# NTC THERMISTOR R-T CHARACTERISTICS

| TYPE | TH20-3S104F[T,B] |
|---|---|

| | | | |
|---|---|---|---|
| RESISTANCE(at25℃) | 100000 Ω | R-TOLERANCE(±) | 1 % |
| B-VALUE(25/50℃) | 3760 K | B-TOLERANCE(±) | 1 % |

| T(℃) | Rmin(Ω) | Rnom(Ω) | Rmax(Ω) |
|---|---|---|---|
| -40 | 2.610E+006 | 2.731E+006 | 2.857E+006 |
| -39 | 2.456E+006 | 2.567E+006 | 2.684E+006 |
| -38 | 2.311E+006 | 2.414E+006 | 2.522E+006 |
| -37 | 2.176E+006 | 2.272E+006 | 2.372E+006 |
| -36 | 2.049E+006 | 2.138E+006 | 2.231E+006 |
| -35 | 1.931E+006 | 2.013E+006 | 2.099E+006 |
| -34 | 1.820E+006 | 1.897E+006 | 1.976E+006 |
| -33 | 1.717E+006 | 1.788E+006 | 1.862E+006 |
| -32 | 1.620E+006 | 1.686E+006 | 1.754E+006 |
| -31 | 1.529E+006 | 1.590E+006 | 1.654E+006 |
| -30 | 1.444E+006 | 1.501E+006 | 1.559E+006 |
| -29 | 1.364E+006 | 1.417E+006 | 1.472E+006 |
| -28 | 1.290E+006 | 1.339E+006 | 1.390E+006 |
| -27 | 1.220E+006 | 1.265E+006 | 1.312E+006 |
| -26 | 1.154E+006 | 1.196E+006 | 1.240E+006 |
| -25 | 1.091E+006 | 1.131E+006 | 1.172E+006 |
| -24 | 1.033E+006 | 1.070E+006 | 1.107E+006 |
| -23 | 9.778E+005 | 1.012E+006 | 1.047E+006 |
| -22 | 9.260E+005 | 9.576E+005 | 9.903E+005 |
| -21 | 8.771E+005 | 9.065E+005 | 9.369E+005 |
| -20 | 8.310E+005 | 8.584E+005 | 8.867E+005 |
| -19 | 7.874E+005 | 8.129E+005 | 8.392E+005 |
| -18 | 7.464E+005 | 7.701E+005 | 7.945E+005 |
| -17 | 7.077E+005 | 7.298E+005 | 7.525E+005 |
| -16 | 6.713E+005 | 6.918E+005 | 7.129E+005 |
| -15 | 6.369E+005 | 6.560E+005 | 6.757E+005 |
| -14 | 6.045E+005 | 6.223E+005 | 6.406E+005 |
| -13 | 5.740E+005 | 5.906E+005 | 6.076E+005 |
| -12 | 5.452E+005 | 5.606E+005 | 5.764E+005 |
| -11 | 5.180E+005 | 5.323E+005 | 5.470E+005 |
| -10 | 4.923E+005 | 5.056E+005 | 5.193E+005 |
| -9 | 4.680E+005 | 4.805E+005 | 4.932E+005 |
| -8 | 4.451E+005 | 4.567E+005 | 4.686E+005 |
| -7 | 4.234E+005 | 4.342E+005 | 4.453E+005 |
| -6 | 4.029E+005 | 4.130E+005 | 4.233E+005 |
| -5 | 3.835E+005 | 3.929E+005 | 4.025E+005 |
| -4 | 3.652E+005 | 3.739E+005 | 3.828E+005 |
| -3 | 3.478E+005 | 3.559E+005 | 3.642E+005 |
| -2 | 3.314E+005 | 3.389E+005 | 3.466E+005 |
| -1 | 3.158E+005 | 3.228E+005 | 3.300E+005 |
| 0 | 3.010E+005 | 3.076E+005 | 3.143E+005 |

