## Tyco/Electronics Raychem Circuit Protection 308 Constitution Drive

308 Constitution Drive Menlo Park, CA 94025-1164 800-227-4856 FAX 800-227-4866

## PolySwitch® PTC Devices

**Overcurrent Protection Device** 

PRODUCT: AGR600

DOCUMENT: SCD 24443 PCN: 444259

**REV LETTER: F** 

REV DATE: JUNE 11, 2003 PAGE NO.: 1 OF 2

### **Specification Status: RELEASED**

**Electrical Rating** 

Voltage: 16V<sub>DC</sub> MAX

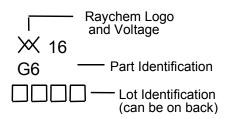
Insulating Material:

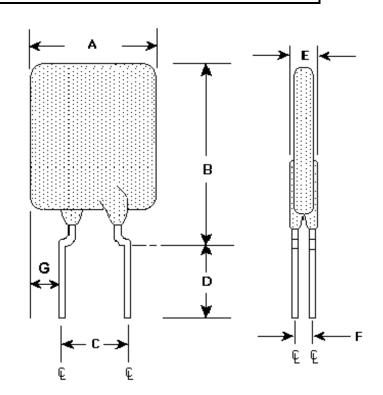
Cured, Flame Retardant Epoxy Polymer

Lead Material:

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

Part Marking:





#### **TABLE I. INSTALLATION ENVELOPE DIMENSIONS:**

MIN MAX MIN MAX MIN MAX MIN MAX MIN MAX TYP MIN MAX 10.7 5.8 1.2 18.4 4.3 7.6 3.0 4.07 mm: ----(0.42)(0.73)(0.17)(0.23)(0.30)(0.05)(0.16)in\*: (0.12)

#### **TABLE II. PERFORMANCE RATINGS:**

CURRENT RATINGS			TIME TO TRIP	INITIAL RESISTANCE		R <sub>1 MAX</sub> 1 HR. POST TRIP RESISTANCE STANDARD TRIP	R <sub>A MAX</sub>	TRIPPED-STATE POWER DISSIPATION
HOLD AT R <sub>1 MAX</sub>	AMPS AT 25°0 HOLD AT R <sub>A MAX</sub>	C TRIP	SECONDS AT 25°C, 30 A MAX	OHI AT 2 MIN	_	OHMS AT 25°C	OHMS AT 25°C	WATTS AT 25°C TYP
6.0	5.3	10.7	3.5	0.0095	0.0190	0.028	0.032	2.8

Reference Documents: PS400, PS300 (reference for R<sub>1 MAX</sub>)

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.

<sup>\*</sup>Rounded off approximation

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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