

Single Insulated TPE OM Probe Ø 5 x 15mm



- IP67 Rated
- TPE Overmolded probe with probe head dimensions of Ø5 x 15mm
- 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 DO-35 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 -35°C to +105°C

APPLICATIONS

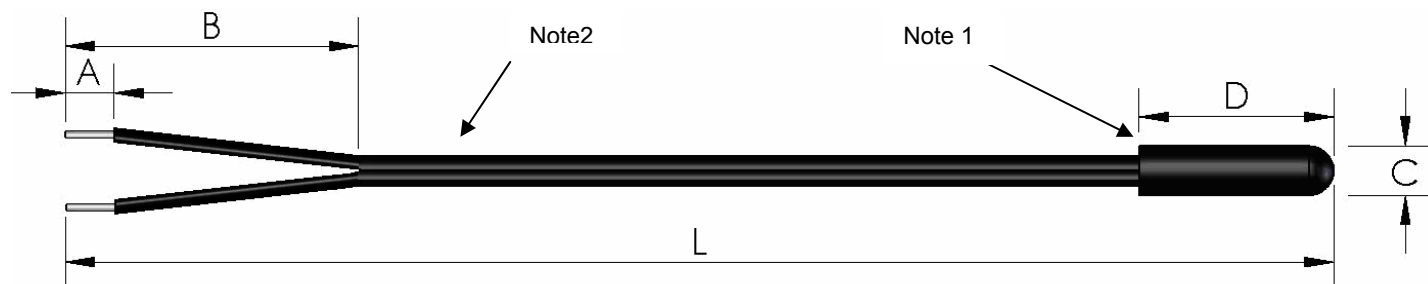
- Building Management Applications
- Heater Control
- Air Conditioning

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

MECHANICAL DETAILS

Single Insulated TPE OM Probe Ø 5 x 15mm



	Dimension			
	A	B	C	D
	5 ± 1mm	35 ± 3mm	Ø 5mm	15 ± 1mm
Note 1	NTC encapsulated using White TPU 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 15mm

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
-18°C	61.58
-17°C	58.72
-16°C	56.01
-15°C	53.44

Temp. °C	K Ohms
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-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
-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

Temp. °C	K Ohms
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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
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

Temp. °C	K Ohms
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28°C	8.95
29°C	8.62
30°C	8.31
31°C	8.02
32°C	7.73
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

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49°C	4.30	64°C	2.67	79°C	1.72	94°C	1.14
50°C	4.16	65°C	2.59	80°C	1.67	95°C	1.11
51°C	4.03	66°C	2.51	81°C	1.62	96°C	1.08
52°C	3.90	67°C	2.44	82°C	1.58	97°C	1.05
53°C	3.77	68°C	2.37	83°C	1.53	98°C	1.02
54°C	3.66	69°C	2.30	84°C	1.49	99°C	1.00
55°C	3.54	70°C	2.23	85°C	1.45	100°C	0.97
56°C	3.43	71°C	2.16	86°C	1.41	101°C	0.95
57°C	3.32	72°C	2.10	87°C	1.37	102°C	0.92
58°C	3.22	73°C	2.04	88°C	1.34	103°C	0.90
59°C	3.12	74°C	1.98	89°C	1.30	104°C	0.88
60°C	3.02	75°C	1.93	90°C	1.27	105°C	0.86
61°C	2.93	76°C	1.87	91°C	1.23		
62°C	2.84	77°C	1.82	92°C	1.20		
63°C	2.75	78°C	1.77	93°C	1.17		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
10K3435STM010	TPE OM Probe Ø 5 x 15mm Length 1 meter	10,000	5,000*
10K3435STM020	TPE OM Probe Ø 5 x 15mm Length 2 meters	10,000	5,000*
10K3435STM030	TPE OM Probe Ø 5 x 15mm Length 3 meters	10,000	5,000*

* For quantities less than Minimum Order Quantity – contact distribution

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