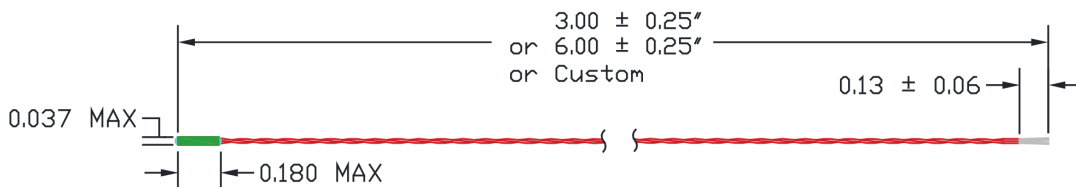
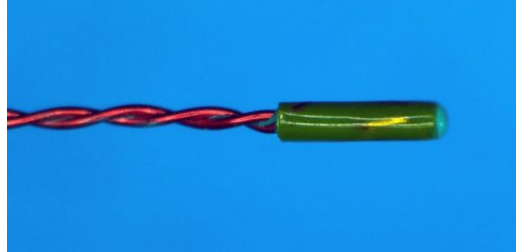




5XT Mini NTC Thermistor

Description:

Mini chip thermistor encapsulated with epoxy in polyimide tube with red polyurethane nylon insulated 32 AWG leads, twisted pair, with multiple overall length options.



(Drawing dimensions are typical)

Features:

- **Small with low thermal mass**
- **Precise over a wide temperature band**
- **More affordable than 3XT series micro thermistor**

The 5XT mini series is a small leaded standard thermistor package that North Star Sensors offers. The 5XT is ideal for applications where a fast time response is desired and/or mounting space is limited. The small size of the 5XT thermistor allows it to be encapsulated into small housings while being more affordable than the 3XT micro series. Pre-tinned leads and custom designs are available. Contact us at info@northstarsensors.com for assistance with your unique application.

Applications:

- **Low volume flow sensors (liquids or gas)**
- **Peltier temperature tracking**
- **Small package electronics**
- **Meteorological research**

5XT Mini NTC Thermistor

Typical Configurations:

Part Number	Resistance at 25 °C	Overall Length	Temperature Tolerance	R/T Curve	25 °C / 85 °C β
5BT103R44T2A	10 k Ω	6.00 $\pm$ 0.25"	$\pm$ 0.2 °C from 0 °C to 70 °C	44	3978
5AT104R47T2A	100 k Ω	3.00 $\pm$ 0.25"	$\pm$ 0.2 °C from 0 °C to 70 °C	47	4262
5AT222R44T1M	2252 Ω	3.00 $\pm$ 0.25"	$\pm$ 0.1 °C from 35 °C to 40 °C	44	3978

A wide variety of configurations are possible. Contact us at info@northstarsensors.com for assistance with your unique application.

Other Specifications:

Normal Operating Temperature	0 °C to 70 °C
Max Temperature	125 °C
Recommended Measurement Current	< 25 μ A
Time Constant	< 400 ms in stirred liquid
Dissipation Constant	$\sim$ 1.5 mW / °C in ambient air
RoHS and REACH	Compliant

Resistance vs Temperature Conversion Table

°C	CURVE 43		CURVE 44		CURVE 47	
	Ω RATIO	NTC	Ω RATIO	NTC	Ω RATIO	NTC
	R_T / R_{25}	(%/°C)	R_T / R_{25}	(%/°C)	R_T / R_{25}	(%/°C)
0	3.1660	-4.94	3.2651	-5.11	3.51020	-5.40
5	2.4815	-4.80	2.5393	-4.95	2.69037	-5.24
10	1.9583	-4.67	1.9901	-4.80	2.07803	-5.09
15	1.5556	-4.54	1.5712	-4.66	1.61702	-4.94
20	1.2434	-4.42	1.2493	-4.52	1.26728	-4.80
25	1.0000	-4.30	1.0000	-4.39	1.00000	-4.67
30	0.80892	-4.18	0.80567	-4.26	0.79430	-4.54
35	0.65804	-4.07	0.65314	-4.14	0.63490	-4.42
40	0.53820	-3.97	0.53266	-4.02	0.51059	-4.30
45	0.44249	-3.87	0.43689	-3.91	0.41302	-4.18
50	0.36563	-3.77	0.36031	-3.81	0.33598	-4.07
55	0.30357	-3.67	0.29857	-3.71	0.27479	-3.97
60	0.25323	-3.58	0.24869	-3.61	0.22593	-3.87
65	0.21219	-3.49	0.20816	-3.51	0.18669	-3.77
70	0.17858	-3.41	0.17508	-3.42	0.15502	-3.67

Please visit
northstarsensors.com/temperature-curves
 for additional tables