

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

PolySwitch® PTC Devices

Overcurrent Protection Device

Raychem Circuit Protection Products

PRODUCT: AHRF600

DOCUMENT: SCD 25184 PCN: F70668 REV LETTER: B REV DATE: MAY 8, 2007 PAGE NO.: 1 OF 2

Specification Status: RELEASED

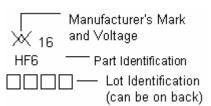
Electrical Rating Voltage: 16V_{DC} MAX

Insulating Material: Cured, Flame Retardant Epoxy Polymer

Lead Material:

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

Part Marking:



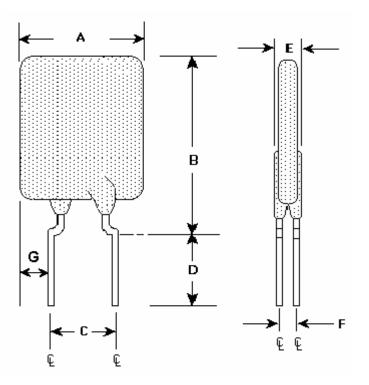


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

| | Α | | В | | С | | D | | E | | F | (| G |
|------|----------------------------|--------|-----|--------|--------|--------|--------|-----|-----|--------|--------|-----|--------|
| | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | TYP | MIN | MAX |
| mm: | | 11.2 | | 21.0 | 4.3 | 5.8 | 7.6 | | | 3.0 | 1.2 | | 4.19 |
| in*: | | (0.44) | | (0.83) | (0.17) | (0.23) | (0.30) | | | (0.12) | (0.05) | | (0.17) |
| | *Rounded off approximation | | | | | | | | | | | | |

TABLE II. PERFORMANCE RATINGS:

| CURRENT | | TIME TO | RESIS | TANCE | R _{a MAX} | TRIPPED-STATE | |
|---------|------|------------|-------|-------|--------------------|---------------|--|
| RATINGS | | TRIP | | | C THE OT | POWER | |
| | | | | | | DISSIPATION | |
| AMPS | | SECONDS AT | OF | IMS | OHMS | WATTS AT | |
| AT 25°C | | 25°C, 30 A | AT | 25°C | AT 25°C | 25°C | |
| HOLD | TRIP | MAX | MIN | MAX | | TYP | |
| 6.0 | 12.0 | 6.5 | .010 | .022 | 0.032 | 4.1 | |

Reference Documents: Precedence: Effectivity: CAUTION: PS400, PS300 This specification takes precedence over documents referenced herein. Reference documents shall be the issue in effect on the date of invitation for bid. Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame.

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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