

# PolySwitch® PTC Devices

**Overcurrent Protection Device** 

# PRODUCT: TCF250-180T

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В

A.

# **Specification Status: Released**

## **Operating Conditions at 20°C:**

Maximum Continuous Operating Voltage (V<sub>MCO</sub>): 60V<sub>DC</sub> Maximum Interrupt Current (I<sub>INT</sub>): 3A<sub>RMS</sub>

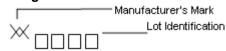
# Fault Ratings at 20°C:

250V<sub>RMS</sub>, 3A, 10 applications

## Additional Info at 20°C:

- Resistance matched: N/A
- Lightning withstand:
- ITU-T K.20, K21 1.5 kV
- ITU-T K.20, K21 4.0 kV when tested with 230V GDT primary protector
- Helps equipment meet ITU-T K.20, K.21 Recommendations
- Helps equipment meet Telcordia GR1089 intrabuilding requirements

# Marking:



## **TABLE I. DIMENSIONS:**

|      | Α      |        | E      | 3      | С      |        |  |
|------|--------|--------|--------|--------|--------|--------|--|
|      | MIN    | MAX    | MIN    | MAX    | MIN    | MAX    |  |
| mm:  | 6.9    | 7.1    | 6.9    | 7.1    | 1.3    | 1.6    |  |
| in:* | (0.27) | (0.28) | (0.27) | (0.28) | (0.05) | (0.06) |  |

#### \*Rounded off approximation.

#### TABLE II. PERFORMANCE RATINGS @ 20°C (as measured in test board # T2978):

| HOLD*<br>CURRENT<br>(A) | TRIP*<br>CURRENT<br>(A) | RESISTANCE (Ω) |       | TIME TO TRIP(Sec)<br>@ 1A* |     | OPERATING<br>TEMPERATURE<br>(°C) |     | TRIPPED<br>POWER DISSIPATION<br>(W) @ 60V <sub>DC</sub> * |      |     |
|-------------------------|-------------------------|----------------|-------|----------------------------|-----|----------------------------------|-----|---|------|-----|
| .,                      | . ,                     | R MIN          | R MAX | R24 max**                  | ТҮР | MAX*                             | MIN | MAX   | ΤΫ́Ρ | MAX |
| 0.180                   | 0.38                    | 1.9            | 3.0   | 4.2                        | 3.4 | 6.5                              | -40 | 85  | 0.8  | 0.9 |

\* Dependent on Heat Sinking of Mounting Fixture.

\*\*Maximum device resistance at 20°C measured 24 hour post trip

## TABLE III. APPLICABLE PART DESCRIPTIONS:

| PART DESCRIPTION  | PACKAGING TYPE | NOTES |
|-------------------|----------------|-------|
| TCF250-180T       | Bulk           | N/A   |
| Ageney Decembines | 0)             |       |

Agency Recognitions: UL (File # E74889) Reference Documents: PS300, ITU-T K.20, K.21

Precedence: This specification takes prece

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.

# **Materials Information**

#### **ROHS Compliant**

Directive 2002/95/EC

Compliant

Effectivity:

CAUTION:





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