| T(℃) | Rmin(Ω) | Rnom(Ω) | Rmax(Ω) |
|---|---|---|---|
| 0 | 3.010E+005 | 3.076E+005 | 3.143E+005 |
| 1 | 2.870E+005 | 2.931E+005 | 2.993E+005 |
| 2 | 2.737E+005 | 2.794E+005 | 2.852E+005 |
| 3 | 2.611E+005 | 2.664E+005 | 2.718E+005 |
| 4 | 2.492E+005 | 2.541E+005 | 2.591E+005 |
| 5 | 2.379E+005 | 2.425E+005 | 2.471E+005 |
| 6 | 2.271E+005 | 2.314E+005 | 2.357E+005 |
| 7 | 2.169E+005 | 2.209E+005 | 2.249E+005 |
| 8 | 2.072E+005 | 2.109E+005 | 2.147E+005 |
| 9 | 1.980E+005 | 2.015E+005 | 2.049E+005 |
| 10 | 1.893E+005 | 1.925E+005 | 1.957E+005 |
| 11 | 1.810E+005 | 1.839E+005 | 1.869E+005 |
| 12 | 1.731E+005 | 1.758E+005 | 1.786E+005 |
| 13 | 1.656E+005 | 1.681E+005 | 1.707E+005 |
| 14 | 1.584E+005 | 1.608E+005 | 1.632E+005 |
| 15 | 1.516E+005 | 1.538E+005 | 1.560E+005 |
| 16 | 1.451E+005 | 1.472E+005 | 1.492E+005 |
| 17 | 1.389E+005 | 1.408E+005 | 1.427E+005 |
| 18 | 1.331E+005 | 1.348E+005 | 1.366E+005 |
| 19 | 1.275E+005 | 1.291E+005 | 1.307E+005 |
| 20 | 1.221E+005 | 1.236E+005 | 1.251E+005 |
| 21 | 1.171E+005 | 1.184E+005 | 1.198E+005 |
| 22 | 1.122E+005 | 1.135E+005 | 1.148E+005 |
| 23 | 1.076E+005 | 1.088E+005 | 1.100E+005 |
| 24 | 1.032E+005 | 1.043E+005 | 1.054E+005 |
| 25 | 9.900E+004 | 1.000E+005 | 1.010E+005 |
| 26 | 9.491E+004 | 9.591E+004 | 9.691E+004 |
| 27 | 9.102E+004 | 9.202E+004 | 9.301E+004 |
| 28 | 8.731E+004 | 8.830E+004 | 8.929E+004 |
| 29 | 8.376E+004 | 8.475E+004 | 8.574E+004 |
| 30 | 8.038E+004 | 8.136E+004 | 8.235E+004 |
| 31 | 7.716E+004 | 7.813E+004 | 7.911E+004 |
| 32 | 7.408E+004 | 7.505E+004 | 7.602E+004 |
| 33 | 7.114E+004 | 7.210E+004 | 7.306E+004 |
| 34 | 6.834E+004 | 6.928E+004 | 7.024E+004 |
| 35 | 6.566E+004 | 6.659E+004 | 6.754E+004 |
| 36 | 6.310E+004 | 6.402E+004 | 6.495E+004 |
| 37 | 6.065E+004 | 6.156E+004 | 6.248E+004 |
| 38 | 5.831E+004 | 5.921E+004 | 6.012E+004 |
| 39 | 5.607E+004 | 5.696E+004 | 5.786E+004 |
| 40 | 5.393E+004 | 5.481E+004 | 5.569E+004 |

# NTC THERMISTOR R-T CHARACTERISTICS

| TYPE | TH20-3S104F[T,B] |
|---|---|

| RESISTANCE(at25℃) | 100000 Ω | R-TOLERANCE(±) | 1 % |
|---|---|---|---|
| B-VALUE(25/50℃) | 3760 K | B-TOLERANCE(±) | 1 % |

| T(℃) | Rmin(Ω) | Rnom(Ω) | Rmax(Ω) |
|---|---|---|---|
| 40 | 5.393E+004 | 5.481E+004 | 5.569E+004 |
| 41 | 5.188E+004 | 5.275E+004 | 5.362E+004 |
| 42 | 4.992E+004 | 5.077E+004 | 5.163E+004 |
| 43 | 4.805E+004 | 4.888E+004 | 4.973E+004 |
| 44 | 4.625E+004 | 4.707E+004 | 4.790E+004 |
| 45 | 4.453E+004 | 4.534E+004 | 4.616E+004 |
| 46 | 4.288E+004 | 4.368E+004 | 4.448E+004 |
| 47 | 4.130E+004 | 4.208E+004 | 4.288E+004 |
| 48 | 3.979E+004 | 4.056E+004 | 4.134E+004 |
| 49 | 3.834E+004 | 3.910E+004 | 3.986E+004 |
| 50 | 3.696E+004 | 3.770E+004 | 3.845E+004 |
| 51 | 3.563E+004 | 3.635E+004 | 3.709E+004 |
| 52 | 3.435E+004 | 3.506E+004 | 3.578E+004 |
| 53 | 3.313E+004 | 3.382E+004 | 3.453E+004 |
| 54 | 3.195E+004 | 3.264E+004 | 3.333E+004 |
| 55 | 3.082E+004 | 3.150E+004 | 3.218E+004 |
| 56 | 2.974E+004 | 3.040E+004 | 3.107E+004 |
| 57 | 2.871E+004 | 2.935E+004 | 3.001E+004 |
| 58 | 2.771E+004 | 2.834E+004 | 2.899E+004 |
| 59 | 2.675E+004 | 2.737E+004 | 2.801E+004 |
| 60 | 2.583E+004 | 2.644E+004 | 2.706E+004 |
| 61 | 2.495E+004 | 2.555E+004 | 2.616E+004 |
| 62 | 2.410E+004 | 2.469E+004 | 2.528E+004 |
| 63 | 2.329E+004 | 2.386E+004 | 2.444E+004 |
| 64 | 2.250E+004 | 2.306E+004 | 2.364E+004 |
| 65 | 2.175E+004 | 2.230E+004 | 2.286E+004 |
| 66 | 2.103E+004 | 2.156E+004 | 2.211E+004 |
| 67 | 2.033E+004 | 2.086E+004 | 2.140E+004 |
| 68 | 1.966E+004 | 2.018E+004 | 2.070E+004 |
| 69 | 1.901E+004 | 1.952E+004 | 2.004E+004 |
| 70 | 1.839E+004 | 1.889E+004 | 1.940E+004 |
| 71 | 1.780E+004 | 1.828E+004 | 1.878E+004 |
| 72 | 1.722E+004 | 1.770E+004 | 1.819E+004 |
| 73 | 1.667E+004 | 1.714E+004 | 1.761E+004 |
| 74 | 1.614E+004 | 1.659E+004 | 1.706E+004 |
| 75 | 1.563E+004 | 1.607E+004 | 1.653E+004 |
| 76 | 1.513E+004 | 1.557E+004 | 1.602E+004 |
| 77 | 1.466E+004 | 1.508E+004 | 1.552E+004 |
| 78 | 1.420E+004 | 1.462E+004 | 1.505E+004 |
| 79 | 1.376E+004 | 1.417E+004 | 1.459E+004 |
| 80 | 1.333E+004 | 1.373E+004 | 1.414E+004 |

