400 Series Compatible Sensor Twisted with Connector

- **Low cost disposable**
- **NTC Temperature Sensor**
- **400 Series Thermistor**
- **Twisted lead wires**
- **Small tip diameter**
- **Various leads lengths available**

DESCRIPTION

This assembly consists of a thermistor soldered to twisted leads and potted in a plastic cap using Stycast epoxy resin. It is assembled with a two socket 'Molex™' compatible over-molded connector.

FEATURES

- Suitable for biomedical applications
- Custom tolerances available on request
- Available in a range of R/T curves
- Temperature range -40 ºC to +80ºC
- High Accuracy
- Standard Disposable Configurations

APPLICATIONS

- Skin Temperature
- Core body temperature (esophageal/rectal)
- Breathing gas conditioning systems.

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	2,252
Resistance tolerance from 0°C to +70°C	°C	± 0.2
Beta Value 25/85	K	3976
Tolerance on Beta Value 25/85	%	± 0.5
Time response in Liquids	Seconds	<5

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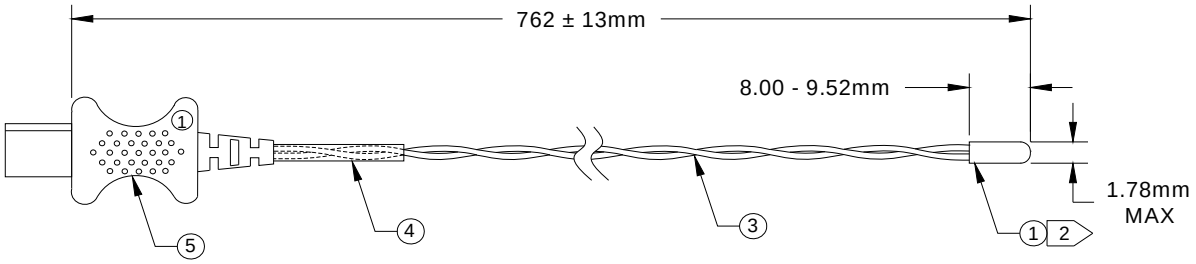
MECHANICAL DETAILS



NOTES:

1. HOUSING/MATERIAL: HDPE, color = white
2. ENCAPSULATION: Thermally Conductive White Epoxy
3. LEAD WIRES: Twisted Wire Pair, 30 AWG Solid Tin Plated Copper with White Polypropylene Insulation
4. 10 - 30mm (0.4" - 1.2") length PVC Tube Strain Relief
5. PVC Molded Connector with (2) Copper / Tin Female Connector Pins Crimped on Wires

Figure 1: Plastic Cap Sensor

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
-40	75491.0
-39	70662.6
-38	66172.8
-37	61996.2
-36	58108.9
-35	54489.3
-34	51117.5
-33	47975.0
-32	45045.0
-31	42311.8
-30	39761.2
-29	37379.9
-28	35155.6
-27	33077.2
-26	31134.3
-25	29317.3
-24	27617.3
-23	26026.0
-22	24536.1
-21	23140.4

Temp. °C	Ohms
-20	21832.4
-19	20606.2
-18	19456.1
-17	18377.1
-16	17364.4
-15	16413.5
-14	15520.2
-13	14680.9
-12	13891.9
-11	13150.0
-10	12452.0
-9	11795.2
-8	11176.9
-7	10594.6
-6	10046.0
-5	9529.0
-4	9041.7
-3	8582.0
-2	8148.5
-1	7739.3

Temp. °C	Ohms
0	7353.0
1	6988.2
2	6643.6
3	6318.0
4	6010.2
5	5719.2
6	5443.9
7	5183.4
8	4936.9
9	4703.5
10	4482.4
11	4273.0
12	4074.6
13	3886.5
14	3708.1
15	3538.9
16	3378.4
17	3226.0
18	3081.4
19	2944.0

Temp. °C	Ohms
20	2813.6
21	2689.6
22	2571.8
23	2459.8
24	2353.3
25	**2252.0**
26	2155.6
27	2063.9
28	1976.5
29	1893.4
30	1814.2
31	1738.7
32	1666.8
33	1598.2
34	1532.9
35	1470.5
36	1411.1
37	1354.3
38	1300.2
39	1248.5

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40	1199.1	51	780.7	62	521.4	73	356.4
41	1151.9	52	751.8	63	503.2	74	344.6
42	1106.9	53	724.1	64	485.7	75	333.3
43	1063.8	54	697.6	65	468.9	76	322.5
44	1022.7	55	672.2	66	452.8	77	312.0
45	983.4	56	647.8	67	437.3	78	301.9
46	945.7	57	624.5	68	422.5	79	292.3
47	909.8	58	602.1	69	408.2	80	282.9
48	875.3	59	580.7	70	394.5		
49	842.4	60	560.1	71	381.3		
50	810.9	61	540.3	72	368.6		

ORDERING INFORMATION

Part Number	Description	Ω @25ºC	MOQ
2.2K3D210	Plastic Cap Probe with over-molded connector	2,252	1000 *

* For quantities less than Minimum Order Quantity – contact distribution

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