

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:

Raychem Logo
and Voltage

XX 16

HF4.5 — Part Identification

□□□□ — Lot Identification
(can be on back)

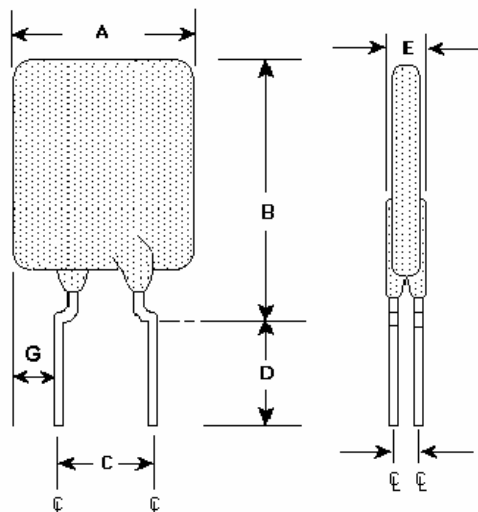


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

| | A | | B | | C | | D | | E | | F | G | |
|------|-----|--------|-----|--------|--------|--------|--------|-----|-----|--------|--------|-----|--------|
| mm: | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | TYP | MIN | MAX |
| in*: | -- | 10.4 | -- | 15.6 | 4.3 | 5.8 | 7.6 | -- | -- | 3.0 | 1.2 | -- | 3.94 |
| | -- | (0.41) | -- | (0.61) | (0.17) | (0.23) | (0.30) | -- | -- | (0.12) | (0.05) | -- | (0.16) |

*Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

| CURRENT RATINGS | | TIME TO TRIP | | RESISTANCE | | R _a MAX | TRIPPED-STATE POWER DISSIPATION |
|-------------------|-----|-----------------------------|--|--------------|------|--------------------|---------------------------------|
| AMPS AT 25°C HOLD | | SECONDS AT 25°C, 22.5 A MAX | | OHMS AT 25°C | | OHMS AT 25°C | |
| TRIP | | | | MIN | MAX | | WATTS AT 25°C TYP |
| 4.5 | 8.7 | 4.0 | | 0.017 | .036 | 0.054 | 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

Directive 2002/95/EC
Compliant

Directive 2000/53/EC
Compliant





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PolySwitch®
PTC Devices
Overcurrent Protection Device
Raychem Circuit Protection Products

PRODUCT: AHRF450

DOCUMENT: SCD 25183
PCN: A05383
REV LETTER: C
REV DATE: MAY 8, 2007
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