

Single Insulated TPE OM Probe Ø 5 x 20mm



- IP67 Rated
- TPE Overmolded probe with probe head dimensions of Ø5 x 20mm
- 24 AWG Zipcord cable
- Ideal from ambient air sensing in building management applications, heater controls, air conditioning
- Available in a variety of connector types
- RoHS Compliant

DESCRIPTION

This assembly consists of a NTC thermistor soldered to a single insulated TPE extension cable. The sensor and the extension cable are moulded together as one hot vulcanised unit to give a high degree of protection against water/moisture ingress.

FEATURES

24AWG Zipcord TPE cable
 IP67 Rated
 Insulation Resistance 100MΩ @ 500VDC
 Available in a variety of connector types
 Customized tolerances and resistances available on request
 Temperature range -40°C to +125°C

APPLICATIONS

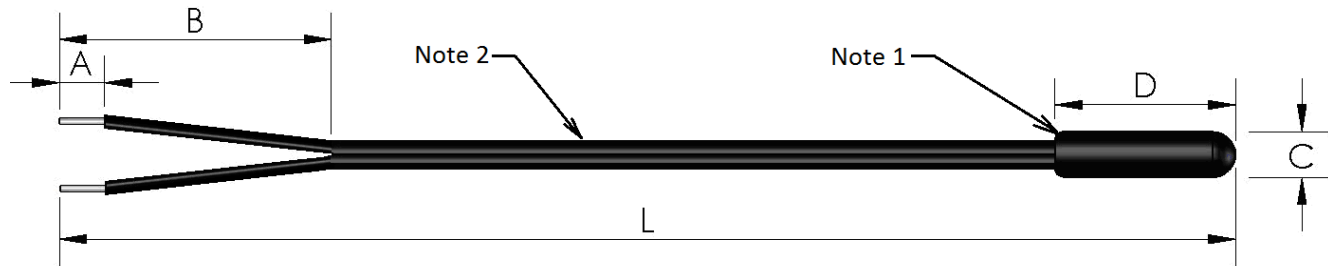
Building Management Applications
 Heater Control
 Air Conditioning

PERFORMANCE SPECS

Parameters	Units	Value
Nominal Resistance at +25°C	Ohms	10,000
Tolerance at +25°C	%	± 1
Beta Value _{25/85}	K	3435
Tolerance on Beta Value	%	± 1
Max power (probe in still air at +25°C)	mW	400
Time Response +25°C to 70°C. (63.2% Span)	Seconds	Approx. 15
Temperature range	°C	-40 to +125

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MECHANICAL DETAILS



	Dimension			
	A	B	C	D
	5 ± 1mm	35 ± 3mm	Ø 5mm	20 ± 1mm
Note 1	NTC encapsulated using Black TPE over-mold material (Temp. Rating +125°C)			
Note 2	24AWG (7/32) Tin plated Zipcord cable with Black TPE jacket (Temp. Rating +125°C)			

Figure 1: TPE Overmoulded Probe Ø 5 x 20mm

RESISTANCE V TEMPERATURE TABLE

Temp. °C	K Ohms
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-35°C	144.30
-34°C	136.92
-33°C	129.96
-32°C	123.39
-31°C	117.19
-30°C	111.34
-29°C	105.81
-28°C	100.58
-27°C	95.64
-26°C	90.97
-25°C	86.55
-24°C	82.37
-23°C	78.42
-22°C	74.68
-21°C	71.13
-20°C	67.77
-19°C	64.59

Temp. °C	K Ohms
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-18°C	61.58
-17°C	58.72
-16°C	56.01
-15°C	53.44
-14°C	51.01
-13°C	48.69
-12°C	46.50
-11°C	44.41
-10°C	42.43
-9°C	40.55
-8°C	38.76
-7°C	37.06
-6°C	35.44
-5°C	33.91
-4°C	32.44
-3°C	31.05
-2°C	29.73

Temp. °C	K Ohms
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-1°C	28.47
0°C	27.27
1°C	26.12
2°C	25.03
3°C	23.99
4°C	23.00
5°C	22.06
6°C	21.16
7°C	20.30
8°C	19.48
9°C	18.70
10°C	17.95
11°C	17.24
12°C	16.56
13°C	15.91
14°C	15.29
15°C	14.69

Temp. °C	K Ohms
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16°C	14.12
17°C	13.58
18°C	13.06
19°C	12.56
20°C	12.09
21°C	11.63
22°C	11.20
23°C	10.78
24°C	10.38
25°C	10.00
26°C	9.63
27°C	9.28
28°C	8.95
29°C	8.62
30°C	8.31
31°C	8.02
32°C	7.73

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33°C	7.46
34°C	7.20
35°C	6.95
36°C	6.70
37°C	6.47
38°C	6.25
39°C	6.04
40°C	5.83
41°C	5.63
42°C	5.44
43°C	5.26
44°C	5.08
45°C	4.92
46°C	4.75
47°C	4.60
48°C	4.45
49°C	4.30
50°C	4.16
51°C	4.03

52°C	3.90
53°C	3.77
54°C	3.66
55°C	3.54
56°C	3.43
57°C	3.32
58°C	3.22
59°C	3.12
60°C	3.02
61°C	2.93
62°C	2.84
63°C	2.75
64°C	2.67
65°C	2.59
66°C	2.51
67°C	2.44
68°C	2.37
69°C	2.30
70°C	2.23

71°C	2.16
72°C	2.10
73°C	2.04
74°C	1.98
75°C	1.93
76°C	1.87
77°C	1.82
78°C	1.77
79°C	1.72
80°C	1.67
81°C	1.62
82°C	1.58
83°C	1.53
84°C	1.49
85°C	1.45
86°C	1.41
87°C	1.37
88°C	1.34
89°C	1.30

90°C	1.27
91°C	1.23
92°C	1.20
93°C	1.17
94°C	1.14
95°C	1.11
96°C	1.08
97°C	1.05
98°C	1.02
99°C	1.00
100°C	0.97
101°C	0.95
102°C	0.92
103°C	0.90
104°C	0.88
105°C	0.86

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
10K3435STM010	TPE OM Probe Ø 5 x 20mm Length 1 meter	10,000	1,000*
10K3435STM020	TPE OM Probe Ø 5 x 20mm Length 2 meters	10,000	1,000*
10K3435STM030	TPE OM Probe Ø 5 x 20mm Length 3 meters	10,000	1,000*

* For quantities less than Minimum Order Quantity – contact distribution

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