



## 1.35mm TIP NTC TEMPERATURE SENSOR FOR MEDICAL APPLICATIONS

### PRODUCT DESCRIPTION

- NTC thermistor temperature sensor with 10.000ohms nominal resistance @25°C
- Thermistor potted inside a Polyimide Tubing for ceramic element protection
- Thermally conductive epoxy resin used for the potting to achieve fast responding during application
- 30AWG solid tin-plated twisted copper wire with light gray polypropylene insulation
- Customized extension of wire ends suitable for easy attachment to desire connector
- High precision NTC thermistor-based sensor for body temperature measurement

### FEATURES

- Low cost solution for disposable application
- Small tip OD maximum  $\Phi$ 1.35mm
- Various lead lengths available on request
- Suitable wire stiffness for further assembly
- Reliable measurement performance
- Custom tolerances available on request
- Temperature range -20°C to +70°C

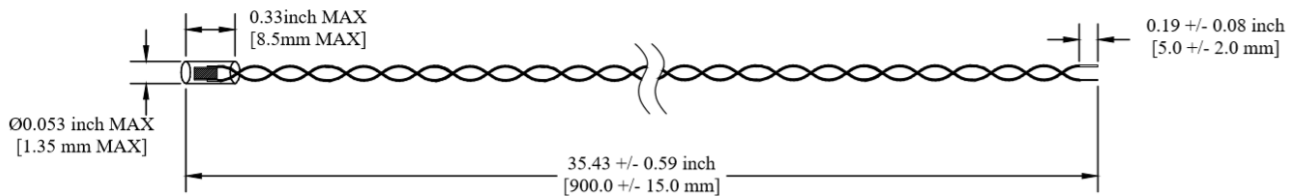
### APPLICATIONS

- Skin temperature detection (External)
- Breathing gas conditioning systems
- Sub-assembly for esophageal/rectal probes
- Sub-assembly for Foley Cath

## PERFORMANCE SPECIFICATION

Parameters	Units	Value
Resistance @+25°C	Ohms	10,000
Resistance tolerance from +25°C to +50°C	°C	±0.1°C
Beta value 25/85	K	3976
Tolerance on Beta value 25/85	%	±0.5
Time responding in liquids (T63.2%)	S	< 5
Operating temperature range	°C	-20°C to +70°C

## MECHANICAL DETAILS



## Notes

1	TEMP TOLERANCE: $\pm 0.1^\circ\text{C}$ FROM $+25^\circ\text{C}$ to $+50^\circ\text{C}$
2	RESISTANCE: 10,000 OHMS AT $25^\circ\text{C}$
3	MATERIAL:
	TIP HOUSING: POLYIMIDE TUBING
	WIRE: AWG 30, TIN-PLATED COPPER, TWISTED, POLYPROPYLENE, WHITE/WHITE
	POTTING: THERMALLY CONDUCTIVE EPOXY, WHITE
4	TIP TO BE STRAIGHT WITHOUT BEND

## PACKAGING DETAILS

Individual product will be packed into a bundle of 25 pieces, wrap by the protective air bubble. Bulk packed in quantities of maximum 500 pieces in non-sterilized zip lock bag. Double bag is applied for safe transfer to next sub-assembly unless customized.

## R-T TABLE

A curve Resistance vs. Temperature (degrees C)

10,000 ohms nominal at 25 C

Temp °C	Ohms	Temp °C	Ohms	Temp °C	Ohms
-20	97083	21	11944	62	2315
-19	91625	22	11420	63	2234
-18	86506	23	10923	64	2157
-17	81704	24	10450	65	2082
-16	77197	25	10000	66	2011
-15	72965	26	9572	67	1942
-14	68990	27	9165	68	1876
-13	65256	28	8777	69	1813
-12	61746	29	8407	70	1752
-11	58445	30	8056	71	1693
-10	55340	31	7721	72	1637
-9	52418	32	7401	73	1583
-8	49668	33	7097	74	1530
-7	47078	34	6807	75	1480
-6	44639	35	6530	76	1432
-5	42340	36	6266	77	1385
-4	40173	37	6014	78	1341
-3	38129	38	5773	79	1298
-2	36201	39	5544	80	1256
-1	34382	40	5325	81	1216
0	32665	41	5115	82	1178
1	31044	42	4915	83	1141
2	29512	43	4724	84	1105
3	28065	44	4541	85	1071
4	26697	45	4367	86	1037
5	25403	46	4200	87	1005
6	24180	47	4040	88	975
7	23022	48	3887	89	945
8	21927	49	3741	90	916
9	20890	50	3601	91	888
10	19908	51	3467	92	862
11	18977	52	3339	93	836
12	18095	53	3216	94	811
13	17260	54	3098	95	787
14	16467	55	2985	96	764
15	15716	56	2877	97	741
16	15003	57	2773	98	720
17	14326	58	2674	99	699
18	13683	59	2579	100	679
19	13073	60	2487	100	153
20	12494	61	2399		
20	2814	61	540		

### Ordering Information

Model	Description	R @25°C	Part Number
1	1.35mm tip OD, 10,000ohm, 900mm length	10,000	20015409-00