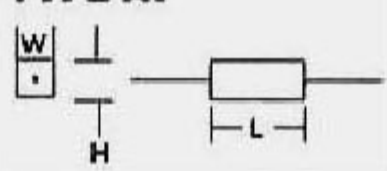




AT35 1K Ohm (std.) .1W Rectangular +3500 PPM Wire Wound Axial Compensator

TYPE AT



Body Dimensions:

H-Height	3.18mm (.125")
L-Length	9.14mm (.360")
W-Width	3.18mm (.125")

Lead dimensions: .02" x 1" 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.

> ±100 PPM/°C from +25°C. to 100°C. For example, If you are looking for a systems offset of +3350 PPM/°C to 3450 PPM/°C...try a few engineering samples of our (std.) 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 shown 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 SMT our type ST35 is a drop in replacement for the thru-hole part w/ interchangeable specs. All our (std.) 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 your temperature 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 (No Load)

Standard: ±.05%/year @ 25°C.; Special: < ±.01%/year @ 25°C.

PROTECTIVE SEAL

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

MARKING

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

TCR CHARACTERISTICS AVAILABLE

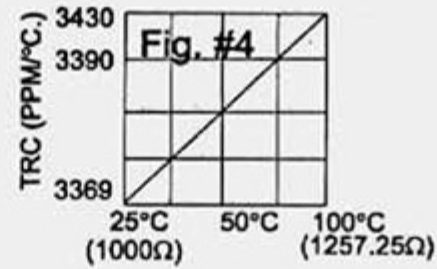
Temperature Coefficient of Resistance (TCR*)

+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

*The TCR characteristic listed are based upon the average PPM change in resistance per degree C. between +25°C & +100°C



Detailed Images



e.g. 1000Ω at 25° is 1257.25Ω at +100 °C.

$$\text{TCR} = \frac{R@100^{\circ}\text{C.} - R@25^{\circ}\text{C.}}{R@25^{\circ}\text{C.} \times 75} \times 10^6$$

$$\text{TCR} = \frac{1257.25 - 1000}{1000 \times 75} \times 10^6$$

$$\text{TCR} = \frac{257.25}{75000} \times 10^6$$

$$\text{TCR} = +3430 \text{ PPM/}^{\circ}\text{C. OR } 3.4\Omega/^{\circ}\text{C.}$$

Res/Temp Curve & TCR Equation

Details

SKU	AT35
Type	Rect. Axial
Length	9.14mm (.360")
Width	3.18mm (.125")
Lead Dimensions	.02" x 1" long (min.)
Height	3.18mm (.125")
TCR Char.	+3500ppm/°C
Temperature	-65°C. to +150°C.
Resistance	1KΩ (Std) from 1Ω to 50KΩ
Tolerance	0±1% (std.) to ±.05%
Stability	to ±.01% per year @ 25°C
Max Watts	.1
Max Volts	100
Lead Free	Yes