

# Temperature Coefficient

Related To Resistance:

How does the resistance of a component such as

CTS – Coolant Temperature Sensor

ATS - Air Temperature Sensor

TFTS – Transmission Fluid Temperature Sensor, Etc.

react to a change in temperature?

If The Resistance Goes Up ↑, As The  
Temperature Goes Up ↑, We Say  
That The Component Has A:

**Positive Temperature Coefficient**

$$\text{PTC} = \overset{\uparrow}{F} * \overset{\uparrow}{\Omega}$$

If The Resistance Goes Down ↓, As The  
Temperature Goes Up ↑, We Say The  
Component Has A

**Negative Temperature Coefficient**

$$\text{NTC} = \overset{\uparrow}{F} * \underset{\downarrow}{\Omega}$$