



1.35mm TIP NTC TEMPERATURE SENSOR FOR MEDICAL APPLICATIONS

PRODUCT DESCRIPTION

- NTC thermistor temperature sensor with 2.252ohms 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 $\Phi 1.35\text{mm}$
- 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

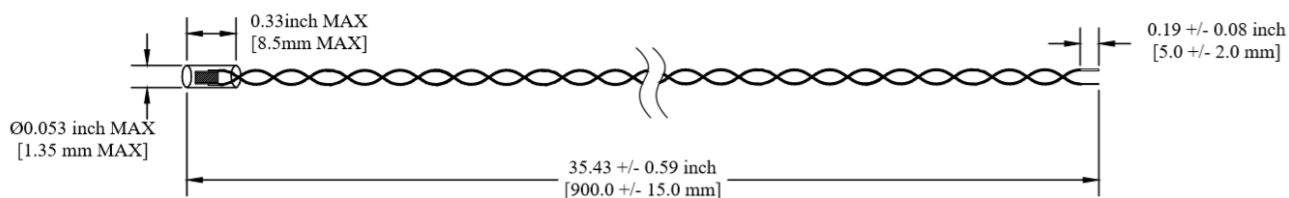
APPLICATIONS

- 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	2,252
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: ±0.1°C FROM +25°C to +50°C
2	RESISTANCE: 2,252 OHMS AT 25°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)

2252 ohms nominal at 25 C

Temp °C	Ohms	Temp °C	Ohms	Temp °C	Ohms
-21	23175	20	2814	61	540
-20	21863	21	2690	62	521
-19	20634	22	2572	63	503
-18	19481	23	2460	64	486
-17	18400	24	2353	65	469
-16	17385	25	2252	66	453
-15	16432	26	2156	67	437
-14	15537	27	2064	68	423
-13	14696	28	1977	69	408
-12	13905	29	1893	70	394
-11	13162	30	1814	71	381
-10	12463	31	1739	72	369
-9	11805	32	1667	73	356
-8	11185	33	1598	74	345
-7	10602	34	1533	75	333
-6	10053	35	1471	76	322
-5	9535	36	1411	77	312
-4	9047	37	1354	78	302
-3	8587	38	1300	79	292
-2	8153	39	1248	80	283
-1	7743	40	1199	81	274
0	7356	41	1152	82	265
1	6991	42	1107	83	257
2	6646	43	1064	84	249
3	6320	44	1023	85	241
4	6012	45	983	86	234
5	5721	46	946	87	226
6	5445	47	910	88	219
7	5185	48	875	89	213
8	4938	49	842	90	206
9	4704	50	811	91	200
10	4483	51	781	92	194
11	4274	52	752	93	188
12	4075	53	724	94	183
13	3887	54	698	95	177
14	3708	55	672	96	172
15	3539	56	648	97	167
16	3379	57	625	98	162
17	3226	58	602	99	157
18	3082	59	581	100	153
19	2944	60	560		
20	2814	61	540		

Ordering Information

Model	Description	R @25°C	Part Number
1	1.35mm tip OD, 2,252ohm, 900mm length	2,252	20015408-00