

## Features

- Two resistance-matched PTCs in a ceramic housing
- Aids compliance with:
  - ITU-T K.20/21/45
  - Telcordia GR-1089-CORE
  - UL 60950, 3rd Ed.
- Narrow resistance tolerance
- RoHS compliant\*



This series is currently available but not recommended for new designs.

## Applications

Used as a secondary overcurrent protection device in:

- Customer Premise Equipment (CPE)
- Central Office (CO)
- Access equipment

# CMF-RD Series - Telecom CPTC Resettable Fuses

## Electrical Characteristics

| Model       | Induction Voltage Withstand | Rated Voltage | Rated Resistance (RN) |           | Resistance Matching in Housing | Hold Current | Hold Current | Trip Current | Imax @ 230 VAC | Time to Trip @ Imax / 230 VAC |
|-------------|-----------------------------|---------------|-----------------------|-----------|--------------------------------|--------------|--------------|--------------|----------------|-------------------------------|
|             | VAC                         | Volts         | Ohms                  | Tolerance | Ohms                           | Amps @ 25 °C | Amps @ 40 °C | Amps @ 25 °C | Amps           | Seconds                       |
| CMF-RD50    | 600                         | 230           | 50                    | ±20 %     | ± 0.5                          | 0.09         | 0.06         | 0.19         | 3.0            | < 0.1                         |
| CMF-RD50-10 | 600                         | 230           | 50                    | ±10 %     | ± 0.5                          | 0.09         | 0.06         | 0.19         | 3.0            | < 0.1                         |

## Test Procedures And Requirements For Model CMF-RD Series

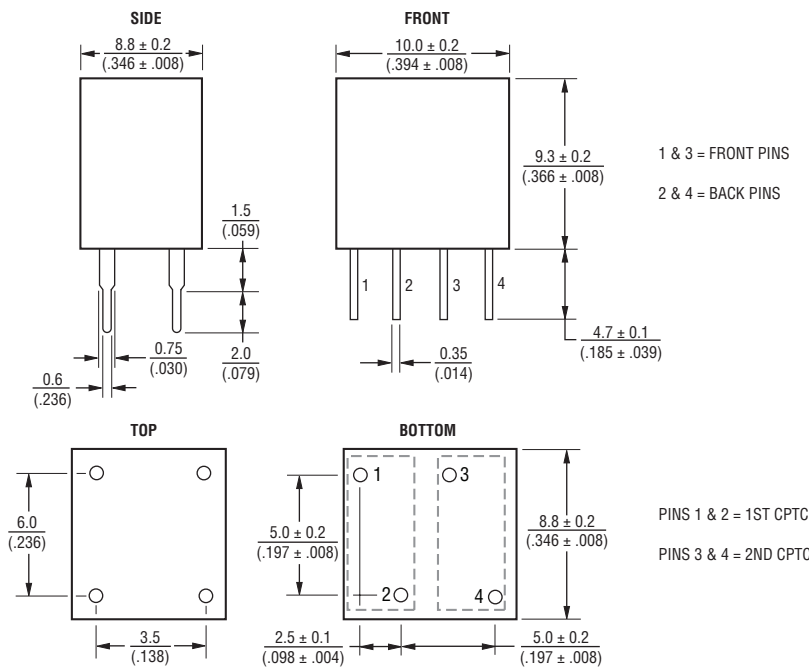
| Test                                   | Primary Protection | Test Condition   | Requirements*        |
|--|--------------------|--|----------------------|
| Mains Power Contact - ITU-T K.20, K.21 | None               | 230 V rms, 10 ohms, 15 Min.                              | (Ri-Rf) / Ri < ±10 % |
| Power Induction - ITU-T K.20, K.21     | None               | 600V rms, 600 ohms, 0.2 seconds, 10 cycles, every 1 Min. | (Ri-Rf) / Ri < ±10 % |
| Power Induction - ITU-T K.20, K.21     | GDT                | 600 V rms, 600 ohms, 1 second, 10 cycles, every 1 Min.   | (Ri-Rf) / Ri < ±10 % |
| Power Induction - ITU-T K.20, K.21     | GDT                | 600 V rms, 200 ohms, 1 second, 10 cycles, every 1 Min.   | (Ri-Rf) / Ri < ±10 % |
| Lightning Surge - ITU-T K.20, K.21     |                    | 10/700 μs, 25 ohms, 1.0 kV, 10 Tests, every 1 Min.       | (Ri-Rf) / Ri < ±10 % |
| Lightning Surge                        |                    | 10/1000 μs, 40 ohms, 1.0 kV, 30 Tests, every 3 Min.      | (Ri-Rf) / Ri < ±10 % |
| Overvoltage Withstand                  |                    | 300 V, 3 A, 4 Hours, 1 Time                              | (Ri-Rf) / Ri < ±10 % |
| Failure Mode                           |                    | 300 V, RL=0, 60 Min.                                     | **                   |

Ri = R initial

Rf = R final

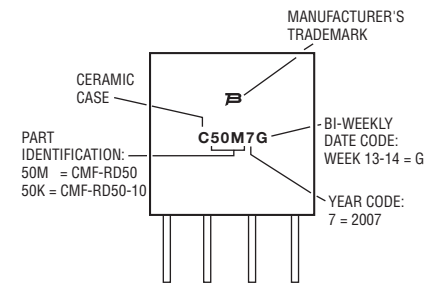
\*\* Circuit disconnected or high resistance is acceptable.

## Product Dimensions

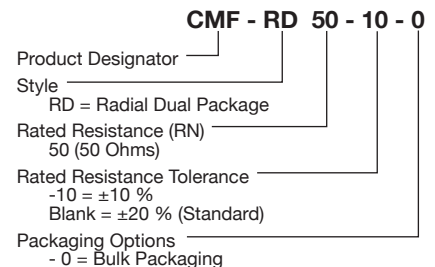


## Typical Part Marking

Represents total content. Layout may vary.



## How to Order



Packaging options: BULK: 96 pcs. per plastic box

DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

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