

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:

- ⊗ 16 — Raychem Logo and Voltage
- GF10 — Part Identification
- □ □ □ — Lot Identification (can be on back)

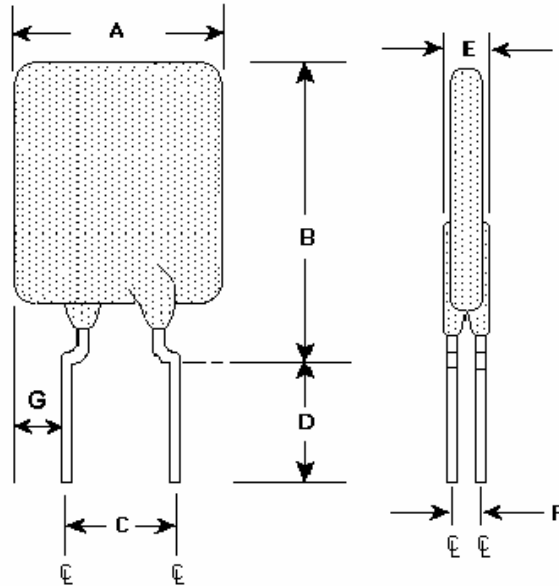


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

| | A | | B | | C | | D | | E | | F | G | |
|------|-----|--------|-----|--------|--------|--------|--------|-----|-----|--------|--------|-----|---------|
| | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | TYP | MIN | MAX |
| mm: | -- | 16.51 | -- | 25.7 | 4.3 | 5.8 | 7.6 | -- | -- | 3.0 | 1.0 | -- | 6.96 |
| in*: | -- | (0.65) | -- | (1.01) | (0.17) | (0.23) | (0.30) | -- | -- | (0.12) | (0.04) | -- | (0.274) |

*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, 50 A MAX | OHMS AT 25°C | | OHMS AT 25°C | OHMS AT 25°C | WATTS AT 25°C TYP |
| | | | | MIN | MAX | | | |
| 10.0 | 9.6 | 18.5 | 7.0 | 0.0034 | 0.0070 | 0.0102 | 0.0106 | 3.6 |

Reference Documents:

PS400, PS300 (reference for R₁ 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



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: AGRF1000

DOCUMENT: SCD 25237
PCN: F47022
REV LETTER: A
REV DATE: OCTOBER 28, 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