



- ▶ **NTC Temperature Probe**
- ▶ **Epoxy potting material**
- ▶ **Temperature range -40 to +125°C**
- ▶ **Miniature design with 2,5 mm OD**

### Applications

Building management

Heater control

Air conditioning

### Features

Cost effective

Stock model

Custom design on request

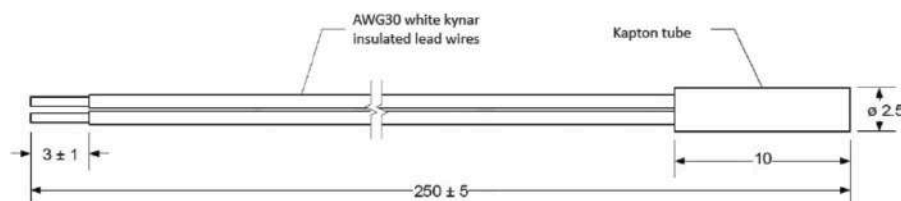
### Specifications

|                                   | Unit  | Value       |
|-----------------------------------|-------|-------------|
| Nominal resistance at +25°C       | Ohms  | 10,000      |
| Resistance tolerance from 0..70°C | °C    | +/- 0.2     |
| Beta value 25/85                  | K     | 3977        |
| Tolerance on Beta value 25/85     | %     | +/- 1       |
| Dissipation constant in still air | mW/°C | 2           |
| Operating temperature             | °C    | -40 to +125 |

### Materials

|                      |                                        |
|----------------------|----------------------------------------|
| Leads and insulation | AWG30 white kynar insulated lead wires |
| Probe material       | Kapton tube, Epoxy potting             |

### Dimensions in mm



UNITS: [mm]

## Ordering information

(Please use the characters in the chart below to construct your product code)

**Sample Code** ETP - KT - 1 - 2.5 - 24 - EB - 10k3977 - 02

|                                           |  |
|-------------------------------------------|--|
| <b>Probe housing length</b><br>1 10 mm    |  |
| <b>Probe housing diameter</b><br>xx in mm |  |
| <b>Probe cable length</b><br>xx in cm     |  |
| <b>Thermistor Type</b>                    |  |

If you require a customized solution for your program contact our sales team.



## Resistance vs. Temperature Table for 10K3977 Thermistor

| Temp. °C | Ohm     |
|----------|---------|
| -40      | 336,052 |
| -39      | 314,512 |
| -38      | 294,487 |
| -37      | 275,863 |
| -36      | 258,533 |
| -35      | 242,399 |
| -34      | 227,373 |
| -33      | 213,371 |
| -32      | 200,318 |
| -31      | 188,144 |
| -30      | 176,786 |
| -29      | 166,183 |
| -28      | 156,280 |
| -27      | 147,029 |
| -26      | 138,382 |
| -25      | 130,296 |
| -24      | 122,732 |
| -23      | 115,653 |
| -22      | 109,025 |
| -21      | 102,817 |
| -20      | 97,000  |
| -19      | 91,547  |
| -18      | 86,433  |
| -17      | 81,636  |
| -16      | 77,134  |
| -15      | 72,907  |
| -14      | 68,937  |
| -13      | 65,206  |
| -12      | 61,700  |
| -11      | 58,403  |
| -10      | 55,301  |
| -9       | 52,383  |
| -8       | 49,636  |
| -7       | 47,049  |
| -6       | 44,612  |
| -5       | 42,315  |
| -4       | 40,150  |
| -3       | 38,109  |
| -2       | 36,183  |
| -1       | 34,366  |
| 0        | 32,650  |
| 1        | 31,030  |
| 2        | 29,500  |

