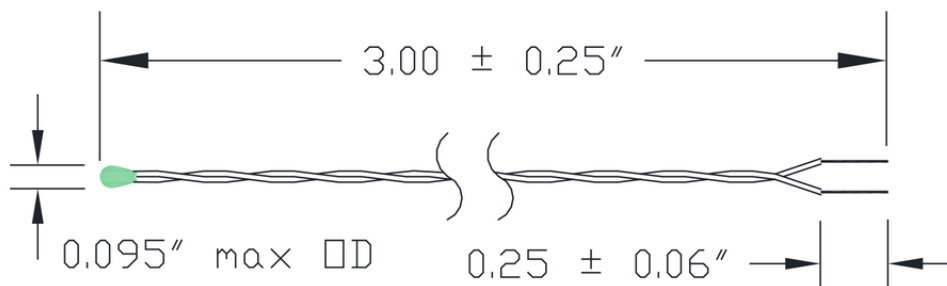


2DE NTC Thermistor

Description:

Epoxy-coated NTC thermistor with twisted pair Kynar-insulated 28 AWG solid silver-plated copper leads, radial configuration, 3 in (76.2 mm) overall length.



(Drawing dimensions are typical)

Features:

- **R25 values from 50 Ω to 100,000 Ω**
- **Available in point-matched and interchangeable temperature tolerances**
- **Available in all R/T Curves**

With twisted pair Kynar-insulated leads, the 2DE thermistor series reduces labors cost when the sensors are potted in housings and the leads must be electrically insulated. The 2DE series facilitates the process of attaching extension leads. The 2DE series is also appropriate for applications where the thermistor is exposed directly to ambient room air. Contact us at info@northstarsensors.com for assistance with your unique application.

Applications:

- **Electronic thermometers**
- **Battery technology**
- **Industrial controls**
- **HVAC**
- **Food processing**
- **Cold junction compensation**

2DE NTC Thermistor

Typical Configurations:

Part Number	Resistance at 25 °C	Temperature Tolerance	R/T Curve	25 °C / 85 °C β
2DE103R44T1A	10 k Ω	± 0.1 °C from 0 °C to 70 °C	44	3978
2DE222R44T1M	2252 Ω	± 0.1 °C from 35 °C to 40 °C	44	3978
2DE351R38P2	350 Ω	$\pm 2\%$ Ω at 25 °C	38	3486
2DE303R43T2A	30 k Ω	± 0.2 °C from 0 °C to 70 °C	43	3943
2DE104R47T5A	100 k Ω	± 0.5 °C from 0 °C to 70 °C	47	4262

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

Other Specifications:

Recommended Operating Temperature	-50 °C to 100 °C
Max Temperature	125 °C
Recommended Measurement Current	< 50 μ A
Time Constant	~ 1 second in stirred liquid
Dissipation Constant	~ 1 mW / °C in ambient air
RoHS and REACH	Compliant

Resistance vs Temperature Conversion Tables

°C	CURVE 38		CURVE 43		CURVE 44	
	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	2.815	-4.46	3.1660	-4.94	3.2651	-5.11
5	2.260	-4.33	2.4815	-4.80	2.5393	-4.95
10	1.826	-4.20	1.9583	-4.67	1.9901	-4.80
15	1.485	-4.07	1.5556	-4.54	1.5712	-4.66
20	1.215	-3.95	1.2434	-4.42	1.2493	-4.52
25	1.000	-3.84	1.0000	-4.30	1.0000	-4.39
30	0.8276	-3.73	0.80892	-4.18	0.80567	-4.26
35	0.6885	-3.63	0.65804	-4.07	0.65314	-4.14
40	0.5758	-3.53	0.53820	-3.97	0.53266	-4.02
45	0.4840	-3.43	0.44249	-3.87	0.43689	-3.91
50	0.4087	-3.33	0.36563	-3.77	0.36031	-3.81
55	0.3467	-3.24	0.30357	-3.67	0.29857	-3.71
60	0.2954	-3.16	0.25323	-3.58	0.24869	-3.61
65	0.2528	-3.07	0.21219	-3.49	0.20816	-3.51
70	0.2172	-2.99	0.17858	-3.41	0.17508	-3.42

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