulating Material:  
 Cured, Flame Retardant Epoxy Polymer

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

**Part Marking:**

- 
Raychem Logo and Voltage
- 
Part Identification
- 
Lot Identification (can be on back)



**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
--	10.4	--	15.6	4.3	5.8	7.6	--	--	3.0	1.2	--	3.94
--	(0.41)	--	(0.61)	(0.17)	(0.23)	(0.30)	--	--	(0.12)	(0.05)	--	(0.16)

mm:  
 in\*:

\*Rounded off approximation

**TABLE II. PERFORMANCE RATINGS:**

CURRENT RATINGS			TIME TO TRIP	INITIAL RESISTANCE		R <sub>1</sub> MAX 1 HR. POST TRIP RESISTANCE STANDARD TRIP	R <sub>A</sub> MAX	TRIPPED-STATE POWER DISSIPATION
HOLD AT	AMPS AT 25°C HOLD AT	TRIP	SECONDS AT 25°C, 25 A MAX	OHMS AT 25°C MIN   MAX		OHMS AT 25°C	OHMS AT 25°C	WATTS AT 25°C TYP
R <sub>1</sub> MAX	R <sub>A</sub> MAX							
5.0	4.3	9.4	2.5	0.014	0.024	0.034	0.048	2.7

Reference Documents:

PS400, PS300 (reference for R<sub>1</sub> 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

ELV Compliant

Pb-Free

Directive 2002/95/EC  
Compliant

Directive 2000/53/EC  
Compliant



**Tyco / Electronics**  
**Raychem Circuit Protection**  
308 Constitution Drive  
Menlo Park, CA 94025-1164  
Phone: 800-227-4856  
Fax: 800-227-4866

**PolySwitch®**  
**PTC Devices**  
**Overcurrent Protection Device**

**PRODUCT: AGRF500**

DOCUMENT: SCD 25232  
PCN: A12655  
REV LETTER: A  
REV DATE: OCTOBER 29, 2004  
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