

44001RC Precision Epoxy NTC Thermistor



100 ohm Resistance @ 25°C
Interchangeable $\pm 0.2^\circ\text{C}$, 0°C to 50°C
Pressed Disk Ceramic Sensor
High sensitivity
Thermally conductive epoxy coating
0.095" (2.4 mm) Maximum Diameter
32 AWG, 3" (7.6 cm) long Silver plated copper leads
RoHS Compliant

DESCRIPTION

Epoxy Encapsulated Precision Interchangeable NTC Thermistor utilizing high stability pressed-disk ceramic sensor for general applications.

FEATURES

- 100 Ohm Resistance @ 25°C
- Interchangeability
- Good Long Term Stability
- High Sensitivity
- Thermally Conductive Epoxy Coating
- RoHS Compliance

APPLICATIONS

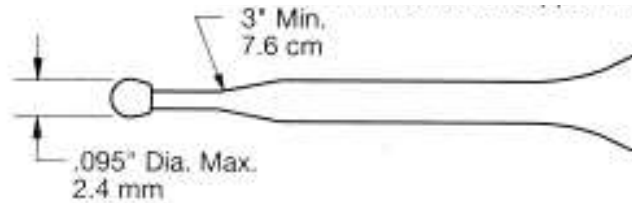
- Low Temperature Applications
- Tight Tolerance Instrumentation
- General Applications Requiring Stability
- Applications Requiring Sensing Small Changes in Temperature
- Non-condensing Moisture Environments
- Allows use in Applications World-wide

PERFORMANCE SPECS

| Parameter | Units | Value |
|---|---------|-----------|
| Resistance @ 25°C | Ohms | 100 |
| tolerance 0°C to 50°C | °C | ± 0.2 |
| Beta Value 25/85 | K | 2873 |
| Tolerance on Beta Value | % | 0.8 |
| Time response in air | Seconds | < 10 |
| Dissipation Constant in air | mW/°C | 1 |
| Insulation Resistance (Min. of 100Mohms for 1 Sec.) | Volts | 500 |

