

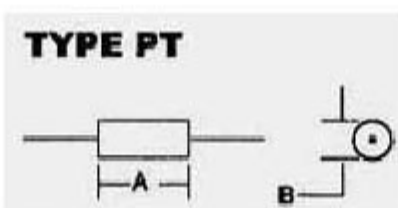


## PT094 .1W Custom (+) TCR Temperature Sensitive Wire Wound Axial Compensator

# PT094

### Electrical & Physical Specifications:

- A-Length:** 10.03mm (.395")
- B-Diameter:** 3.18mm (.125")
- Lead dimensions:** .025" dia. X 1.5" long (min.)



### Compensator Attributes:

#### LINEAR COMPENSATION

PRC's type PT/ST (+) TCR Characteristics +3500 PPM/°C, linear tracking temperature sensitive resistors help you develop the desired compensation for true RMS measurements...and can offset errors in dB output circuits.

#### TOLERANCE FOR (+) 3500 PPM/°C.

Less than ±100 PPM/°C from +25°C. to +100°C. If you are looking for a systems offset of +3350 PPM/°C to +3450 PPM/°C, try a few engineering samples of our off-the-shelf compensators. We are confident you can achieve dramatic results. The element wire used on our type PT/ST, as a rule, is very close to +3350 PPM/°C, @ 25°C. & lower than +3450 PPM/°C, @ 100°C. See figure #4 below.

#### OFF THE SHELF FOR IMMEDIATE DELIVERY

Thru-hole & SMD designs are available for evaluation & testing. We have our PT series for 2 terminal type or our AT35 for 4 terminal type. If you have plans for SMD/SMT, our type ST35 is a drop in replacement for the thru-hole part w/ interchangeable specs. All our standard 1000Ω ±1% +3500 PPM Compensators are in stock!

#### CUSTOM COMPENSATORS

We can customize any of our compensators to fit your specs in any Ohmic value from 1Ω to 50KΩ We have pure metals, alloys, & composite windings available. All of which are extremely linear, reasonably priced & delivered quickly.

#### TRACKING CHART

Constant temperature oil bath computer tracking charts are available to match temp. span & behavior specs exactly.

#### COMPENSATORS VS. POWER

PRC's positive (+) TCR resistors are used to offset negative (-) ambient temperature changes or counter self-generating shifts in resistance w/ an excitation of power to .25W @ +125°C. Derated to 0W @ +150°C.

#### STABILITY

- Standard:** ±.05%/year @ +25°C.
- Special:** Less than ±.01%/year @ +25°C.

#### MARKING

PRC stamp, part type, resistance value, tolerance & TCR characteristics, physical size permitting.

#### PROTECTIVE SEAL

- Standard:** Conformal silicone or epoxy case.
- Special:** Thermal conductive insulating coatings or uncoated.



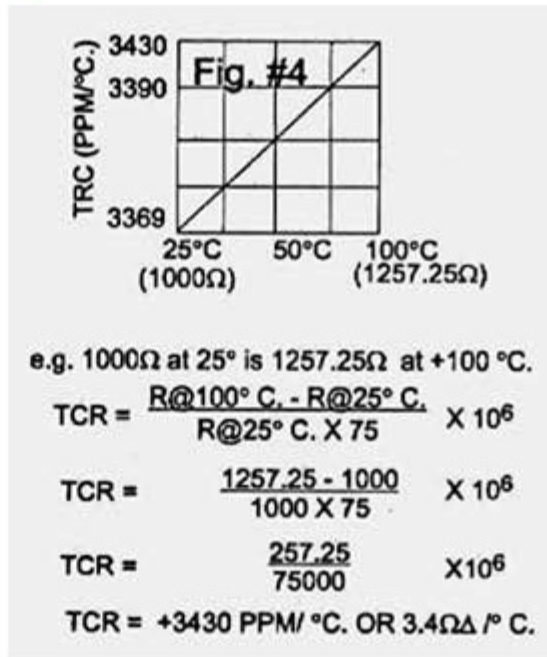
### TCR CHARACTERISTICS AVAILABLE

|   |              |
|---|--------------|
| <b>Temperature Coefficient of Resistance (TCR*)</b> |              |
| +80 ppm/°C  | +3930 ppm/°C |
| +140 ppm/°C   | +4300 ppm/°C |

|              |              |
|--------------|--------------|
| +400 ppm/°C  | +4500 ppm/°C |
| +1400 ppm/°C | +5000 ppm/°C |
| +3500 ppm/°C | +6000 ppm/°C |

\*TCR based upon avg. PPM change in res./°C. from +25°C. to +100°C.

## Detailed Images



## Res/Temp Curve & TCR Equation for nominal 1K ± 1% +3500 PPM Compensator

### Details

|                 |                                     |
|-----------------|-------------------------------------|
| SKU             | PT094                               |
| Type            | Axial                               |
| Length          | 10.03mm (.395")                     |
| Lead Dimensions | .025" dia. X 1.5" long              |
| Diameter        | 3.18mm (.125")                      |
| TCR Char.       | from +80 PPM/°C to +6000 PPM/°C     |
| Power Rating    | 0-.1W                               |
| Resistance      | 1Ω to 6KΩ                           |
| Tolerance       | to ±.05%                            |
| Stability       | to less than ±.01% per year at 25°C |
| Max Watts       | .1                                  |
| Lead Free       | Yes                                 |