# Temperature sensor



**EUROSENSOR** 

## **SMT Ring Terminal Probe ETP-RT-**

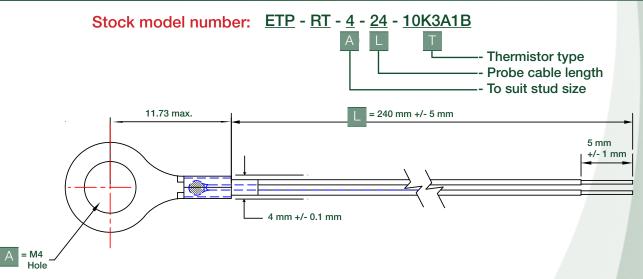
- Temperature range -40 to +125°C
- Available in a range of sizes
- Resistance values from 2.2 100 kΩ
- Custom designs available
- Higher temperature range available



#### Applications

- Industrial equipment
- Transit
- HVAC
- Power and utilities
- Computers
- Home appliances
- · Calibration and instrumentation

### Ordering information for standard stock model:



Technical parameters for stock model		
	Unit	Value
Nominal resistance at +25°C	Ohms	10,000
Resistance tolerance from 070°C	°C	+/- 0.2
Beta value 25/85	K	3976
Tolerance on Beta value 25/85	%	+/- 0.5
Dissipation constant in still air	mW/°C	2
Operating temperature	°C	-40 to +125
Epoxy thermal conductivity	W/(m.K)	1.7

Materials	
Leads and insulation	28AWG Solid silver plated copper leads with white Kynar insulation
Probe material	Tin plated brass

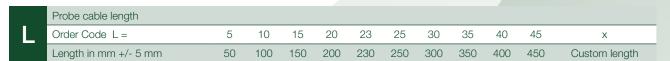
#### Feature

- Cost effective off the shelf model
- Solid tin plated lead wires
- Stock model reduced lead times
- Improved potting epoxy has outstanding thermal conductivity for faster response times

### Ordering information for custom designs:

Use the information below to build up a custom probe design.

	Probe size					
Α	Order Code A =	4	5	6	8	X
	To suit stud size	M4	M5	M6	M8	Optional stud size









## Resistance v. 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

