

46005 Super Stable Glass NTC Thermistor



- Unmatched Long Term Stability
- Glass Hermetic Seal
- Use up to 250°C
- 3000 ohm Resistance @ 25°C
- Interchangeable $\pm 0.2^\circ\text{C}$, 0°C to 70°C,
- Pressed Disk Ceramic Sensor
- High sensitivity
- 32 AWG, 3" (7.6 cm) long Gold Plated Dumet leads
- RoHS Compliant

DESCRIPTION

Hermetically Sealed Glass Encapsulated Precision Interchangeable NTC Thermistor utilizing high stability pressed-disk ceramic sensor for high temperature and high stability applications.

FEATURES

- Glass Hermetic Seal
- 3000 Ohm Resistance @ 25°C
- Interchangeability
- Excellent High Temperature Performance
- Drift Certified Unmatched Long Term Stability
- High Sensitivity
- RoHS Compliance

APPLICATIONS

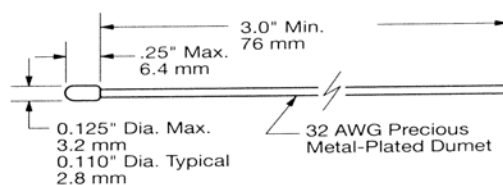
- High Moisture Applications
- Low to Mid Range Temperature Applications
- Tight Tolerance Instrumentation
- Use up to 250°C
- Applications Requiring Outstanding Stability
- Applications Requiring Sensing Small Changes in Temperature
- Non-condensing Moisture Environments
- Allows use in Applications World-wide

