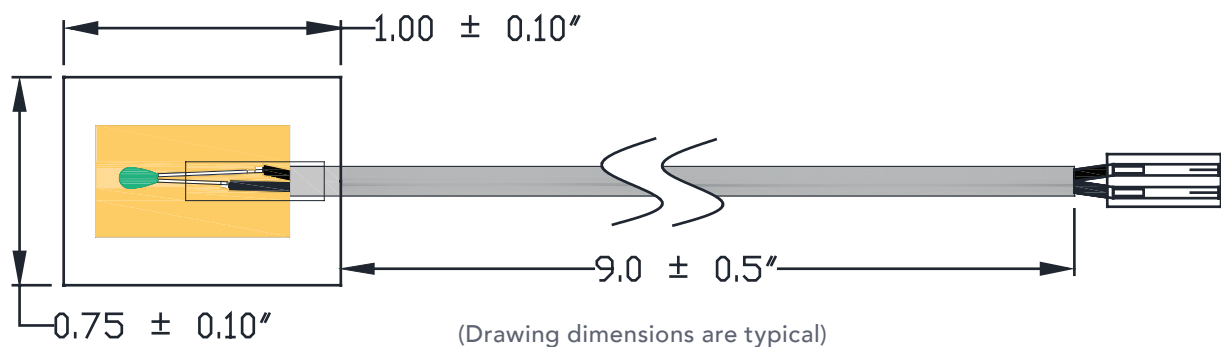
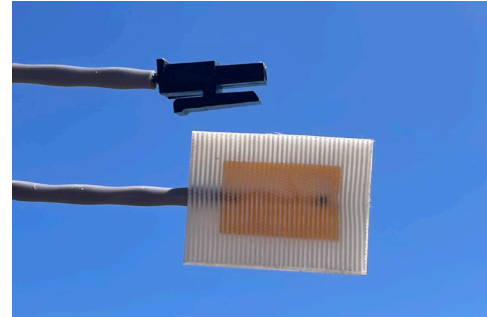




## SP01 NTC Thermistor Surface Probe

### Description:

The SP01 NTC thermistor surface probe features a non-permanent, removable adhesive backing, making it perfect for measuring the temperature of a surface. The probe has a connector for ease of use.



### Features:

- Non-permanent, removable adhesive backing
- Precise over a wide temperature band
- Connector for ease of use

The SP01 NTC thermistor probe has a removable adhesive backing on one side, and a connector on the test end making this product fast to install and easy to use. The standard connector on this part is Molex #43645 to be connected to Molex #43640. This part can be built with custom thermistors, cable lengths, sizes, and connectors to suit your needs. Contact us at [info@northstarsensors.com](mailto:info@northstarsensors.com) for assistance with your unique application.

This product is not water-tight and is not meant for use submerged in liquids or in high humidity environments. RoHS compliant.

### Applications:

- Battery monitoring
- Container surfaces
- Equipment safety
- Temperature controllers

NORTH STAR SENSORS, LLC

4168 Avenida de la Plata, Suite 107, Oceanside, CA 92056 Tel: 760.509.4468 Toll-Free USA: 844.900.2551

Fax: 760.295.6622 Email: [info@northstarsensors.com](mailto:info@northstarsensors.com) [www.northstarsensors.com](http://www.northstarsensors.com)



## SP01 NTC Thermistor Surface Probe

### Typical Configurations:

Part Number	Resistance at 25 °C	Temperature Tolerance	R/T Curve	25 °C/ 85 °C $\beta$
SP01-103R44T1A	10 K $\Omega$	$\pm 0.1$ °C from 0 °C to 70 °C	44	3978
SP01-103R44T5A	10 K $\Omega$	$\pm 0.5$ °C from 0 °C to 70 °C	44	3978
SP01-303R43T2A	30 K $\Omega$	$\pm 0.2$ °C from 0 °C to 70 °C	43	3943
SP01-351R38P2	350 $\Omega$	$\pm 2\%$ $\Omega$ at 25 °C	38	3486

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 Tables

#### Other Specifications:

Operating Temperature	0 °C to 70 °C
Operating Environment	Air with low to mild humidity
Recommended Measurement Current	< 50 $\mu$ A
Standard Connector	Molex #43645
RoHS and REACH	Compliant

°C	CURVE 38		CURVE 43		CURVE 44	
	$\Omega$ RATIO $R_T / R_{25}$	NTC (%/°C)	$\Omega$ RATIO $R_T / R_{25}$	NTC (%/°C)	$\Omega$ RATIO $R_T / R_{25}$	NTC (%/°C)
-10	4.459	-4.75	5.2658	-5.24	5.5325	-5.44
-5	3.530	-4.60	4.0680	-5.09	4.2325	-5.27
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
75	0.1874	-2.92	0.15093	-3.32	0.14793	-3.33
80	0.1622	-2.84	0.12808	-3.24	0.12554	-3.24
85	0.1410	-2.77	0.10912	-3.17	0.10700	-3.16

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