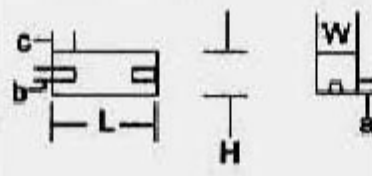




PTS1 .05W Custom (+) TCR Temperature-Sensitive Wire Wound Compensator Surface Mounted Device (SMD)

TYPE PTS



Electrical & Physical Specifications:

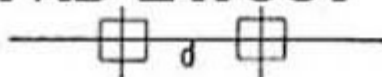
H-Height: 3.30mm (.130")

L-Length: 9.14mm (.360")

W-Width: 3.18mm (.125")

Tab dimensions: a=.075"; b=.075"; c=.100"; d=.260"

PAD LAYOUT



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 (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.

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 zero watts @ +150°C.

STABILITY

Standard: $\pm 0.05\%$ /year @ +25°C. with no load.

Special: Less than $\pm 0.01\%$ /year @ +25°C. with no load.

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.

TAPE & REEL

Have your parts delivered to you in tape & reel form by simply specifying Tape & Reel instead of bulk when placing your order. For detailed information on all the individual specifications for the tape & reel delivery option, click the [Tape & Reel Chart](#)



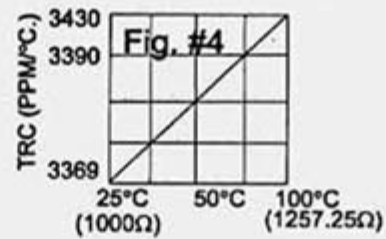
TCR CHARACTERISTICS AVAILABLE

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 characteristics listed are based upon the average PPM change in resistance/°C. between +25°C & +100°C.

Detailed Images



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

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

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

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

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

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

Details

SKU	PTS1
Type	SMD 2-tab
Length	9.14mm (.360")
Width	3.18mm (.125")
Tab Dimensions	a=.075"; b=.075"; c=.100"; d=.260"
Height	3.30mm (.130")
TCR Char.	+80 PPM to +6000 PPM /°C.
Power Rating	0-.05W
Temperature	-65°C. to +150°C.
Resistance	1Ω to 2500Ω
Tolerance	to ±.05%
Stability	±.05% change/yr (std.) to ±.01% change/yr at +25°C
Max Watts	.05
Lead Free	Yes