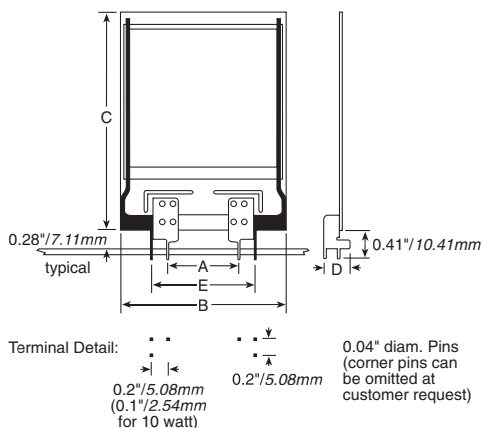


# TC Series

This product has been  
**DISCONTINUED**

## PECOS® Resistors Thick Film on Porcelainized Steel Substrate



| Series  | Watts | Dimensions (in. / mm) |              |              |             |              |
|---------|-------|-----------------------|--------------|--------------|-------------|--------------|
|         |       | A                     | B            | C            | D           | E            |
| TC010PA | 10    | 0.300 / 7.62          | 0.55 / 13.97 | 1.25 / 31.75 | 0.29 / 7.37 | 0.50 / 12.70 |
| TC020PA | 20    | 0.600 / 15.24         | 1.10 / 27.94 | 1.40 / 35.56 | 0.37 / 9.40 | 1.00 / 25.40 |
| TC025PA | 25    | 1.000 / 25.40         | 1.60 / 40.64 | 1.25 / 31.75 | 0.37 / 9.40 | 1.40 / 35.56 |
| TC050PA | 50    | 1.000 / 25.40         | 1.75 / 44.45 | 2.50 / 63.50 | 0.37 / 9.40 | 1.40 / 35.56 |
| TC100PA | 100   | 1.300 / 33.02         | 2.55 / 64.77 | 3.35 / 85.09 | 0.37 / 9.40 | 1.70 / 43.18 |

### ORDERING INFORMATION

E = RoHS compliant  
Available Jan. 2006

**TC025PA5R00FE**

Series: TC  
Power Rating: 025  
Package: PA = standard  
Resistance (Ω): 5R00 = 5.0  
50R0 = 50.0  
Tolerance: F = 5%, K = 10%, L\* = 20%

\*20% Values are not laser trimmed and offer enhanced surge handling.

PECOS® stands for Porcelain Enamel Coating on Steel. It is a plate resistor system utilizing thick film ruthenium oxide on a porcelain coated steel substrate. Copper plated silver conductors are employed and the resistive element is protected by a glass passivation layer.

These resistors offer low inductance (50nh @ 1MHz) and very high power densities (15W/in<sup>2</sup>). Being PC-board mountable, they are economic to install and best suited for applications under 200V operating.

### FEATURES

- 15W/in<sup>2</sup> Power Density
- Low Inductance
- Easy to Install

### SPECIFICATIONS

#### Material

**Substrate:** PECOS® (Porcelain Enamel Coating on Steel)

**Resistor:** Ruthenium Oxide

**Coating:** Glass

**Terminals:** Solder Plated Phosphor Bronze, riveted in place and electrically connected with high temperature solder.

**Thermal Conductivity:** 60 Watts/Meter/°C, x-y direction

**Temperature Coefficient:** 150 ppm/°C ≥ 1Ω

#### Electrical

**Ohmic Range:** 1-2500Ω

**Tolerance:** ±1-5% to 20%

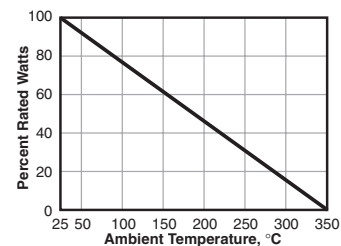
**Power Rating:** Based on 25°C free air

**Maximum Operating Voltage:** 200 VDC

**Overload:** Five times rated power, as long as the one second average dissipation does not exceed the wattage rating.

ΔR: ±2%, 2000 hours

### DERATING CURVE



This product has been  
**DISCONTINUED**