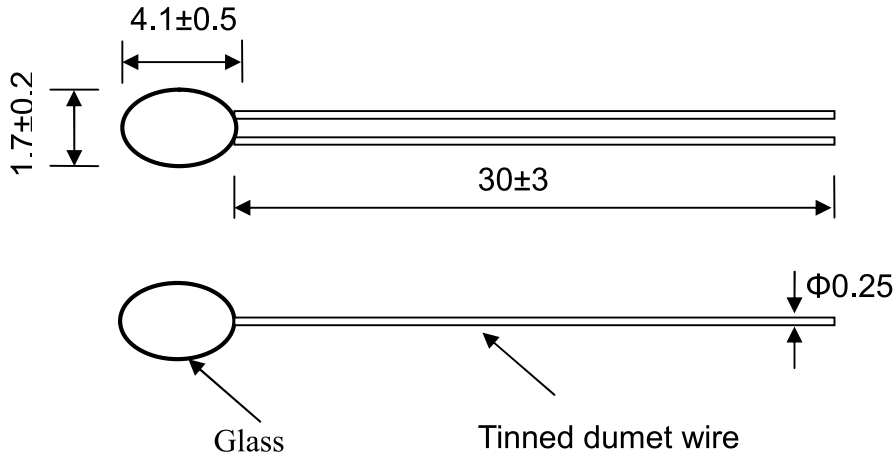
♦ **PART NO. : RN3446** ♦

## FEATURES

- Low cost
- High stability
- Glass sealed body for high reliability

## ♦ SHAPE & DIMENSIONS




Unit : mm

| No. | Part Name | Materials | Remark |
|---|---|---|---|
| 1 | NTC Thermistor | Metal Oxide | --- |
| 2 | Coating | Glass | --- |
| 3 | Lead Wire | Dumet Wire | Ø 0.25 mm |

## ♦ ELECTRICAL CHARACTERISTICS

| Style | Symbol | Condition | Specification |
|---|---|---|---|
| Resistance at Ta | R | Ta = 25 ℃ | 100 K Ω ± 3 % |
| B Constant | B | 25 ℃ / 50 ℃ | 3950 K ± 1 % |
| Thermal Time Constant | C | Ta = 25 ℃ | 12 sec |
| Thermal Dissipation Constant | T | Ta = 25 ℃ | 1.0 mW/℃ |
| Operating Temp. Range | -- | -- | - 40 ℃ ~ 250 ℃ |

## ♦ RELIABILITY TEST

| Performance | Test Method | △$R_{25}$ / $R_{25}$ |
|---|---|---|
| Humidity | 40℃ ± 2 , 95 % RH x 1000 hours | Max.± 3% |
| Thermal shock | (- 40℃x10min → 200℃x10min) x 100 times | Max.± 3% |
| High temperature storage | 250 ± 5 ℃ x 1000 hours | Max.± 3% |
| Low temperature storage | - 40 ± 5 ℃ x 1000 hours | Max.± 3% |
| Insulation | Insulation resistance over by DC 500 V | Over 50 MΩ |

## ♦ STORAGE CONDITIONS

1. Storage Temperature : - 10 ℃ ~ + 40 ℃.
2. Relative humidity : 30 ~ 75 % RH.
3. Thermistor must be kept away from sunshine and stored in a non-corrosive atmosphere.
4. Period of Storage : 1 year.

## ♦ ORDERING INFORMATION

| 104 | H | 3950 | FA | - | 25 | 30 |
|---|---|---|---|---|---|---|
| ① | ② | ③ | ④ | | ⑤ | ⑥ |

◆ Glass Sealed Type Thermistor.

①Resistance at 25 ℃ : 104 = 10 x $10^4$ = 100,000 (Ω).

②Tolerance of R : F:±1% ; G:±2% ; H:±3% ; J:±5% ; K:±10%.

③B value (K).

④Tolerance of B : F:±1% ; G:±2% ; H:±3% ; J:±5%. A = $B_{25/50}$

⑤Lead Diameter : 25 = Ø 0.25 mm.

⑥Length (Wire) : 30 = 30 mm.

