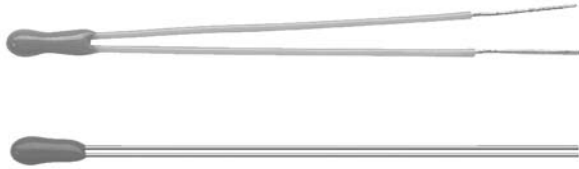


NTC Thermistors, Long Lead Sensors



FEATURES

- Accuracy of 0.5 °C between 0 °C and 50 °C
- Small diameter
- High stability over a long life
- Long and flexible leads for special mounting or assembly requirements

APPLICATIONS

- Temperature sensing and control

These thermistors have a negative temperature coefficient. The device consists of a chip with two insulated or non-insulated nickel leads.

PACKAGING

The thermistors are packed in cardboard boxes; the smallest packing quantity is 1000 units.

MARKING

The body is coloured with ochre lacquer and not marked.

MOUNTING

By soldering in any position.

| QUICK REFERENCE DATA | |
|---|-----------------------------|
| PARAMETER | VALUE |
| Resistance value at: 0 °C | see Resistance Values Table |
| 50 °C | see Resistance Values Table |
| B _{25/85} -value | 3977 K |
| ΔT ensured between 0 °C and 50 °C | ±0.5 °C |
| Temperature coefficient | see Resistance Values Table |
| Maximum dissipation | 100 mW |
| Minimum dielectric withstanding voltage (RMS) between leads and coating | 500 V |
| Operating temperature range | -40 to +125 °C |
| Climatic category | 40/125/56 |
| Mass | ≈0.2 g |

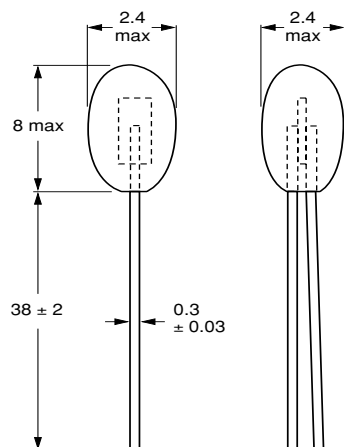
| ELECTRICAL DATA AND ORDERING INFORMATION | | |
|--|-------------------------------|--|
| R ₂₅ -VALUE (kΩ) | B _{25/85} -VALUE (K) | CATALOG NUMBER 2322 645 ⁽¹⁾ |
| 3 | 3977 | .0302 |
| 5 | 3977 | .0502 |
| 10 | 3977 | .0103 |

Note

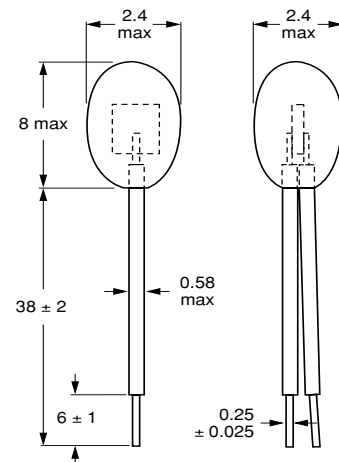
1. Replace dot in last 5 digits of catalog number by 1 for non-insulated or 2 for insulated leads.

DIMENSIONS in millimeters

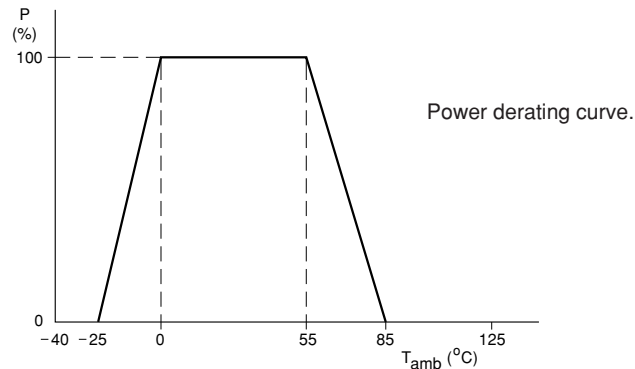
Component outline for 2322 645 10... series.



Component outline for 2322 645 20... series.



