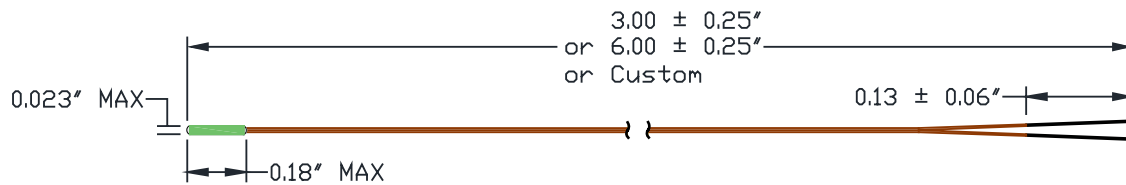




3XT Micro NTC Thermistor

Description:

Micro chip thermistor encapsulated with epoxy in polyimide tube with brown 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 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 β
3AT103R44T2A	10 k Ω	3.00 \pm 0.25"	\pm 0.2 °C from 0 °C to 70 °C	44	3978
3BT103R44T2A	10 k Ω	6.00 \pm 0.25"	\pm 0.2 °C from 0 °C to 70 °C	44	3978
3AT103R44T1A	10 k Ω	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 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 μ A
Time Constant	< 200 ms in stirred liquid
Dissipation Constant	~ 0.3 mW / °C in ambient air
RoHS and REACH	Compliant

°C	CURVE 44	
	Ω 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 for additional tables