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MECHANICAL DETAILS



RESISTANCE V TEMPERATURE TABLE

| Temp °C | K- Ohms | Temp °C | K- Ohms | Temp °C | K- Ohms | Temp °C | K- Ohms |
|---------|---------|---------|---------|---------|---------|---------|---------|
| -80 | 14.470 | -35 | 1.073 | 10 | 0.1659 | 55 | 0.0415 |
| -79 | 13.510 | -34 | 1.023 | 11 | 0.1601 | 56 | 0.0404 |
| -78 | 12.620 | -33 | 0.975 | 12 | 0.1546 | 57 | 0.0393 |
| -77 | 11.800 | -32 | 0.930 | 13 | 0.1493 | 58 | 0.0383 |
| -76 | 11.040 | -31 | 0.887 | 14 | 0.1442 | 59 | 0.0373 |
| -75 | 10.330 | -30 | 0.846 | 15 | 0.1394 | 60 | 0.0364 |
| -74 | 9.672 | -29 | 0.808 | 16 | 0.1347 | 61 | 0.0354 |
| -73 | 9.061 | -28 | 0.771 | 17 | 0.1302 | 62 | 0.0345 |
| -72 | 8.494 | -27 | 0.736 | 18 | 0.1259 | 63 | 0.0337 |
| -71 | 7.966 | -26 | 0.704 | 19 | 0.1217 | 64 | 0.0328 |
| -70 | 7.475 | -25 | 0.673 | 20 | 0.1177 | 65 | 0.0320 |
| -69 | 7.018 | -24 | 0.643 | 21 | 0.1139 | 66 | 0.0312 |
| -68 | 6.592 | -23 | 0.615 | 22 | 0.1102 | 67 | 0.0304 |
| -67 | 6.195 | -22 | 0.588 | 23 | 0.1067 | 68 | 0.0297 |
| -66 | 5.825 | -21 | 0.563 | 24 | 0.1033 | 69 | 0.0290 |
| -65 | 5.479 | -20 | 0.539 | 25 | 0.1000 | 70 | 0.0283 |
| -64 | 5.157 | -19 | 0.516 | 26 | 0.0969 | 71 | 0.0276 |
| -63 | 4.856 | -18 | 0.494 | 27 | 0.0938 | 72 | 0.0269 |
| -62 | 4.575 | -17 | 0.474 | 28 | 0.0909 | 73 | 0.0263 |
| -61 | 4.312 | -16 | 0.454 | 29 | 0.0881 | 74 | 0.0256 |
| -60 | 4.066 | -15 | 0.435 | 30 | 0.0854 | 75 | 0.0250 |
| -59 | 3.835 | -14 | 0.417 | 31 | 0.0828 | 76 | 0.0245 |
| -58 | 3.620 | -13 | 0.400 | 32 | 0.0803 | 77 | 0.0239 |
| -57 | 3.418 | -12 | 0.384 | 33 | 0.0778 | 78 | 0.0233 |
| -56 | 3.229 | -11 | 0.369 | 34 | 0.0755 | 79 | 0.0228 |
| -55 | 3.051 | -10 | 0.354 | 35 | 0.0732 | 80 | 0.0223 |
| -54 | 2.885 | -9 | 0.340 | 36 | 0.0711 | 81 | 0.0218 |
| -53 | 2.729 | -8 | 0.327 | 37 | 0.0690 | 82 | 0.0213 |
| -52 | 2.582 | -7 | 0.314 | 38 | 0.0670 | 83 | 0.0208 |
| -51 | 2.445 | -6 | 0.302 | 39 | 0.0650 | 84 | 0.0203 |
| -50 | 2.315 | -5 | 0.290 | 40 | 0.0631 | 85 | 0.0199 |
| -49 | 2.194 | -4 | 0.279 | 41 | 0.0613 | 86 | 0.0194 |
| -48 | 2.079 | -3 | 0.268 | 42 | 0.0596 | 87 | 0.0190 |
| -47 | 1.972 | -2 | 0.258 | 43 | 0.0579 | 88 | 0.0186 |
| -46 | 1.870 | -1 | 0.249 | 44 | 0.0562 | 89 | 0.0182 |
| -45 | 1.775 | 0 | 0.239 | 45 | 0.0547 | 90 | 0.0178 |
| -44 | 1.685 | 1 | 0.230 | 46 | 0.0531 | 91 | 0.0174 |
| -43 | 1.600 | 2 | 0.222 | 47 | 0.0517 | 92 | 0.0170 |
| -42 | 1.521 | 3 | 0.214 | 48 | 0.0502 | 93 | 0.0166 |
| -41 | 1.445 | 4 | 0.206 | 49 | 0.0489 | 94 | 0.0163 |
| -40 | 1.374 | 5 | 0.199 | 50 | 0.0475 | 95 | 0.0159 |
| -39 | 1.307 | 6 | 0.192 | 51 | 0.0462 | 96 | 0.0156 |
| -38 | 1.244 | 7 | 0.185 | 52 | 0.0450 | 97 | 0.0153 |
| -37 | 1.184 | 8 | 0.178 | 53 | 0.0438 | 98 | 0.0150 |
| -36 | 1.127 | 9 | 0.172 | 54 | 0.0426 | 99 | 0.0146 |
| | | | | | | 100 | 0.0143 |

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ORDERING INFORMATION

| Part Number | Description | Ω @25°C | MOQ |
|-------------|-----------------------------------|----------------|--------|
| 701001 | 44001RC,THERMISTOR,ROHS COMPLIANT | 100 | \$2000 |
| 701101 | 44001RC-BP (100 PCS),THERM,ROHS | 100 | \$2000 |

* For quantities less than Minimum Order Quantity – contact distribution

NORTH AMERICA

Measurement Specialties, Inc.
2670 Indian Ripple Road
Dayton, OH 45440
Tel: 1-937-427-1231
Fax: 1-937-427-1640

Sales email:

temperature.info.dayton@meas-spec.com

EUROPE

Measurement Specialties, Inc
Ballybrit Business Park
Galway, Ireland
Tel: +353-91-753238
Fax: +353-91-770789

Sales email:

temperature.sales.emea@meas-spec.com

ASIA

Measurement Specialties (China) Ltd.
No. 26 Langshan Road
Shenzhen High-Tech Park (North)
Nanshan District, Shenzhen 518057
China

Tel: +86 (0) 755 33305088

Fax: +86 (0) 755 33305099

Sales email:

temperature.sales.asia@meas-spec.com

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