

YSI PRECISION THERMISTOR

YSI 44011

RESISTANCE 100,000 OHMS @25°C

Interchangeability: $\pm 0.2^\circ\text{C}$ (See Tolerance Curves).

Max. Operating Temp: 150°C (300°F).

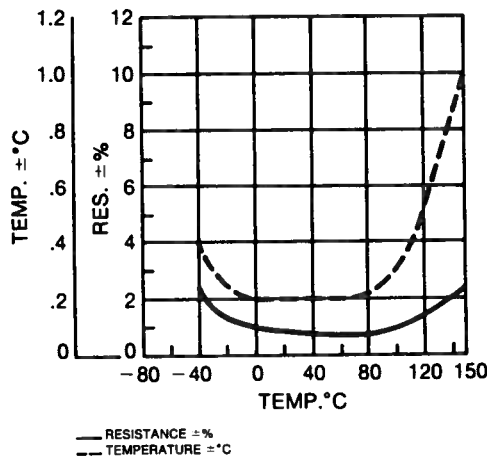
Time Constant, Max: 1 sec. in well stirred oil, 10 sec. in still air. Time constant is the time required for a thermistor to indicate 63% of a newly impressed temperature.

Dissipation Constant, Min: $8\text{mW}/^\circ\text{C}$ in well stirred oil, $1\text{mW}/^\circ\text{C}$ in still air. Dissipation constant is the power in milliwatts to raise a thermistor 1°C above surrounding temperature.

Color Code: Brown epoxy body, brown end.

Storage Temperature: -80° to $+120^\circ\text{C}$ (-112° to $+250^\circ\text{F}$).

Tolerance Curves: The following curves indicate conformance to standard resistance temperature values as a % of resistance, and as a maximum interchangeability error expressed as temperature.



WARNING

Use heat sinks when soldering or welding to thermistor leads.



Industrial Division
Yellow Springs Instrument Co.
Yellow Springs, Ohio 45387, U.S.A.
Phone 513-767-7241

ITEM 003250 P/N B44511-C Printed in U.S.A. MP

YSI PRECISION THERMISTOR



RESISTANCE VERSUS TEMPERATURE —40° to +150°C

| TEMP °C RES | TEMP °C RES | TEMP °C RES | TEMP °C RES | TEMP °C RES | TEMP °C RES | TEMP °C RES | TEMP °C RES | TEMP °C RES | TEMP °C RES |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| -40 335K | -10 565.5K | +20 125.2K | +50 34.78K | +80 81 | +110 4427 | +140 1914 | | | |
| -39 312.1K | 9 527.5K | 21 125.2K | 52 32.14K | 81 80 | 111 4297 | 141 1865 | | | |
| -37 279.8K | 7 481.0K | 23 114.5K | 53 30.92K | 83 83 | 112 4172 | 142 1817 | | | |
| -36 259.8K | 6 456.0K | 24 104.5K | 54 29.74K | 84 84 | 113 4051 | 143 1770 | | | |
| -35 244.0K | 5 432.4K | 25 100.0K | 55 28.61K | 85 85 | 114 3933 | 144 1725 | | | |
| -34 229.2K | 4 410.0K | 26 95.51K | 56 27.53K | 86 86 | 115 3820 | 145 1681 | | | |
| -33 215.4K | 3 389.2K | 27 91.34K | 57 26.50K | 87 87 | 116 3711 | 146 1639 | | | |
| -32 202.5K | 2 369.4K | 28 87.30K | 58 25.56K | 88 88 | 117 3605 | 147 1598 | | | |
| -31 190.4K | 1 350.7K | 29 83.60K | 59 24.68K | 89 89 | 118 3502 | 148 1558 | | | |
| -30 179.1K | 0 333.1K | +30 80.00K | 60 23.85K | 90 90 | 119 3403 | 149 1519 | | | |
| -29 168.5K | +1 316.4K | 31 76.59K | 61 23.07K | 91 91 | 120 3307 | +150 1481 | | | |
| -28 158.6K | 2 300.9K | 32 73.35K | 62 22.34K | 92 92 | 121 3214 | | | | |
| -27 149.4K | 3 286.6K | 33 70.26K | 63 21.64K | 93 93 | 122 3124 | | | | |
| -26 140.7K | 4 273.6K | 34 67.26K | 64 21.00K | 94 94 | 123 3038 | | | | |
| -25 132.6K | 5 261.6K | 35 64.44K | 65 20.37K | 95 95 | 124 2953 | | | | |
| -24 125.0K | 6 250.7K | 36 61.75K | 66 19.63K | 96 96 | 125 2872 | | | | |
| -23 117.8K | 7 240.8K | 37 59.19K | 67 18.93K | 97 97 | 126 2793 | | | | |
| -22 111.1K | 8 232.5K | 38 56.75K | 68 18.25K | 98 98 | 127 2717 | | | | |
| -21 104.9K | 9 224.9K | 39 54.42K | 69 17.57K | 99 99 | 128 2643 | | | | |
| -20 98.9K | +10 201.7K | +40 52.19K | 70 16.97K | +100 6005 | 129 2571 | | | | |
| -19 93.4K | 11 192.2K | 41 50.07K | 71 16.37K | 101 5621 | 130 2501 | | | | |
| -18 88.2K | 12 183.1K | 42 48.04K | 72 15.80K | 102 5453 | 131 2434 | | | | |
| -17 83.4K | 13 174.5K | 43 46.16K | 73 15.25K | 103 5302 | 132 2368 | | | | |
| -16 78.8K | 14 166.3K | 44 44.50K | 74 14.71K | 104 5167 | 133 2304 | | | | |
| -15 74.3K | 15 158.3K | 45 42.96K | 75 14.19K | 105 5047 | 134 2241 | | | | |
| -14 70.0K | 16 150.9K | 46 41.53K | 76 13.70K | 106 4933 | 135 2185 | | | | |
| -13 65.7K | 17 144.3K | 47 39.20K | 77 13.25K | 107 4844 | 136 2128 | | | | |
| -12 61.6K | 18 137.7K | 48 37.66K | 78 12.86K | 108 4700 | 137 2072 | | | | |
| -11 57.7K | 19 131.4K | 49 36.19K | 79 12.50K | 109 4561 | 138 2018 | | | | |
| -10 54.0K | | | | | 139 1965 | | | | |