



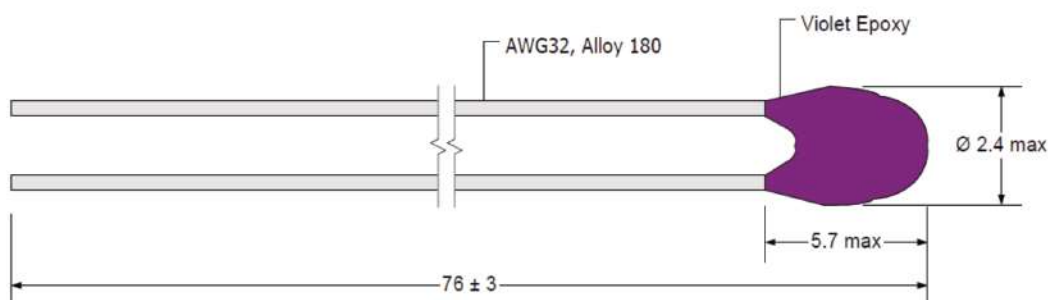
- **High Sensitivity**
- **Epoxy encapsulated**
- **Temperature range -40° C to 150° C**
- **RoHS compliant**

The ENTC-EB-100k4262-02 is specifically designed for sensing small changes in temperature for mid-range temperature applications.

Due to its high sensitivity and high resistance (100kOhm @25°C) it is ideal for tight tolerance instrumentation in non-condensing moisture environments.

| Specifications                        |                                          |
|---------------------------------------|------------------------------------------|
| Element:                              | NTC Thermistor                           |
| Wire material                         | 76 mm bare leads, 32 AWG solid Alloy 180 |
| Resistance at +25°C                   | 100000 $\Omega$                          |
| Resistance Tolerance from 0°C to 70°C | $\pm 0.2^\circ\text{C}$                  |
| Beta Value 25/85 constant             | 4262K $\pm 0.5\%$                        |
| Dissipation factor (in air)           | $\sim 2 \text{ mW}/^\circ\text{C}$       |
| Thermal time constant (in air)        | $\sim 15 \text{ sec}$                    |
| Operating temperature range           | -40° C to + 150° C                       |

## Dimensions in mm





## Resistance vs. temperature table for 100k4262-02

R(25) = 100000 Ohms      B(25/85) = 4262K ± 0,5%

| TEMP (°C) | RESIS (KΩ) |
|-----------|------------|
| -30       | 2067.000   |
| -29       | 1937.463   |
| -28       | 1816.833   |
| -27       | 1704.446   |
| -26       | 1599.689   |
| -25       | 1502.000   |
| -24       | 1410.917   |
| -23       | 1325.898   |
| -22       | 1246.503   |
| -21       | 1172.328   |
| -20       | 1103.000   |
| -19       | 1038.089   |
| -18       | 977.377    |
| -17       | 920.568    |
| -16       | 867.391    |
| -15       | 817.400    |
| -14       | 770.690    |
| -13       | 726.919    |
| -12       | 685.886    |
| -11       | 647.404    |
| -10       | 611.300    |
| -9        | 577.375    |
| -8        | 545.527    |
| -7        | 515.617    |
| -6        | 487.515    |
| -5        | 461.100    |
| -4        | 436.246    |
| -3        | 412.872    |
| -2        | 390.881    |
| -1        | 370.184    |
| 0         | 350.700    |
| 1         | 332.346    |
| 2         | 315.054    |
| 3         | 298.756    |
| 4         | 283.391    |
| 5         | 268.900    |
| 6         | 255.205    |
| 7         | 242.284    |
| 8         | 230.088    |
| 9         | 218.574    |