| Temp. °C | Ohm     |
|----------|---------|
| 3        | 28,054  |
| 4        | 26,687  |
| 5        | 25,395  |
| 6        | 24,172  |
| 7        | 23,016  |
| 8        | 21,921  |
| 9        | 20,884  |
| 10       | 19,903  |
| 11       | 18,973  |
| 12       | 18,092  |
| 13       | 17,257  |
| 14       | 16,465  |
| 15       | 15,714  |
| 16       | 15,001  |
| 17       | 14,324  |
| 18       | 13,682  |
| 19       | 13,073  |
| 20       | 12,493  |
| 21       | 11,943  |
| 22       | 11,420  |
| 23       | 10,923  |
| 24       | 10,450  |
| 25       | 10,000  |
| 26       | 9,572.0 |
| 27       | 9,164.7 |
| 28       | 8,777.0 |
| 29       | 8,407.8 |
| 30       | 8,056.1 |
| 31       | 7,721.0 |
| 32       | 7,401.7 |
| 33       | 7,097.3 |
| 34       | 6,807.1 |
| 35       | 6,530.3 |
| 36       | 6,266.3 |
| 37       | 6,014.3 |
| 38       | 5,773.8 |
| 39       | 5,544.3 |
| 40       | 5,325.0 |
| 41       | 5,115.7 |
| 42       | 4,915.6 |
| 43       | 4,724.5 |
| 44       | 4,541.7 |
| 45       | 4,367.1 |

| Temp. °C | Ohm     |
|----------|---------|
| 46       | 4,200.0 |
| 47       | 4,040.2 |
| 48       | 3,887.4 |
| 49       | 3,741.1 |
| 50       | 3,601.1 |
| 51       | 3,467.1 |
| 52       | 3,338.7 |
| 53       | 3,215.8 |
| 54       | 3,098.0 |
| 55       | 2,985.2 |
| 56       | 2,877.0 |
| 57       | 2,773.3 |
| 58       | 2,673.9 |
| 59       | 2,578.6 |
| 60       | 2,487.1 |
| 61       | 2,399.4 |
| 62       | 2,315.2 |
| 63       | 2,234.4 |
| 64       | 2,156.8 |
| 65       | 2,082.3 |
| 66       | 2,010.8 |
| 67       | 1,942.1 |
| 68       | 1,876.0 |
| 69       | 1,812.6 |
| 70       | 1,751.6 |
| 71       | 1,693.0 |
| 72       | 1,636.6 |
| 73       | 1,582.4 |
| 74       | 1,530.2 |
| 75       | 1,480.1 |
| 76       | 1,431.8 |
| 77       | 1,385.3 |
| 78       | 1,340.6 |
| 79       | 1,297.5 |
| 80       | 1,256.1 |
| 81       | 1,216.1 |
| 82       | 1,177.7 |
| 83       | 1,140.6 |
| 84       | 1,104.9 |
| 85       | 1,070.4 |
| 86       | 1,037.3 |
| 87       | 1,005.3 |
| 88       | 974.4   |

| Temp. °C | Ohm   |
|----------|-------|
| 89       | 944.7 |
| 90       | 916.0 |
| 91       | 888.3 |
| 92       | 861.5 |
| 93       | 835.7 |
| 94       | 810.8 |
| 95       | 786.8 |
| 96       | 763.6 |
| 97       | 741.2 |
| 98       | 719.5 |
| 99       | 698.6 |
| 100      | 678.4 |
| 101      | 658.9 |
| 102      | 640.0 |
| 103      | 621.8 |
| 104      | 604.1 |
| 105      | 587.1 |
| 106      | 570.6 |
| 107      | 554.6 |
| 108      | 539.2 |
| 109      | 524.3 |
| 110      | 509.8 |
| 111      | 495.8 |
| 112      | 482.3 |
| 113      | 469.2 |
| 114      | 456.5 |
| 115      | 444.2 |
| 116      | 432.3 |
| 117      | 420.8 |
| 118      | 409.6 |
| 119      | 398.8 |
| 120      | 388.3 |
| 121      | 378.2 |
| 122      | 368.3 |
| 123      | 358.8 |
| 124      | 349.5 |
| 125      | 340.6 |