PERFORMANCE SPECS

| Parameter | Units | Value |
|---|---------|-----------|
| Resistance @ 25°C | Ohms | 3000 |
| Tolerance 0°C to 70°C | °C | ± 0.2 |
| Beta Value 25/85 | K | 3978 |
| Tolerance on Beta Value | % | 0.8 |
| Time response in stirred oil bath | Seconds | < 2.5 |
| Dissipation Constant in stirred oil bath | mW/°C | 10 |
| 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 | 289.200 | -15 | 21.890 | 25 | 3.000 | 65 | 0.6247 | 105 | 0.1764 |
| -54 | 268.600 | -14 | 20.700 | 26 | 2.872 | 66 | 0.6033 | 106 | 0.1714 |
| -53 | 249.700 | -13 | 19.580 | 27 | 2.750 | 67 | 0.5826 | 107 | 0.1667 |
| -52 | 232.200 | -12 | 18.520 | 28 | 2.633 | 68 | 0.5628 | 108 | 0.1620 |
| -51 | 216.000 | -11 | 17.530 | 29 | 2.523 | 69 | 0.5437 | 109 | 0.1576 |
| -50 | 201.100 | -10 | 16.600 | 30 | 2.417 | 70 | 0.5254 | 110 | 0.1532 |
| -49 | 187.300 | -9 | 15.720 | 31 | 2.317 | 71 | 0.5078 | 111 | 0.1490 |
| -48 | 174.500 | -8 | 14.900 | 32 | 2.221 | 72 | 0.4909 | 112 | 0.1450 |
| -47 | 162.700 | -7 | 14.120 | 33 | 2.130 | 73 | 0.4747 | 113 | 0.1411 |
| -46 | 151.700 | -6 | 13.390 | 34 | 2.042 | 74 | 0.4590 | 114 | 0.1372 |
| -45 | 141.600 | -5 | 12.700 | 35 | 1.959 | 75 | 0.4440 | 115 | 0.1336 |
| -44 | 132.200 | -4 | 12.050 | 36 | 1.880 | 76 | 0.4295 | 116 | 0.1300 |
| -43 | 123.500 | -3 | 11.440 | 37 | 1.805 | 77 | 0.4156 | 117 | 0.1265 |
| -42 | 115.400 | -2 | 10.860 | 38 | 1.733 | 78 | 0.4022 | 118 | 0.1232 |
| -41 | 107.900 | -1 | 10.310 | 39 | 1.664 | 79 | 0.3893 | 119 | 0.1199 |
| -40 | 101.000 | 0 | 9.796 | 40 | 1.598 | 80 | 0.3769 | 120 | 0.1168 |
| -39 | 94.480 | 1 | 9.310 | 41 | 1.535 | 81 | 0.3649 | 121 | 0.1138 |
| -38 | 88.460 | 2 | 8.851 | 42 | 1.475 | 82 | 0.3534 | 122 | 0.1108 |
| -37 | 82.870 | 3 | 8.417 | 43 | 1.418 | 83 | 0.3422 | 123 | 0.1079 |
| -36 | 77.660 | 4 | 8.006 | 44 | 1.363 | 84 | 0.3315 | 124 | 0.1052 |
| -35 | 72.810 | 5 | 7.618 | 45 | 1.310 | 85 | 0.3212 | 125 | 0.1025 |
| -34 | 68.300 | 6 | 7.252 | 46 | 1.260 | 86 | 0.3113 | 126 | 0.0999 |
| -33 | 64.090 | 7 | 6.905 | 47 | 1.212 | 87 | 0.3017 | 127 | 0.0973 |
| -32 | 60.170 | 8 | 6.576 | 48 | 1.167 | 88 | 0.2924 | 128 | 0.0949 |
| -31 | 56.510 | 9 | 6.265 | 49 | 1.123 | 89 | 0.2835 | 129 | 0.0925 |
| -30 | 53.100 | 10 | 5.971 | 50 | 1.081 | 90 | 0.2749 | 130 | 0.0902 |
| -29 | 49.910 | 11 | 5.692 | 51 | 1.040 | 91 | 0.2666 | 131 | 0.0879 |
| -28 | 46.940 | 12 | 5.427 | 52 | 1.002 | 92 | 0.2586 | 132 | 0.0857 |
| -27 | 44.160 | 13 | 5.177 | 53 | 0.9650 | 93 | 0.2509 | 133 | 0.0836 |
| -26 | 41.560 | 14 | 4.939 | 54 | 0.9296 | 94 | 0.2434 | 134 | 0.0816 |
| -25 | 39.130 | 15 | 4.714 | 55 | 0.8958 | 95 | 0.2362 | 135 | 0.0796 |
| -24 | 36.860 | 16 | 4.500 | 56 | 0.8633 | 96 | 0.2293 | 136 | 0.0776 |
| -23 | 34.730 | 17 | 4.297 | 57 | 0.8322 | 97 | 0.2226 | 137 | 0.0758 |
| -22 | 32.740 | 18 | 4.105 | 58 | 0.8023 | 98 | 0.2161 | 138 | 0.0739 |
| -21 | 30.870 | 19 | 3.922 | 59 | 0.7737 | 99 | 0.2098 | 139 | 0.0722 |
| -20 | 29.130 | 20 | 3.748 | 60 | 0.7463 | 100 | 0.2038 | 140 | 0.0704 |
| -19 | 27.490 | 21 | 3.583 | 61 | 0.7199 | 101 | 0.1979 | 141 | 0.0688 |
| -18 | 25.950 | 22 | 3.426 | 62 | 0.6947 | 102 | 0.1922 | 142 | 0.0671 |
| -17 | 24.510 | 23 | 3.277 | 63 | 0.6704 | 103 | 0.1868 | 143 | 0.0655 |
| -16 | 23.160 | 24 | 3.135 | 64 | 0.6471 | 104 | 0.1815 | 144 | 0.0640 |
| | | | | | | | | 145 | 0.0625 |
| | | | | | | | | 146 | 0.0611 |
| | | | | | | | | 147 | 0.0596 |
| | | | | | | | | 148 | 0.0583 |
| | | | | | | | | 149 | 0.0569 |
| | | | | | | | | 150 | 0.0556 |

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ORDERING INFORMATION

| Part Number | Description | Ω @25°C | MOQ |
|-------------|--------------------------|----------------|-----|
| 065437 | 46005 THERM,SUPER STABLE | 3,000 | 60 |

* For quantities less than Minimum Order Quantity – contact distribution

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