## Resistance-Temperature Characteristics

**R25 : 100,000 Ω ± 3%**

**B25/50 : 3950 K ± 1%**

| Temperature (℃) | Resistance (Ω) | | | Temp. Coef. | Resist. Tol. (%) | | Temp. Tol. (℃) | |
|---|---|---|---|---|---|---|---|---|
| | MIN. | CENTER | MAX. | (%/℃) | MIN. | MAX. | MIN. | MAX. |
| **-40** | 3250617 | 3472163 | 3705470 | -6.93 | -6.38 | 6.72 | -0.97 | 0.92 |
| **-39** | 3036125 | 3240816 | 3456195 | -6.87 | -6.32 | 6.65 | -0.97 | 0.92 |
| **-38** | 2837468 | 3026697 | 3225640 | -6.81 | -6.25 | 6.57 | -0.97 | 0.92 |
| **-37** | 2653357 | 2828390 | 3012257 | -6.75 | -6.19 | 6.50 | -0.96 | 0.92 |
| **-36** | 2482616 | 2644609 | 2814637 | -6.69 | -6.13 | 6.43 | -0.96 | 0.92 |
| **-35** | 2324175 | 2474180 | 2631497 | -6.63 | -6.06 | 6.36 | -0.96 | 0.91 |
| **-34** | 2177054 | 2316034 | 2461669 | -6.58 | -6.00 | 6.29 | -0.96 | 0.91 |
| **-33** | 2040361 | 2169194 | 2304085 | -6.52 | -5.94 | 6.22 | -0.95 | 0.91 |
| **-32** | 1913281 | 2032769 | 2157774 | -6.47 | -5.88 | 6.15 | -0.95 | 0.91 |
| **-31** | 1795067 | 1905943 | 2021847 | -6.42 | -5.82 | 6.08 | -0.95 | 0.91 |
| **-30** | 1685042 | 1787980 | 1895499 | -6.33 | -5.76 | 6.01 | -0.95 | 0.91 |
| **-29** | 1583894 | 1679602 | 1779490 | -6.28 | -5.70 | 5.95 | -0.95 | 0.91 |
| **-28** | 1489483 | 1578506 | 1671344 | -6.23 | -5.64 | 5.88 | -0.94 | 0.90 |
| **-27** | 1401319 | 1484158 | 1570479 | -6.18 | -5.58 | 5.82 | -0.94 | 0.90 |
| **-26** | 1318951 | 1396066 | 1476360 | -6.13 | -5.52 | 5.75 | -0.94 | 0.90 |
| **-25** | 1241960 | 1313775 | 1388492 | -6.09 | -5.47 | 5.69 | -0.93 | 0.90 |
| **-24** | 1169963 | 1236869 | 1306424 | -6.04 | -5.41 | 5.62 | -0.93 | 0.90 |
| **-23** | 1102604 | 1164960 | 1229734 | -5.99 | -5.35 | 5.56 | -0.93 | 0.89 |
| **-22** | 1039557 | 1097694 | 1158039 | -5.94 | -5.30 | 5.50 | -0.92 | 0.89 |
| **-21** | 980519 | 1034743 | 1090983 | -5.90 | -5.24 | 5.44 | -0.92 | 0.89 |
| **-20** | 925211 | 975804 | 1028238 | -5.85 | -5.18 | 5.37 | -0.92 | 0.89 |
| **-19** | 873374 | 920596 | 969498 | -5.81 | -5.13 | 5.31 | -0.91 | 0.88 |
| **-18** | 824770 | 868862 | 914487 | -5.77 | -5.07 | 5.25 | -0.91 | 0.88 |
| **-17** | 779177 | 820360 | 862942 | -5.72 | -5.02 | 5.19 | -0.91 | 0.88 |
