

NTC Thermistor .040"Ø Probe, 200°C

ATS30



- -40°C - 200°C Operating Temperature
- +/- 0.5% @ 25C
- .040"Ø NTC Thermistor Probe
- Beta -4036
- Fast Response Time (<5 sec TC)
- Media – Dry Air, & Gas

DESCRIPTION

The ATS30 temperature sensor was specifically designed for high temperature applications. The glass bead NTC thermistor is inside of a 0.040" diameter polyimide tube for protection. The molded base is PTFE and is threaded for ease of installation. The wiring is PTFE with a Molex connector. The ATS30 devices can be calibrated and the data supplied at additional charge.

APPLICATIONS

- Industrial Heaters
- Medical Instrumentation
- Commercial Ovens

Maximum Environmental Ratings

Operating Temperature -40°C to 200°C

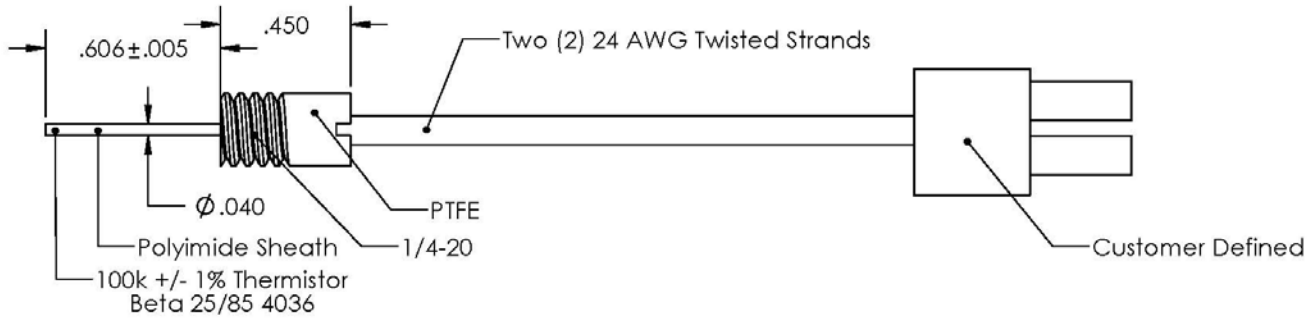
Storage Temperature Range -40°C to 200°C

Resistance vs Temperature Chart

100Kohm NTC R vs. T (other RT charts available)

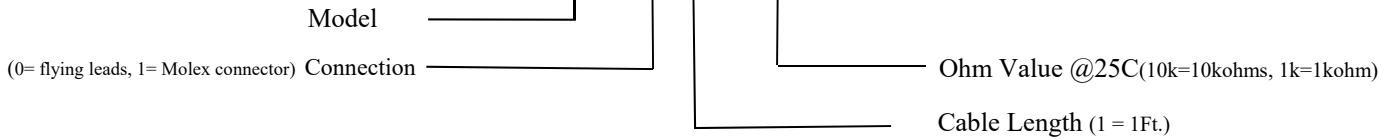
T[-C]	R nom[Ohm]	R min[Ohm]	R max[Ohm]	deltaR/R [+-%]	deltaT [+--C]	alpha [%K]
-55	9877500.0	8855700.0	10899000.0	10.3	1.4	7.4
-50	6864800.0	6186000.0	7543500.0	9.9	1.4	7.1
-45	4833700.0	4376800.0	5290600.0	9.5	1.4	6.9
-40	3445800.0	3134300.0	3757200.0	9.0	1.4	6.7
-35	2485200.0	2270400.0	2700000.0	8.6	1.3	6.4
-30	1812400.0	1662600.0	1962100.0	8.3	1.3	6.2
-25	1335600.0	1230100.0	1441200.0	7.9	1.3	6.0
-20	994130.0	919000.0	1069300.0	7.6	1.3	5.8
-15	747000.0	693030.0	800980.0	7.2	1.3	5.6
-10	566390.0	527260.0	605510.0	6.9	1.3	5.4
-5	433140.0	404540.0	461740.0	6.6	1.3	5.3
0	333960.0	312890.0	355030.0	6.3	1.2	5.2
5	258500.0	242920.0	274080.0	6.0	1.2	5.0
10	201660.0	190050.0	213270.0	5.8	1.2	4.9
15	158500.0	149790.0	167210.0	5.5	1.2	4.7
20	125470.0	118890.0	132050.0	5.2	1.1	4.6
25	100000.0	95000.0	105000.0	5.0	1.1	4.5
30	80223.0	76023.0	84422.0	5.2	1.2	4.3
35	64759.0	61222.0	68296.0	5.5	1.3	4.2
40	52589.0	49600.0	55578.0	5.7	1.4	4.1
45	42951.0	40418.0	45484.0	5.9	1.5	4.0
50	35272.0	33119.0	37426.0	6.1	1.6	3.9
55	29119.0	27282.0	30956.0	6.3	1.7	3.8
60	24161.0	22589.0	25732.0	6.5	1.8	3.7
65	20144.0	18796.0	21493.0	6.7	1.9	3.6
70	16874.0	15713.0	18035.0	6.9	2.0	3.5
75	14198.0	13196.0	15201.0	7.1	2.1	3.4
80	11998.0	11130.0	12867.0	7.2	2.2	3.3
85	10181.0	9427.2	10936.0	7.4	2.3	3.2
90	8674.4	8017.3	9331.5	7.6	2.4	3.2
95	7418.9	6844.9	7993.0	7.7	2.5	3.1
100	6368.8	5865.9	6871.7	7.9	2.6	3.0
105	5487.0	5045.3	5928.7	8.1	2.7	2.9
110	4743.7	4354.6	5132.7	8.2	2.9	2.9
115	4114.8	3771.3	4458.3	8.3	3.0	2.8
120	3580.8	3276.8	3884.9	8.5	3.1	2.7
125	3125.9	2856.1	3395.7	8.6	3.2	2.7
130	2737.0	2497.0	2977.0	8.8	3.3	2.6
135	2403.5	2189.6	2617.5	8.9	3.5	2.6
140	2116.7	1925.5	2307.8	9.0	3.6	2.5
145	1869.1	1697.9	2040.3	9.2	3.7	2.5
150	1654.9	1501.3	1808.6	9.3	3.9	2.4
155	1469.1	1330.9	1607.2	9.4	4.0	2.4
160	1307.3	1182.8	1431.8	9.5	4.1	2.3
165	1166.2	1053.7	1278.6	9.6	4.3	2.3
170	1042.7	941.0	1144.4	9.8	4.4	2.2
175	934.5	842.3	1026.7	9.9	4.5	2.2
180	839.3	755.6	923.0	10.0	4.7	2.1
185	755.4	679.3	831.6	10.1	4.8	2.1
190	681.4	611.9	750.8	10.2	5.0	2.0
195	615.8	552.4	679.2	10.3	5.1	2.0
200	557.6	499.7	615.6	10.4	5.3	2.0
205	505.9	452.9	559.0	10.5	5.4	1.9
210	459.9	411.2	508.6	10.6	5.6	1.9
215	418.8	374.0	463.5	10.7	5.8	1.9
220	382.0	340.8	423.2	10.8	5.9	1.8

Mechanical Dimensions (inches)



Part Number Configuration

ATS30-1-2-100K



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