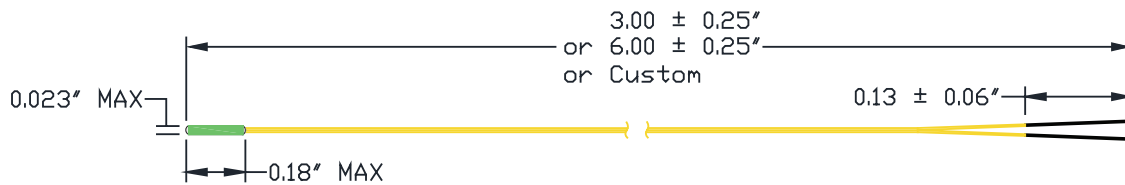
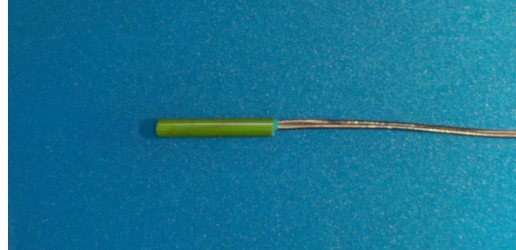




## 3XT Micro NTC Thermistor

### Description:

Micro chip thermistor encapsulated with epoxy in polyimide tube with polyesterimide insulated 38 AWG leads, parallel-bonded, with multiple overall length options.



(Drawing dimensions are typical)

### Features:

- Small with low thermal mass
- Precise over a wide temperature band
- Rapid Time Constant (typ. <200 Milliseconds in liquids)

The 3XT is the smallest leaded standard thermistor package that North Star Sensors offers. The 3XT is ideal for applications where a fast time response is desired and/or mounting space is limited. The small size of the 3XT thermistor allows it to be encapsulated into a 20 gauge thin wall stainless steel tube. Pre-tinned leads and custom designs are available. Contact us at [info@northstarsensors.com](mailto:info@northstarsensors.com) for assistance with your unique application.

### Applications:

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



## 3XT Micro NTC Thermistor

### Typical Configurations:

Part Number	Resistance at 25 °C	Overall Length	Temperature Tolerance	R/T Curve	25 °C / 85 °C $\beta$
3BT103R44T2A	10 k $\Omega$	6.00 $\pm$ 0.25"	$\pm$ 0.2 °C from 0 °C to 70 °C	44	3978
3AT103R44T2A	10 k $\Omega$	3.00 $\pm$ 0.25"	$\pm$ 0.2 °C from 0 °C to 70 °C	44	3978
3AT103R44T1A	10 k $\Omega$	3.00 $\pm$ 0.25"	$\pm$ 0.1 °C from 0 °C to 70 °C	44	3978

A wide variety of configurations are possible. Contact us at [info@northstarsensors.com](mailto:info@northstarsensors.com) for assistance with your unique application.

### Resistance vs Temperature Conversion Table

#### Other Specifications:

Normal Operating Temperature	0 °C to 70 °C
Max Temperature	125 °C
Recommended Measurement Current	< 25 $\mu$ A
Time Constant	< 200 ms in stirred liquid
Dissipation Constant	~ 0.3 mW / °C in ambient air
RoHS and REACH	Compliant

°C	CURVE 44	
	$\Omega$ RATIO $R_T / R_{25}$	NTC (%/°C)
-10	5.5325	-5.44
-5	4.2325	-5.27
0	3.2651	-5.11
5	2.5393	-4.95
10	1.9901	-4.80
15	1.5712	-4.66
20	1.2493	-4.52
25	1.0000	-4.39
30	0.80567	-4.26
35	0.65314	-4.14
40	0.53266	-4.02
45	0.43689	-3.91
50	0.36031	-3.81
55	0.29857	-3.71
60	0.24869	-3.61
65	0.20816	-3.51
70	0.17508	-3.42
75	0.14793	-3.33
80	0.12554	-3.24
85	0.10700	-3.16

Please visit [northstarsensors.com/temperature-curves](http://northstarsensors.com/temperature-curves) for additional tables