| **-16** | 736392 | 774871 | 814627 | -5.68 | -4.97 | 5.13 | -0.90 | 0.87 |
| **-15** | 696224 | 732189 | 769319 | -5.64 | -4.91 | 5.07 | -0.90 | 0.87 |
| **-14** | 658497 | 692124 | 726813 | -5.60 | -4.86 | 5.01 | -0.90 | 0.87 |
| **-13** | 623049 | 654500 | 686920 | -5.56 | -4.81 | 4.95 | -0.89 | 0.86 |
| **-12** | 589729 | 619154 | 649462 | -5.52 | -4.75 | 4.90 | -0.89 | 0.86 |
| **-11** | 558396 | 585935 | 614278 | -5.48 | -4.70 | 4.84 | -0.88 | 0.86 |
| **-10** | 528921 | 554702 | 581216 | -5.44 | -4.65 | 4.78 | -0.88 | 0.85 |
| **-9** | 501182 | 525325 | 550135 | -5.40 | -4.60 | 4.72 | -0.87 | 0.85 |
| **-8** | 475066 | 497682 | 520905 | -5.36 | -4.54 | 4.67 | -0.87 | 0.85 |
| **-7** | 450470 | 471662 | 493406 | -5.32 | -4.49 | 4.61 | -0.87 | 0.84 |
| **-6** | 427297 | 447160 | 467525 | -5.29 | -4.44 | 4.55 | -0.86 | 0.84 |
| **-5** | 405455 | 424078 | 443157 | -5.25 | -4.39 | 4.50 | -0.86 | 0.84 |
| **-4** | 384861 | 402326 | 420205 | -5.22 | -4.34 | 4.44 | -0.85 | 0.83 |
| **-3** | 365436 | 381820 | 398579 | -5.18 | -4.29 | 4.39 | -0.85 | 0.83 |
| **-2** | 347109 | 362482 | 378196 | -5.14 | -4.24 | 4.34 | -0.84 | 0.82 |
| **-1** | 329809 | 344238 | 358975 | -5.11 | -4.19 | 4.28 | -0.84 | 0.82 |
| **0** | 313473 | 327020 | 340845 | -5.08 | -4.14 | 4.23 | -0.83 | 0.82 |
| **1** | 298042 | 310764 | 323737 | -5.04 | -4.09 | 4.17 | -0.83 | 0.81 |
| **2** | 283462 | 295412 | 307588 | -5.01 | -4.05 | 4.12 | -0.82 | 0.81 |
| **3** | 269681 | 280908 | 292339 | -4.97 | -4.00 | 4.07 | -0.82 | 0.80 |
| **4** | 256650 | 267201 | 277935 | -4.94 | -3.95 | 4.02 | -0.81 | 0.80 |
| **5** | 244325 | 254243 | 264325 | -4.91 | -3.90 | 3.97 | -0.81 | 0.79 |
| **6** | 232663 | 241988 | 251460 | -4.88 | -3.85 | 3.91 | -0.80 | 0.79 |
| **7** | 221625 | 230394 | 239295 | -4.85 | -3.81 | 3.86 | -0.80 | 0.79 |
| **8** | 211173 | 219422 | 227788 | -4.82 | -3.76 | 3.81 | -0.79 | 0.78 |
| **9** | 201275 | 209036 | 216900 | -4.78 | -3.71 | 3.76 | -0.79 | 0.78 |
| **10** | 191898 | 199201 | 206596 | -4.75 | -3.67 | 3.71 | -0.78 | 0.77 |
| **11** | 183010 | 189884 | 196839 | -4.72 | -3.62 | 3.66 | -0.78 | 0.77 |

