

Specification Status: RELEASED

Electrical Rating

Voltage: 16V_{DC} MAX

INSULATING MATERIAL:

Cured, Flame Retarded Epoxy Polymer

LEAD MATERIAL:

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

PART MARKING:

- Raychem Logo and Voltage
- XX 16 — Part Identification
- H7.5 — Lot Identification (can be on back)

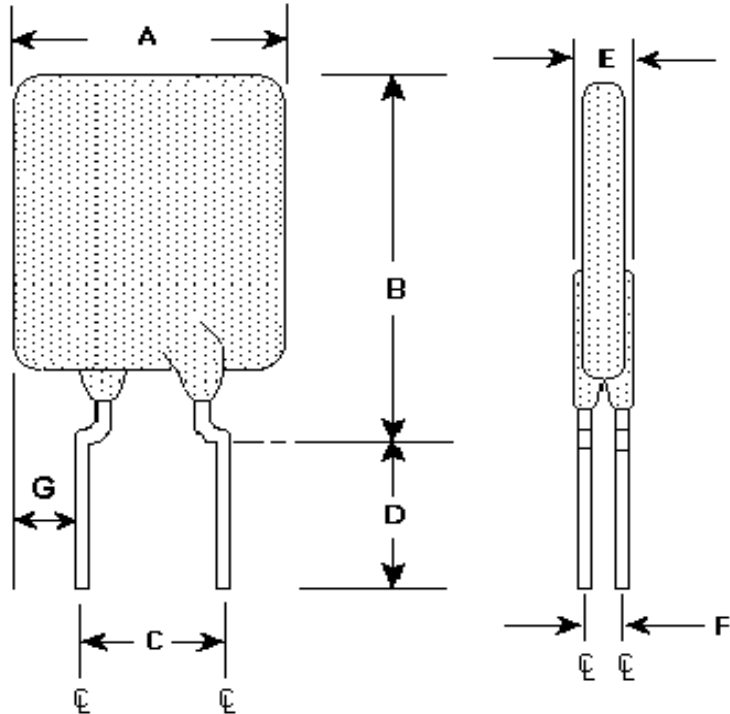


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

| | A | | B | | C | | D | | E | | F | G | |
|------|-----|--------|-----|--------|--------|--------|--------|-----|-----|--------|--------|-----|---------|
| | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | TYP | MIN | MAX |
| mm: | -- | 14.0 | -- | 23.5 | 4.3 | 5.8 | 7.6 | -- | -- | 3.0 | 1.2 | -- | 5.69 |
| in*: | -- | (0.55) | -- | (0.93) | (0.17) | (0.23) | (0.30) | -- | -- | (0.12) | (0.05) | -- | (0.224) |

*Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

| CURRENT RATINGS | | TIME TO TRIP | RESISTANCE | | R _a MAX | TRIPPED-STATE POWER DISSIPATION |
|-----------------|------|-------------------------|--------------|-------|--------------------|---------------------------------|
| AMPS AT 25°C | | SECONDS AT 25°C, 37.5 A | OHMS AT 25°C | | OHMS AT 25°C | WATTS AT 25°C |
| HOLD | TRIP | MAX | MIN | MAX | | TYP |
| 7.5 | 14.8 | 8.0 | .0074 | .0153 | 0.022 | 4.5 |

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.

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

Polyswitch®
PTC Devices
Overcurrent Protection Device

PRODUCT: AHR750

DOCUMENT: SCD 24387
PCN: 167181
REV LETTER: G
REV DATE: MARCH 22, 2001
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