

44007RC Precision Epoxy NTC Thermistor



- 5000 ohm Resistance @ 25°C
- Interchangeable $\pm 0.2^\circ\text{C}$, 0°C to 70°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

- 5000 Ohm Resistance @ 25°C
- Interchangeability
- Good Long Term Stability
- High Sensitivity
- Thermally Conductive Epoxy Coating
- RoHS Compliance

APPLICATIONS

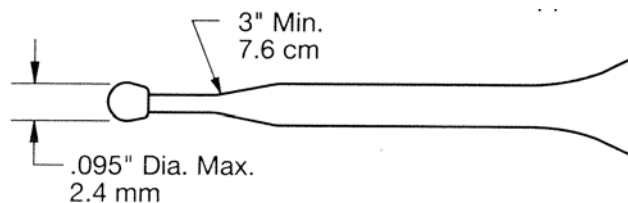
- Mid-range Temperature Applications
- Tight Tolerance Instrumentation
- General Applications Requiring Stability
- Applications Requiring Sensing Small Changes in Temperature
- Non-condensing Moisture Environments
- Allows use in Applications World-wide

PERFORMANCE SPECS

| Parameter | Units | Value |
|---|----------------------|-----------|
| Resistance @ 25°C | Ohms | 5000 |
| Tolerance 0°C to 70°C | $^\circ\text{C}$ | ± 0.2 |
| Beta Value 25/85 | K | 3976 |
| Tolerance on Beta Value | % | 0.8 |
| Time response in air | Seconds | < 10 |
| Dissipation Constant in air | mW/ $^\circ\text{C}$ | 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 | Temp °C | K-Ohms |
|---------|---------|---------|--------|---------|--------|---------|--------|---------|--------|
| -55 | 482.200 | -15 | 36.490 | 25 | 5.000 | 65 | 1.0410 | 105 | 0.2940 |
| -54 | 447.900 | -14 | 34.500 | 26 | 4.787 | 66 | 1.0060 | 106 | 0.2857 |
| -53 | 416.300 | -13 | 32.630 | 27 | 4.583 | 67 | 0.9711 | 107 | 0.2778 |
| -52 | 387.100 | -12 | 30.880 | 28 | 4.389 | 68 | 0.9380 | 108 | 0.2701 |
| -51 | 360.200 | -11 | 29.230 | 29 | 4.204 | 69 | 0.9063 | 109 | 0.2626 |
| -50 | 335.300 | -10 | 27.670 | 30 | 4.029 | 70 | 0.8757 | 110 | 0.2554 |
| -49 | 312.300 | -9 | 26.210 | 31 | 3.861 | 71 | 0.8464 | 111 | 0.2484 |
| -48 | 291.000 | -8 | 24.830 | 32 | 3.702 | 72 | 0.8183 | 112 | 0.2416 |
| -47 | 271.300 | -7 | 23.540 | 33 | 3.549 | 73 | 0.7912 | 113 | 0.2351 |
| -46 | 253.000 | -6 | 22.320 | 34 | 3.404 | 74 | 0.7651 | 114 | 0.2287 |
| -45 | 236.200 | -5 | 21.170 | 35 | 3.266 | 75 | 0.7400 | 115 | 0.2226 |
| -44 | 220.500 | -4 | 20.080 | 36 | 3.134 | 76 | 0.7159 | 116 | 0.2167 |
| -43 | 205.900 | -3 | 19.060 | 37 | 3.008 | 77 | 0.6927 | 117 | 0.2109 |
| -42 | 192.500 | -2 | 18.100 | 38 | 2.888 | 78 | 0.6703 | 118 | 0.2053 |
| -41 | 180.000 | -1 | 17.190 | 39 | 2.773 | 79 | 0.6488 | 119 | 0.1999 |
| -40 | 168.300 | 0 | 16.330 | 40 | 2.663 | 80 | 0.6281 | 120 | 0.1947 |
