



TPE OVERMOLDED TEMPERATURE PROBE Ø5-X-20MM

Features

- IP67 Rated
- 24 AWG double insulated TPE cable
- Insulation resistance 100MΩ @ 500VDC
- Temperature range -40°C to +105°C

Applications

- Air-conditioning units
- Climate control systems
- Domestic heating controls
- Case refrigeration

Description

This assembly consists of an epoxy coated NTC thermistor soldered to an extension cable. The sensor and the extension cable are molded as one single vulcanized unit to provide a high degree of protection against moisture and water ingress.

Customized configurations available on request for volume applications. Options include:

- Resistance / temperature characteristics
- Various electrical tolerances available
- Wire length
- Connector type

Performance Specifications

Parameters	Value	
Resistance and corresponding Beta options	Nominal resistance at +25°C	Beta value (25/85)
	10K Ohm	3435 K
	10K Ohm	3976 K
Resistance tolerance	± 1%	
Beta tolerance	± 2%	
Time response (63.2% of temperature span) in liquid	<24 s	
Insulation resistance	100 MΩ @ 500 VDC	
Temperature range	-40°C to +105°C	
Resistance drift after storage at 70°C for 1000h	<1%	
Cable	24 AWG (7/32) Stranded TPC conductor with black TPE insulation	
Probe head	Overmolded black TPE material	

Dimensional Information



	A	B	C	D	L
Dimensions	5.0	35.0	Ø 5	20	Refer to Page 4
Tolerance	± 1.0	± 3.0	± 0.5	± 1.0	

All dimensions in millimeters

Resistance v Temperature Table

Temperature (°C)	10K ohms Beta $_{25/85} = 3435$	10K ohms Beta $_{25/85} = 3976$
-40	188482	313592
-35	144300	228397
-30	111337	168,031
-25	86551	124818
-20	67774	93577
-15	53444	70779
-10	42430	53990
-5	33906	41518
0	27266	32176
5	22060	25123
10	17952	19756
15	14692	15643
20	12089	12468
25	10000	10000
30	8314	8069
35	6945	6550
40	5830	5346
45	4915	4,87
50	4162	3619
55	3540	3000
60	3023	2499
65	2591	2091
70	2230	1758
75	1926	1484
80	1669	1258
85	1451	1071
90	1266	915
95	1108	785
100	973	675
105	857	583

Ordering Information

Part Number	Resistance at +25°C	Beta Value (25/85)	Length (mm) (Dimension L)
20026072-01	10000 Ω	3435	1000
20026072-02			2000
20026072-03			3000
20026072-11	10000 Ω	3976	1000
20026072-12			2000
20026072-13			3000

Example of customization options available for high volume enquires:

- Various nominal resistance values and material systems available
- Variety of compatible connectors

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