DERATING



RESISTANCE VALUES AT INTERMEDIATE TEMPERATURES

| T _{oper} (°C) | R _T /R ₂₅ | ΔT (K) | TC (%/K) | R ₂₅ (kΩ) | | |
|---------------------------|---------------------------------|-----------|-------------|----------------------------|--------|--------|
| | | | | 2322 645; see note 1 | | |
| | | | | .0302 | .0502 | .0103 |
| -40 | 33.21 | 0.68 | 6.57 | 99.63 | 166.1 | 332.1 |
| -35 | 23.99 | 0.66 | 6.36 | 71.97 | 120.0 | 239.9 |
| -30 | 17.52 | 0.64 | 6.15 | 52.56 | 87.60 | 175.2 |
| -25 | 12.93 | 0.62 | 5.95 | 38.79 | 64.65 | 129.3 |
| -20 | 9.636 | 0.59 | 5.76 | 28.91 | 48.18 | 96.36 |
| -15 | 7.250 | 0.57 | 5.58 | 21.75 | 36.25 | 72.50 |
| -10 | 5.505 | 0.55 | 5.40 | 16.51 | 27.52 | 55.05 |
| -5 | 4.216 | 0.52 | 5.24 | 12.65 | 21.08 | 42.16 |
| 0 | 3.255 | 0.50 | 5.08 | 9.766 | 16.28 | 32.56 |
| 5 | 2.534 | 0.50 | 4.92 | 7.602 | 12.67 | 25.34 |
| 10 | 1.987 | 0.50 | 4.78 | 5.962 | 9.936 | 19.87 |
| 15 | 1.570 | 0.50 | 4.64 | 4.710 | 7.849 | 15.70 |
| 20 | 1.249 | 0.50 | 4.50 | 3.746 | 6.244 | 12.49 |
| 25 | 1.000 | 0.50 | 4.37 | 3.000 | 5.000 | 10.00 |
| 30 | 0.8059 | 0.50 | 4.25 | 2.418 | 4.030 | 8.059 |
| 35 | 0.6535 | 0.50 | 4.13 | 1.960 | 3.267 | 6.535 |
| 40 | 0.5330 | 0.50 | 4.02 | 1.599 | 2.665 | 5.330 |
| 45 | 0.4372 | 0.50 | 3.91 | 1.312 | 2.186 | 4.372 |
| 50 | 0.3605 | 0.50 | 3.80 | 1.082 | 1.803 | 3.606 |
| 55 | 0.2989 | 0.55 | 3.70 | 0.8966 | 1.494 | 2.989 |
| 60 | 0.2490 | 0.61 | 3.60 | 0.7470 | 1.245 | 2.490 |
| 65 | 0.2084 | 0.66 | 3.51 | 0.6253 | 1.042 | 2.084 |
| 70 | 0.1753 | 0.72 | 3.42 | 0.5259 | 0.8765 | 1.753 |
| 75 | 0.1481 | 0.77 | 3.33 | 0.4443 | 0.7405 | 1.481 |
| 80 | 0.1256 | 0.83 | 3.25 | 0.3769 | 0.6282 | 1.256 |
| 85 | 0.1070 | 0.89 | 3.16 | 0.3211 | 0.5352 | 1.070 |
| 90 | 0.09154 | 0.95 | 3.09 | 0.2746 | 0.4577 | 0.9154 |
| 95 | 0.07860 | 1.02 | 3.01 | 0.2358 | 0.3930 | 0.7860 |
| 100 | 0.06773 | 1.08 | 2.94 | 0.2032 | 0.3387 | 0.6773 |
| 105 | 0.05858 | 1.14 | 2.87 | 0.1757 | 0.2929 | 0.5858 |
| 110 | 0.05083 | 1.21 | 2.80 | 0.1525 | 0.2542 | 0.5083 |
| 115 | 0.04426 | 1.27 | 2.73 | 0.1328 | 0.2213 | 0.4426 |
| 120 | 0.03866 | 1.34 | 2.67 | 0.1160 | 0.1933 | 0.3866 |
| 125 | 0.03387 | 1.41 | 2.61 | 0.1016 | 0.1694 | 0.3387 |

Note

1. Replace dot in last 5 digits of catalog number by 1 for non-insulated or 2 for insulated leads.