| TEMP (°C) | RESIS (KΩ) |
|-----------|------------|
| 10        | 207.700    |
| 11        | 197.445    |
| 12        | 187.750    |
| 13        | 178.582    |
| 14        | 169.908    |
| 15        | 161.700    |
| 16        | 153.909    |
| 17        | 146.537    |
| 18        | 139.560    |
| 19        | 132.955    |
| 20        | 126.700    |
| 21        | 120.779    |
| 22        | 115.165    |
| 23        | 109.841    |
| 24        | 104.792    |
| 25        | 100.000    |
| 26        | 95.452     |
| 27        | 91.133     |
| 28        | 87.031     |
| 29        | 83.134     |
| 30        | 79.430     |
| 31        | 75.913     |
| 32        | 72.569     |
| 33        | 69.390     |
| 34        | 66.366     |
| 35        | 63.490     |
| 36        | 60.763     |
| 37        | 58.150     |
| 38        | 55.677     |
| 39        | 53.303     |
| 40        | 51.060     |
| 41        | 48.917     |
| 42        | 46.874     |
| 43        | 44.927     |
| 44        | 43.071     |
| 45        | 41.300     |
| 46        | 39.611     |
| 47        | 37.999     |
| 48        | 36.461     |
| 49        | 34.992     |

| TEMP (°C) | RESIS (KΩ) |
|-----------|------------|
| 50        | 33.590     |
| 51        | 32.252     |
| 52        | 30.974     |
| 53        | 29.753     |
| 54        | 28.586     |
| 55        | 27.470     |
| 56        | 26.405     |
| 57        | 25.387     |
| 58        | 24.413     |
| 59        | 23.482     |
| 60        | 22.590     |
| 61        | 21.734     |
| 62        | 20.915     |
| 63        | 20.131     |
| 64        | 19.380     |
| 65        | 18.660     |
| 66        | 2011       |
| 67        | 1942       |
| 68        | 1876       |
| 69        | 1813       |
| 70        | 1752       |
| 71        | 1693       |
| 72        | 1637       |
| 73        | 1582       |
| 74        | 1530       |
| 75        | 1480       |
| 76        | 1432       |
| 77        | 1385       |
| 78        | 1341       |
| 79        | 1298       |
| 80        | 10.830     |
| 81        | 10.459     |
| 82        | 10.103     |
| 83        | 9.761      |
| 84        | 9.432      |
| 85        | 9.115      |
| 86        | 8.811      |
| 87        | 8.518      |
| 88        | 8.236      |
| 89        | 7.965      |



| TEMP (°C) | RESIS (KΩ) |
|-----------|------------|
| 90        | 7.704      |
| 91        | 7.453      |
| 92        | 7.211      |
| 93        | 6.978      |
| 94        | 6.754      |
| 95        | 6.538      |
| 96        | 6.330      |
| 97        | 6.129      |
| 98        | 5.936      |
| 99        | 5.750      |
| 100       | 5.570      |
| 101       | 5.397      |
| 102       | 5.230      |
| 103       | 5.069      |
| 104       | 4.914      |
| 105       | 4.764      |
| 106       | 4.619      |
| 107       | 4.480      |
| 108       | 4.345      |
| 109       | 4.215      |
| 110       | 4.089      |
| 111       | 3.968      |
| 112       | 3.850      |
| 113       | 3.737      |
| 114       | 3.628      |
| 115       | 3.522      |
| 116       | 3.420      |
| 117       | 3.322      |
| 118       | 3.226      |
| 119       | 3.134      |
| 120       | 3.045      |

| TEMP (°C) | RESIS (KΩ) |
|-----------|------------|
| 121       | 2.959      |
| 122       | 2.875      |
| 123       | 2.795      |
| 124       | 2.717      |
| 125       | 2.641      |
| 126       | 2.568      |
| 127       | 2.497      |
| 128       | 2.429      |
| 129       | 2.362      |
| 130       | 2.298      |
| 131       | 2.236      |
| 132       | 2.176      |
| 133       | 2.117      |
| 134       | 2.061      |
| 135       | 2.006      |
| 136       | 1.953      |
| 137       | 1.901      |
| 138       | 1.851      |
| 139       | 1.803      |
| 140       | 1.756      |
| 141       | 1.711      |
| 142       | 1.667      |
| 143       | 1.624      |
| 144       | 1.582      |
| 145       | 1.542      |
| 146       | 1.503      |
| 147       | 1.465      |
| 148       | 1.428      |
| 149       | 1.393      |
| 150       | 1.358      |

## Ordering information

Order code: ENTC-EB-100k4262-02