

SINGLE INSULATED TPE OM PROBE Ø 5 X 20MM

SPECIFICATIONS

- **TPE Overmolded Thermistor Probe for HVAC Applications**
- **Probe head dimensions of Ø 5 x 20mm**
- **24 AWG Zipcord cable**
- **IP-67 Rated**
- **Ideal from ambient air sensing in building management applications, heater controls, air conditioning**
- **Available in a variety of connector types**
- **RoHS Compliant**

This thermistor 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
- IP-67 Rated
- Insulation Resistance 100MΩ @ 500VDC
- Available in a variety of connector types
- Customized tolerances and resistances available on request
- Temperature range -35ºC to +105ºC

APPLICATIONS

- Building Management Applications
- Heater Control
- Air Conditioning

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PERFORMANCE SPECS

Parameters	Value	Units
Nominal Resistance at +25°C	10,000	Ohms
Tolerance at +25°C	± 1	%
Beta Value 25/85	3435	K
Tolerance on Beta Value	± 1	%
Max power (probe in still air at +25ºC)	400	mW
Time Constant. (63.2% Span)	Approx. 15	Seconds
Temperature range	-35 to +105	ºC

MECHANICAL DETAILS

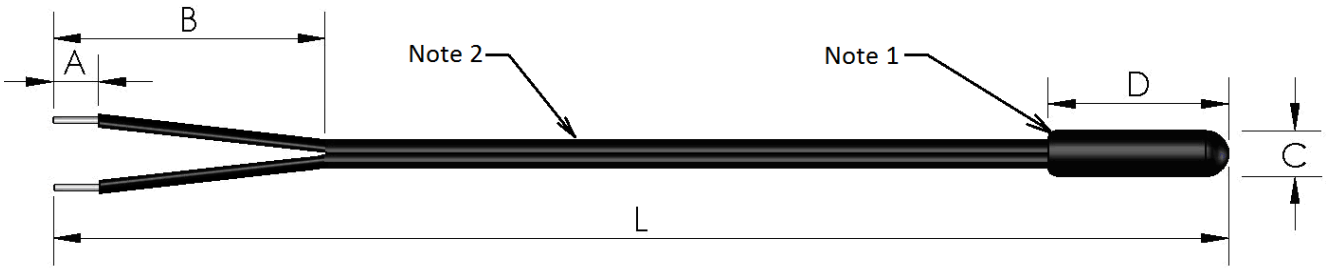


Figure 1: TPE Overmoulded Probe Ø 5 x 20mm

	Dimensions			
	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)			
Note 3	Ref part description for dimension L			

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RESISTANCE V TEMPERATURE TABLE

Temp °C	KOhms
-35ºC	144.30
-34ºC	136.92
-33ºC	129.96
-32ºC	123.39
-31ºC	117.19
-30ºC	111.34
-29ºC	105.81
-28ºC	100.58
-27ºC	95.64
-26ºC	90.97
-25ºC	86.55
-24ºC	82.37
-23ºC	78.42
-22ºC	74.68
-21ºC	71.13
-20ºC	67.77
-19ºC	64.59
-18ºC	61.58
-17ºC	58.72
-16ºC	56.01
-15ºC	53.44
-14ºC	51.01
-13ºC	48.69
-12ºC	46.50
-11ºC	44.41
-10ºC	42.43
-9ºC	40.55
-8ºC	38.76
-7ºC	37.06
-6ºC	35.44
-5ºC	33.91
-4ºC	32.44
-3ºC	31.05
-2ºC	29.73
-1ºC	28.47
0ºC	27.27

Temp °C	KOhms
1ºC	26.12
2ºC	25.03
3ºC	23.99
4ºC	23.00
5ºC	22.06
6ºC	21.16
7ºC	20.30
8ºC	19.48
9ºC	18.70
10ºC	17.95
11ºC	17.24
12ºC	16.56
13ºC	15.91
14ºC	15.29
15ºC	14.69
16ºC	14.12
17ºC	13.58
18ºC	13.06
19ºC	12.56
20ºC	12.09
21ºC	11.63
22ºC	11.20
23ºC	10.78
24ºC	10.38
25ºC	10.00
26ºC	9.63
27ºC	9.28
28ºC	8.95
29ºC	8.62
30ºC	8.31
31ºC	8.02
32ºC	7.73
33ºC	7.46
34ºC	7.20
35ºC	6.95
36ºC	6.70

Temp °C	KOhms
37ºC	6.47
38ºC	6.25
39ºC	6.04
40ºC	5.83
41ºC	5.63
42ºC	5.44
43ºC	5.26
44ºC	5.08
45ºC	4.92
46ºC	4.75
47ºC	4.60
48ºC	4.45
49ºC	4.30
50ºC	4.16
51ºC	4.03
52ºC	3.90
53ºC	3.77
54ºC	3.66
55ºC	3.54
56ºC	3.43
57ºC	3.32
58ºC	3.22
59ºC	3.12
60ºC	3.02
61ºC	2.93
62ºC	2.84
63ºC	2.75
64ºC	2.67
65ºC	2.59
66ºC	2.51
67ºC	2.44
68ºC	2.37
69ºC	2.30
70ºC	2.23
71ºC	2.16
72ºC	2.10

Temp °C	KOhms
73ºC	2.04
74ºC	1.98
75ºC	1.93
76ºC	1.87
77ºC	1.82
78ºC	1.77
79ºC	1.72
80ºC	1.67
81ºC	1.62
82ºC	1.58
83ºC	1.53
84ºC	1.49
85ºC	1.45
86ºC	1.41
87ºC	1.37
88ºC	1.34
89ºC	1.30
90ºC	1.27
91ºC	1.23
92ºC	1.20
93ºC	1.17
94ºC	1.14
95ºC	1.11
96ºC	1.08
97ºC	1.05
98ºC	1.02
99ºC	1.00
100ºC	0.97
101ºC	0.95
102ºC	0.92
103ºC	0.90
104ºC	0.88
105ºC	0.86

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ORDERING INFORMATION

TE Part Number	Legacy Ref	Description	Ω @25ºC	MOQ
GA10K3435STM010	10K3435STM010	TPE OM Probe Ø 5 x 20mm Length 1 meter	10,000	1,000*
20024687-20	10K3435STM020	TPE OM Probe Ø 5 x 20mm Length 2 meter	10,000	1,000*
20024687-30	10K3435STM030	TPE OM Probe Ø 5 x 20mm Length 3 meter	10,000	1,000*

* For quantities less than Minimum Order Quantity – contact distribution

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