

# Thermistor Inputs

## SES1 Thermistor Sensor Temperature vs. Volts DC vs. Resistance

Note for Field usage: expect reading variances up to  $\pm 5\%$  due to inherent accuracy tolerances of test instruments

| Temperature<br>°F | pin-to-pin<br>Volts DC | Resistance<br>$\Omega$ | Temperature<br>°F | pin-to-pin<br>Volts DC | Resistance<br>$\Omega$ |
|-------------------|------------------------|------------------------|-------------------|------------------------|------------------------|
| -40               | 3.41                   | 330073                 | 80                | 1.41                   | 9298                   |
| -35               | 3.38                   | 276915                 | 85                | 1.32                   | 8250                   |
| -30               | 3.34                   | 232613                 | 90                | 1.23                   | 7332                   |
| -25               | 3.30                   | 195716                 | 95                | 1.14                   | 6530                   |
| -20               | 3.25                   | 164994                 | 100               | 1.06                   | 5827                   |
| -15               | 3.19                   | 139404                 | 105               | 0.99                   | 5209                   |
| -10               | 3.13                   | 118050                 | 110               | 0.91                   | 4665                   |
| -5                | 3.07                   | 100260                 | 115               | 0.85                   | 4184                   |
| 0                 | 3.00                   | 85398                  | 120               | 0.78                   | 3759                   |
| 5                 | 2.92                   | 72950                  | 125               | 0.73                   | 3382                   |
| 10                | 2.84                   | 62495                  | 130               | 0.67                   | 3048                   |
| 15                | 2.75                   | 53685                  | 135               | 0.62                   | 2751                   |
| 20                | 2.66                   | 46240                  | 140               | 0.57                   | 2488                   |
| 25                | 2.56                   | 39929                  | 145               | 0.53                   | 2252                   |
| 30                | 2.46                   | 34565                  | 150               | 0.49                   | 2042                   |
| 35                | 2.36                   | 29998                  | 155               | 0.45                   | 1855                   |
| 40                | 2.25                   | 26099                  | 160               | 0.42                   | 1686                   |
| 45                | 2.14                   | 22763                  | 165               | 0.39                   | 1535                   |
| 50                | 2.03                   | 19900                  | 170               | 0.36                   | 1399                   |
| 55                | 1.93                   | 17435                  | 175               | 0.33                   | 1277                   |
| 60                | 1.82                   | 15309                  | 180               | 0.31                   | 1168                   |
| 65                | 1.71                   | 13472                  | 185               | 0.29                   | 1070                   |
| 70                | 1.61                   | 11881                  | 190               | 0.27                   | 980                    |
| 75                | 1.51                   | 10501                  | open circuit      | 3.625                  | infinite               |

- Type III – 10,000  $\Omega$  @ 77°F Negative Temperature Coefficient
- Thermistor Chart tab of spreadsheet on handout flash drive