

Menlo Park, CA 94025-1164

308 Constitution Drive

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PolySwitch® PTC Devices

Overcurrent Protection Device

Raychem Circuit Protection Products

Specification Status: Released

PRODUCT: AHRF200

DOCUMENT: SCD 26632

PCN: RF0204 REV LETTER: D

REV DATE: JULY 27, 2007

PAGE NO.: 1 OF 2

Electrical Rating

Voltage: 16V_{DC} MAX Current: 100A MAX

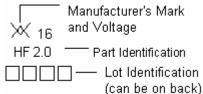
Insulating Material:

Cured, Flame Retardant Epoxy Polymer meets UL94 V-0 Requirements

Lead Material:

24 AWG Tin Plated Copper Clad Steel (0.51mm[0.020]nom. diameter)

Part Marking:



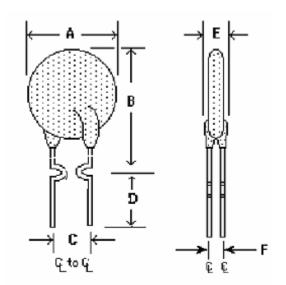


TABLE I. DIMENSIONS:

| | A | | l B | | | | ן ט | | , E | | F |
|------|-----|--------|-----|--------|--------|--------|--------|-----|-----|--------|--------|
| | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | TYP |
| mm: | | 9.4 | 1 | 14.4 | 4.3 | 5.8 | 7.6 | 1 | 1 | 3.0 | 1.2 |
| in*: | | (0.37) | - | (0.57) | (0.17) | (0.23) | (0.30) | - | - | (0.12) | (0.05) |
| | | | | | | | | | | | |

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

| CURRENT | | TIME TO | INITIAL | | $R_{a MAX}$ | TRIPPED- |
|---------|------|---------------|---------|-------|-------------|-------------|
| RATINGS | | TRIP | RESIS | TANCE | G 1111 U 1 | STATE |
| | | | VALUES | | | POWER |
| | | | | | | DISSIPATION |
| AM | PS | SECONDS | OHMS | | OHMS | WATTS AT |
| AT 2 | 25°C | AT 25°C, 10.0 | AT 25°C | | AT 25°C | 25°C 16V |
| | | Α | | | | |
| HOLD | TRIP | MAX | MIN | MAX | MAX | TYP |
| 2.0 | 3.8 | 4.8 | 0.039 | 0.074 | 0.11 | 1.4 |

Reference Documents: PS400, PS300 (reference for R_{1 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

Directive 2000/53/EC Compliant **ELV Compliant**

Directive 2002/95/EC Compliant Pb-Free



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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.