

**Tyco / Electronics**  
**Raychem Circuit Protection**  
 308 Constitution Drive  
 Menlo Park, CA 94025-1164  
 Phone: 800-227-4856  
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**PolySwitch®**  
**PTC Devices**  
 Overcurrent Protection Device

**PRODUCT: AGRF800**

DOCUMENT: SCD 25235  
 PCN: A95482  
 REV LETTER: A  
 REV DATE: OCTOBER 29, 2004  
 PAGE NO.: 1 OF 2

**Specification Status: RELEASED**

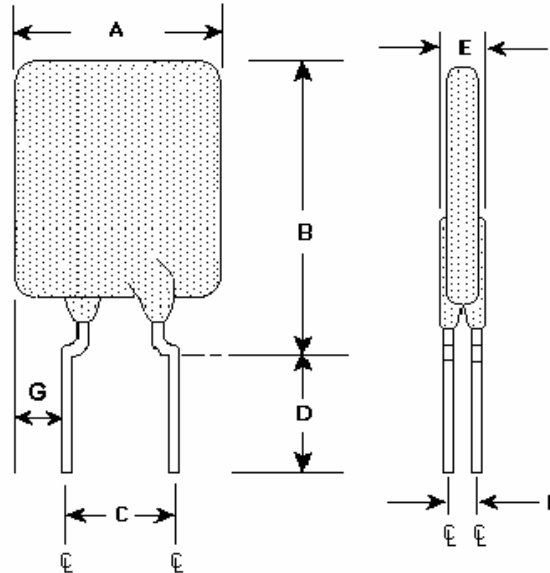
**Electrical Rating**  
**Voltage: 16V<sub>DC</sub> MAX**

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
- GF8 — 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
mm:	--	12.7	--	22.2	4.3	5.8	7.6	--	--	3.0	1.2	--	5.08
in*:	--	(0.50)	--	(0.88)	(0.17)	(0.23)	(0.30)	--	--	(0.12)	(0.05)	--	(0.200)

\*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
AMPS AT 25°C			SECONDS AT 25°C, 40 A MAX	OHMS AT 25°C		OHMS AT 25°C	OHMS AT 25°C	WATTS AT 25°C TYP
HOLD AT R <sub>1</sub> MAX	HOLD AT R <sub>A</sub> MAX	TRIP		MIN	MAX			
8.0	7.6	15.0	5.5	0.0049	0.0113	0.0175	0.0181	3.2

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



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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