ET-TP-TH1 THERMISTOR PROBE

FEATURES:

- Accurate over wide temperature range
- High Stability
- Excellent price/performance ratio
- Negative temperature coefficient
- Brass-pipe enclosure makes them suitable for applications in various environmental conditions

PRODUCT DESCRIPTION

The ET-TP-TH1 probe contains a 10 k NTC thermistor encapsulated in a 1" x 1/4" brass tubing. The 15" long (24 AWG) wire leads are sealed in the tubing forming an environmentally protected assembly. This probe can be used for economical temperature monitoring in the range of –40°C to +85°C. Combined with Elkor's ETSCAL board it will provide a linear analog signal that can be easily scaled and interfaced with any generic controller. This thermistor probe may be also incorporated into other 'third party' OEM temperature circuitry.

SPECIFICATIONS

R/T Characteristic (polynomial)

$$T_{\circ C}(R) = \frac{1}{A + B + \ln(R) + (Cx\ \ln(R))^3} - 273.15$$

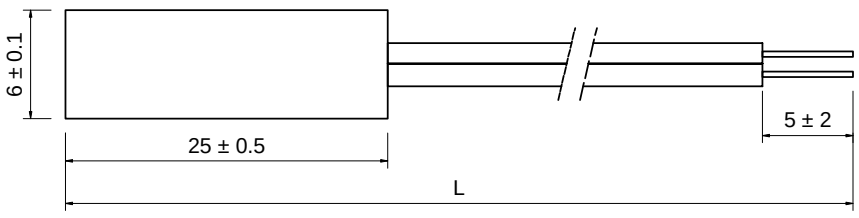
Where:

- A = 0.0011736669200757
- B = 0.000226810153789725
- C = 1.16919057888479E-07
- R is the thermistor's resistance in Ohms

Parameter	Value
Resistance at 25°C (R_{25})	10 kΩ
Tolerance on R_{25} value	±3%
Maximum dissipation	250 mW
Operating Range:	
zero dissipation (continuously)	-40°C to +85°C
maximum dissipation	0°C to +50°C
Climatic category	40/085/56
Mass	~6g

R/T Characteristic (table)

T (°C)	R (kΩ)	T (°C)	R (kΩ)
-40	332.1	25	10.00
-35	240.0	30	8.059
-30	175.2	35	6.535
-25	129.3	40	5.330
-20	96.36	45	4.372
-15	72.50	50	3.606
-10	55.05	55	2.989
-5	42.16	60	2.490
0	32.56	65	2.084
5	25.34	70	1.753
10	19.87	75	1.481
15	15.70	80	1.256
20	12.49	85	1.070



Dimensions in mm.
L = 400 ±10mm