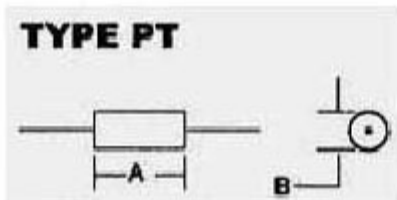


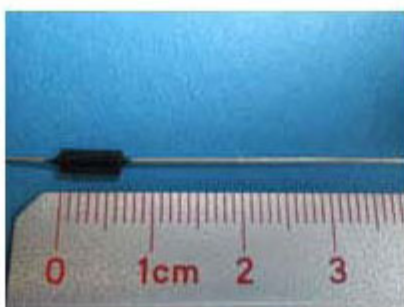


## PT083 Wire Wound BALCO Element Sensor

### TYPE PT



# PT083



Balco Tracking Chart & TCR Equations

### Electrical & Physical Specifications:

<b>A-Length:</b>	8.43mm (.332")
<b>B-Diameter:</b>	2.54mm (.100")
<b>Lead Dimensions:</b>	.020" D X 1.500" L
<b>Max Watts:</b>	.05
<b>Resistance (<math>\Omega</math>):</b>	1000 $\Omega$ $\pm$ .1% @ 70°F (Std.)

### Balco Series Engineering Attributes:

#### RESISTANCE & TOLERANCE

**Standard Input:** 1000 $\Omega$   $\pm$ .1% @ 70°F, & .1%Tolerance

**Special:** .1 $\Omega$  to 5K $\Omega$

#### CUSTOM TOLERANCES

$\pm$ .1% (Std) Also available:  $\pm$ 1%,  $\pm$ 5%,  $\pm$ .25%,  $\pm$ .05%.

\*Tolerances listed are attainable only with certain selected temperatures.

#### TCR CHARACTERISTIC

+4300ppm/°C.  $\pm$ 50ppm/°C

#### POWER RATING

The PT083 is rated for a maximum of 0.05W

#### CONSTRUCTION

##### Balco Wire

70% Nickel (Ni), 30% Iron (Fe)

##### Substrate

Phenolic/epoxy filled

##### Terminals

Solderable hot tinned pure copper leads are standard at PRC.

##### Protective Seal

Commercial Plastic (TX) Coating or Epoxy Casing.

#### RESISTANCE/TEMPERATURE CHARACTERISTIC

The Balco 1000 $\Omega$  element changes approx. 2.3 $\Omega$ /°F, from -40°F to +212°F.

#### STABILITY VS. TIME

$\pm$ 0.02%/yr. @ 25°C. (77°F.) All Balco elements are artificially aged to assure close interchangeability in calibration.

#### MARKING

PRC symbol, type, value, tolerance & TCR, physical size permitting. Custom markings are also available upon request.

#### DELIVERY

Our Standard 1000 $\Omega$  .1% Tol. part is usually in stock and ready to ship within a couple of days.

#### BALCO RESISTANCE/TEMPERATURE TABLE

Engineering samples & individual element tracking charts available at no charge upon request. The Balco tracking chart & TCR Equations can be viewed by clicking the link below pictures.

## Details

SKU	PT083
Type	Axial
Length	8.43mm (.332")
Diameter	2.54mm (.100")
TCR Char.	+4300ppm/°C, ±50ppm/°C, from +25°C, to +100°C.
Power Rating	.05W Max
Temperature	-65°C, to +125°C, (-40°F, to +212°F.)
Resistance	1KΩ at 21.1°C. (70°F.)
Tolerance	to ±.05%
Stability	Less than ±0.02%/yr. @ 25°C.
Max Watts	.05
Lead Free	Yes