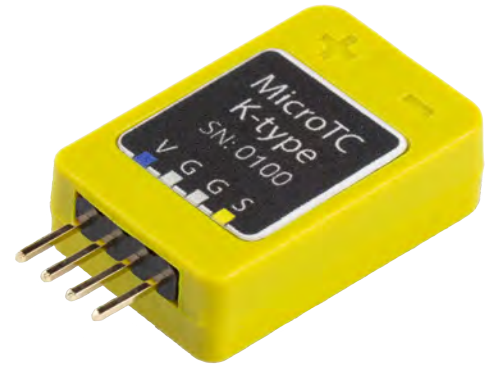


Featured Product: Thermocouple Amplifier

Model MicroTC

- Thermocouple connector and amplifier in one small unit
- Nonlinear thermocouple input signal is converted to linear output voltage
- Input signal is amplified to 5 mV/ °C
- Cold junction compensation
- Units available in K-type
- Signal bandwidth 2.0 kHz

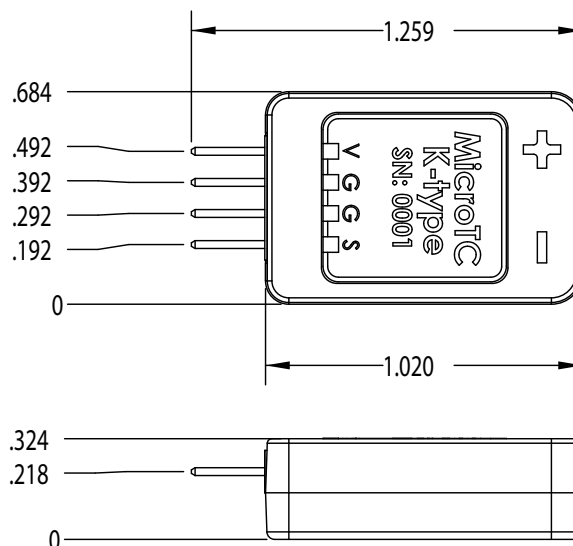


Description

The *MicroTC Linear Thermocouple Amplifier* is a miniature thermocouple amplifier package. A standard miniature male thermocouple connector plugs directly into the unit, and solder terminals or miniature connector on the back allow easy connection for power and signal.

The amplifier provides cold junction compensation and amplifies the thermocouple signal to a linear 5 mV/°C over a measurable range of -25 °C to 400 °C. The measurable range expands to -200 °C to 970 °C with the use of post-processing polynomials. The amplifier accepts a wide power supply range.

Configuration



Thermocouple Amplifier

Specifications

PARAMETER	SPECIFICATION
INPUT	
Range (5mV/°C linear output)	-25 °C to 400 °C
Range (w/ polynomial equation)	-200 °C to 970 °C
OUTPUT	
Range	Min = -0.77 V; Max = 4.92 V
MEASUREMENT ERROR	
	±2 °C Typical; ±3 °C Max
NOISE	
0.01 - 10 Hz	0.8 µV p-p
DYNAMIC RESPONSE	
	Higher Bandwidths available
Frequency Response -3dB	2.0 kHz
Settling Time 0.1%	36 µs
POWER REQUIREMENTS	
Voltage	+7 Vdc to +16 Vdc
Quiescent Current	3.25 mA max
ENVIRONMENT	
Specification	0 °C to +50 °C (+32 °F to +122 °F)
Operation	-40 °C to +100 °C (-40 °F to +212 °F)
MECHANICAL	
Weight	5.0 g (0.17 oz)
Overall Length	32.0 mm (1.259 in)
Overall Height	8.2 mm (0.324 in)
Overall Width	17.4 mm (0.684 in)