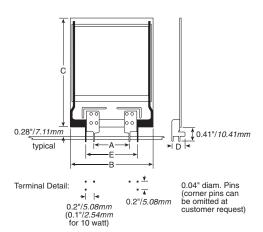
## TC Series



# PECOS Resistors Thick Film on Porcelainized Steel Substrate



		Dimensions (in. // mm)				
Series	Watts	Α	В	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						
$ \begin{array}{c c}     \hline         & T C \\         & Series \end{array} \begin{array}{c c}         & 0 2 5 P A \hline         & T R 0 0 F E \end{array} $ Tolerance						
Power Rating — Package PA = standard 5R00 = 5.0 50R0 = 50.0 50.0 50.0 50.0 50.0 50.0 50.0 5						
*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

These resistors offer low inductance (50nh @1MHz) and very high power densities (15W/in²). 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  $\geq 1\Omega$ 

**Electrical** 

Ohmic Range: 1-2500 $\Omega$  Tolerance:  $\pm 1$ -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

