ETP - OP - 150 - 10K3A1B TEMPERATURE SENSOR

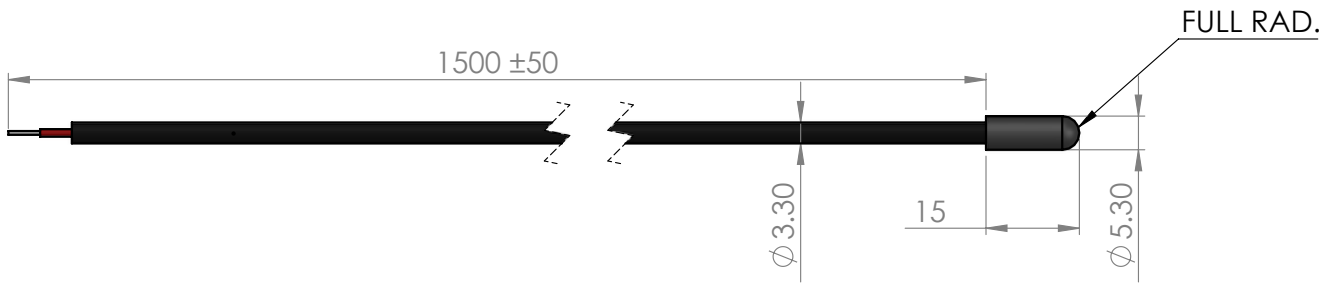


- **Miniature design, Ø5.3 mm and 15 mm length**
- **Insulated and encapsulated with Thermoplastic Elastomer**
- **Temperature range -40 to +125°C**
- **Resistance values from 10 kΩ**
- **Aimed at HVAC and building managment ambient air temperature sensing**

The ETP-OP-150-10K3A1B moulds a high quality NTC thermistor and a soldered PVC cable into a single highly durable probe asembly. The IP67 rated sensor offers a high degree of protection against water and moisture ingress and is an ideal solution for ambient air temperature sensing applications throughout building management and HVAC.

Specifications		
	Unit	Value
Nominal resistance at +25°C	Ohms	10,000
Resistance tolerance from 0..70 °C	°C	+/- 0.2
Beta value 25/85	K	3976
Tolerance on Beta value	%	+/- 0.5
Temperature range	°C	-40 to +125
Insulation Resistance	MΩ/VDC	100/500
Time Response +25°C to 70°C. (63.2% Span)	Seconds	Approx. 15
Leads and insulation	2x AWG24 Stranded tinned copper, Black Insulation PVC, OD~3.3mm	
Environmental rating	IP67	

Ordering code and dimensions for standard model



Stock model number: 93681 - ETP-OP-150-10K3A1B

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TEMPERATURE SENSOR

Resistance vs. Temperature Table for 10K3A1B Thermistor

Temp. °C	Ohms
-40	336,052
-39	314,512
-38	294,487
-37	275,863
-36	258,533
-35	242,399
-34	227,373
-33	213,371
-32	200,318
-31	188,144
-30	176,786
-29	166,183
-28	156,280
-27	147,029
-26	138,382
-25	130,296
-24	122,732
-23	115,653
-22	109,025
-21	102,817
-20	97,000
-19	91,547
-18	86,433
-17	81,636
-16	77,134
-15	72,907
-14	68,937
-13	65,206
-12	61,700
-11	58,403
-10	55,301
-9	52,383
-8	49,636
-7	47,049
-6	44,612
-5	42,315
-4	40,150
-3	38,109
-2	36,183
-1	34,366
0	32650
1	31,030
2	29,500

Temp. °C	Ohms
3	28,054
4	26,687
5	25,395
6	24,172
7	23,016
8	21,921
9	20,884
10	19,903
11	18,973
12	18,092
13	17,257
14	16,465
15	15,714
16	15,001
17	14,324
18	13,682
19	13,073
20	12,493
21	11,943
22	11,420
23	10,923
24	10,450
25	10,000
26	9,572.0
27	9,164.7
28	8,777.0
29	8,407.8
30	8,056.1
31	7,721.0
32	7,401.7
33	7,097.3
34	6,807.1
35	6,530.3
36	6,266.3
37	6,014.3
38	5,773.8
39	5,544.3
40	5,325.0
41	5,115.7
42	4,915.6
43	4,724.5
44	4,541.7
45	4,367.1

Temp. °C	Ohms
46	4,200.0
47	4,040.2
48	3,887.4
49	3,741.1
50	3,601.1
51	3,467.1
52	3,338.7
53	3,215.8
54	3,098.0
55	2,985.2
56	2,877.0
57	2,773.3
58	2,673.9
59	2,578.6
60	2,487.1
61	2,399.4
62	2,315.2
63	2,234.4
64	2,156.8
65	2,082.3
66	2,010.8
67	1,942.1
68	1,876.0
69	1,812.6
70	1751.6
71	1,693.0
72	1,636.6
73	1,582.4
74	1,530.2
75	1,480.1
76	1,431.8
77	1,385.3
78	1,340.6
79	1,297.5
80	1,256.1
81	1,216.1
82	1,177.7
83	1,140.6
84	1,104.9
85	1,070.4
86	1,037.3
87	1,005.3
88	974.4

Temp. °C	Ohms
89	944.7
90	916.0
91	888.3
92	861.5
93	835.7
94	810.8
95	786.8
96	763.6
97	741.2
98	719.5
99	698.6
100	678.4
101	658.9
102	640.0
103	621.8
104	604.1
105	587.1
106	570.6
107	554.6
108	539.2
109	524.3
110	509.8
111	495.8
112	482.3
113	469.2
114	456.5
115	444.2
116	432.3
117	420.8
118	409.6
119	398.8
120	388.3
121	378.2
122	368.3
123	358.8
124	349.5
125	340.6