| T(℃) | Rmin(Ω) | Rnom(Ω) | Rmax(Ω) |
|---|---|---|---|
| 80 | 1.333E+004 | 1.373E+004 | 1.414E+004 |
| 81 | 1.292E+004 | 1.331E+004 | 1.372E+004 |
| 82 | 1.252E+004 | 1.291E+004 | 1.331E+004 |
| 83 | 1.214E+004 | 1.252E+004 | 1.291E+004 |
| 84 | 1.177E+004 | 1.214E+004 | 1.252E+004 |
| 85 | 1.142E+004 | 1.178E+004 | 1.215E+004 |
| 86 | 1.108E+004 | 1.143E+004 | 1.179E+004 |
| 87 | 1.074E+004 | 1.109E+004 | 1.145E+004 |
| 88 | 1.042E+004 | 1.076E+004 | 1.111E+004 |
| 89 | 1.012E+004 | 1.045E+004 | 1.079E+004 |
| 90 | 9.817E+003 | 1.014E+004 | 1.048E+004 |
| 91 | 9.527E+003 | 9.846E+003 | 1.017E+004 |
| 92 | 9.248E+003 | 9.560E+003 | 9.882E+003 |
| 93 | 8.978E+003 | 9.284E+003 | 9.599E+003 |
| 94 | 8.717E+003 | 9.017E+003 | 9.325E+003 |
| 95 | 8.465E+003 | 8.758E+003 | 9.060E+003 |
| 96 | 8.221E+003 | 8.508E+003 | 8.804E+003 |
| 97 | 7.986E+003 | 8.267E+003 | 8.557E+003 |
| 98 | 7.758E+003 | 8.033E+003 | 8.317E+003 |
| 99 | 7.538E+003 | 7.807E+003 | 8.085E+003 |
| 100 | 7.325E+003 | 7.588E+003 | 7.861E+003 |
| 101 | 7.118E+003 | 7.377E+003 | 7.644E+003 |
| 102 | 6.919E+003 | 7.172E+003 | 7.434E+003 |
| 103 | 6.726E+003 | 6.974E+003 | 7.230E+003 |
| 104 | 6.539E+003 | 6.782E+003 | 7.033E+003 |
| 105 | 6.358E+003 | 6.596E+003 | 6.842E+003 |
| 106 | 6.183E+003 | 6.416E+003 | 6.657E+003 |
| 107 | 6.014E+003 | 6.242E+003 | 6.478E+003 |
| 108 | 5.850E+003 | 6.073E+003 | 6.305E+003 |
| 109 | 5.691E+003 | 5.910E+003 | 6.137E+003 |
| 110 | 5.537E+003 | 5.751E+003 | 5.974E+003 |
| 111 | 5.387E+003 | 5.597E+003 | 5.815E+003 |
| 112 | 5.242E+003 | 5.448E+003 | 5.662E+003 |
| 113 | 5.102E+003 | 5.304E+003 | 5.513E+003 |
| 114 | 4.966E+003 | 5.164E+003 | 5.369E+003 |
| 115 | 4.834E+003 | 5.028E+003 | 5.229E+003 |
| 116 | 4.707E+003 | 4.897E+003 | 5.094E+003 |
| 117 | 4.583E+003 | 4.770E+003 | 4.963E+003 |
| 118 | 4.464E+003 | 4.646E+003 | 4.836E+003 |
| 119 | 4.348E+003 | 4.527E+003 | 4.712E+003 |
| 120 | 4.236E+003 | 4.411E+003 | 4.593E+003 |
| 121 | 4.127E+003 | 4.299E+003 | 4.477E+003 |
| 122 | 4.022E+003 | 4.190E+003 | 4.365E+003 |
| 123 | 3.919E+003 | 4.084E+003 | 4.256E+003 |
| 124 | 3.820E+003 | 3.982E+003 | 4.150E+003 |
| 125 | 3.724E+003 | 3.883E+003 | 4.048E+003 |