| -39 | 157.500 | 1 | 15.520 | 41 | 2.559 | 81 | 0.6082 | 121 | 0.1896 |
| -38 | 147.500 | 2 | 14.750 | 42 | 2.459 | 82 | 0.5889 | 122 | 0.1847 |
| -37 | 138.200 | 3 | 14.030 | 43 | 2.363 | 83 | 0.5704 | 123 | 0.1799 |
| -36 | 129.500 | 4 | 13.340 | 44 | 2.272 | 84 | 0.5526 | 124 | 0.1753 |
| -35 | 121.400 | 5 | 12.700 | 45 | 2.184 | 85 | 0.5354 | 125 | 0.1708 |
| -34 | 113.900 | 6 | 12.090 | 46 | 2.101 | 86 | 0.5188 | 126 | 0.1664 |
| -33 | 106.900 | 7 | 11.510 | 47 | 2.021 | 87 | 0.5028 | 127 | 0.1622 |
| -32 | 100.300 | 8 | 10.960 | 48 | 1.944 | 88 | 0.4874 | 128 | 0.1581 |
| -31 | 94.220 | 9 | 10.440 | 49 | 1.871 | 89 | 0.4726 | 129 | 0.1541 |
| -30 | 88.530 | 10 | 9.951 | 50 | 1.801 | 90 | 0.4582 | 130 | 0.1503 |
| -29 | 83.220 | 11 | 9.486 | 51 | 1.734 | 91 | 0.4444 | 131 | 0.1465 |
| -28 | 78.260 | 12 | 9.046 | 52 | 1.670 | 92 | 0.4310 | 132 | 0.1429 |
| -27 | 73.620 | 13 | 8.628 | 53 | 1.608 | 93 | 0.4182 | 133 | 0.1394 |
| -26 | 69.290 | 14 | 8.232 | 54 | 1.549 | 94 | 0.4057 | 134 | 0.1360 |
| -25 | 65.240 | 15 | 7.857 | 55 | 1.493 | 95 | 0.3937 | 135 | 0.1326 |
| -24 | 61.450 | 16 | 7.500 | 56 | 1.439 | 96 | 0.3821 | 136 | 0.1294 |
| -23 | 57.900 | 17 | 7.162 | 57 | 1.387 | 97 | 0.3709 | 137 | 0.1263 |
| -22 | 54.580 | 18 | 6.841 | 58 | 1.337 | 98 | 0.3601 | 138 | 0.1232 |
| -21 | 51.470 | 19 | 6.536 | 59 | 1.290 | 99 | 0.3497 | 139 | 0.1203 |
| -20 | 48.560 | 20 | 6.247 | 60 | 1.244 | 100 | 0.3396 | 140 | 0.1174 |
| -19 | 45.830 | 21 | 5.972 | 61 | 1.200 | 101 | 0.3298 | 141 | 0.1146 |
| -18 | 43.270 | 22 | 5.710 | 62 | 1.158 | 102 | 0.3204 | 142 | 0.1119 |
| -17 | 40.860 | 23 | 5.462 | 63 | 1.117 | 103 | 0.3113 | 143 | 0.1092 |
| -16 | 38.610 | 24 | 5.225 | 64 | 1.079 | 104 | 0.3025 | 144 | 0.1067 |
| | | | | | | | | 145 | 0.1042 |
| | | | | | | | | 146 | 0.1018 |
| | | | | | | | | 147 | 0.0994 |
| | | | | | | | | 148 | 0.0971 |
| | | | | | | | | 149 | 0.0949 |
| | | | | | | | | 150 | 0.0927 |

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ORDERING INFORMATION

| Part Number | Description | Ω @25°C | MOQ |
|-------------|--------------------------------------|----------------|-----|
| 701007 | 44007RC,THERMISTOR,ROHS COMPLIANT | 5000 | 300 |
| 701107 | 44007RC-BP (100 PCS),THERMISTOR,ROHS | 5000 | 300 |

* For quantities less than Minimum Order Quantity – contact distribution

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