R25 : 100,000 Ω ± 3%
B25/50 : 3950 K ± 1%

| Temperature (℃) | Resistance (Ω) | | | Temp. Coef. | Resist. Tol. (%) | | Temp. Tol. (℃) | |
|---|---|---|---|---|---|---|---|---|
| | MIN. | CENTER | MAX. | (%/℃) | MIN. | MAX. | MIN. | MAX. |
| 12 | 174585 | 181056 | 187598 | -4.69 | -3.57 | 3.61 | -0.77 | 0.76 |
| 13 | 166595 | 172688 | 178843 | -4.66 | -3.53 | 3.56 | -0.76 | 0.76 |
| 14 | 159015 | 164754 | 170546 | -4.64 | -3.48 | 3.52 | -0.76 | 0.75 |
| 15 | 151824 | 157229 | 162680 | -4.61 | -3.44 | 3.47 | -0.75 | 0.75 |
| 16 | 144997 | 150090 | 155222 | -4.58 | -3.39 | 3.42 | -0.75 | 0.74 |
| 17 | 138515 | 143314 | 148146 | -4.55 | -3.35 | 3.37 | -0.74 | 0.74 |
| 18 | 132360 | 136883 | 141433 | -4.52 | -3.30 | 3.32 | -0.73 | 0.73 |
| 19 | 126512 | 130775 | 135060 | -4.50 | -3.26 | 3.28 | -0.73 | 0.73 |
| 20 | 120954 | 124973 | 129009 | -4.47 | -3.22 | 3.23 | -0.72 | 0.72 |
| 21 | 115671 | 119461 | 123264 | -4.44 | -3.17 | 3.18 | -0.72 | 0.71 |
| 22 | 110648 | 114222 | 117805 | -4.41 | -3.13 | 3.14 | -0.71 | 0.71 |
| 23 | 105871 | 109242 | 112619 | -4.39 | -3.09 | 3.09 | -0.70 | 0.70 |
| 24 | 101325 | 104505 | 107688 | -4.36 | -3.04 | 3.05 | -0.70 | 0.70 |
| 25 | 97000 | 100000 | 103000 | -4.34 | -3.00 | 3.00 | -0.69 | 0.69 |
| 26 | 92801 | 95713 | 98628 | -4.31 | -3.04 | 3.05 | -0.71 | 0.71 |
| 27 | 88806 | 91633 | 94464 | -4.29 | -3.08 | 3.09 | -0.72 | 0.72 |
| 28 | 85005 | 87749 | 90500 | -4.26 | -3.13 | 3.13 | -0.74 | 0.73 |
| 29 | 81388 | 84051 | 86723 | -4.24 | -3.17 | 3.18 | -0.75 | 0.75 |
| 30 | 77942 | 80527 | 83123 | -4.21 | -3.21 | 3.22 | -0.77 | 0.76 |
| 31 | 74662 | 77171 | 79692 | -4.19 | -3.25 | 3.27 | -0.78 | 0.78 |
| 32 | 71537 | 73972 | 76421 | -4.16 | -3.29 | 3.31 | -0.80 | 0.79 |
| 33 | 68558 | 70922 | 73301 | -4.14 | -3.33 | 3.35 | -0.81 | 0.81 |
| 34 | 65720 | 68014 | 70325 | -4.12 | -3.37 | 3.40 | -0.83 | 0.82 |
| 35 | 63014 | 65241 | 67486 | -4.09 | -3.41 | 3.44 | -0.84 | 0.83 |
| 36 | 60433 | 62595 | 64776 | -4.07 | -3.45 | 3.48 | -0.86 | 0.85 |
| 37 | 57973 | 60071 | 62189 | -4.05 | -3.49 | 3.53 | -0.87 | 0.86 |
| 38 | 55624 | 57661 | 59719 | -4.02 | -3.53 | 3.57 | -0.89 | 0.88 |
| 39 | 53383 | 55360 | 57359 | -4.00 | -3.57 | 3.61 | -0.90 | 0.89 |
| 40 | 51244 | 53164 | 55106 | -3.98 | -3.61 | 3.65 | -0.92 | 0.91 |
| 41 | 49201 | 51065 | 52952 | -3.96 | -3.65 | 3.69 | -0.93 | 0.92 |
| 42 | 47251 | 49060 | 50893 | -3.94 | -3.69 | 3.74 | -0.95 | 0.94 |
| 43 | 45387 | 47144 | 48925 | -3.92 | -3.73 | 3.78 | -0.96 | 0.95 |
| 44 | 43607 | 45313 | 47043 | -3.89 | -3.76 | 3.82 | -0.98 | 0.97 |
| 45 | 41905 | 43562 | 45243 | -3.87 | -3.80 | 3.86 | -1.00 | 0.98 |
| 46 | 40279 | 41888 | 43522 | -3.85 | -3.84 | 3.90 | -1.01 | 1.00 |
| 47 | 38724 | 40286 | 41874 | -3.83 | -3.88 | 3.94 | -1.03 | 1.01 |
| 48 | 37237 | 38754 | 40297 | -3.81 | -3.92 | 3.98 | -1.04 | 1.03 |
| 49 | 35814 | 37288 | 38787 | -3.79 | -3.95 | 4.02 | -1.06 | 1.04 |
| 50 | 34453 | 35884 | 37341 | -3.77 | -3.99 | 4.06 | -1.08 | 1.06 |
| 51 | 33150 | 34541 | 35957 | -3.75 | -4.03 | 4.10 | -1.09 | 1.07 |
| 52 | 31903 | 33254 | 34631 | -3.73 | -4.06 | 4.14 | -1.11 | 1.09 |
| 53 | 30709 | 32021 | 33359 | -3.71 | -4.10 | 4.18 | -1.13 | 1.10 |
| 54 | 29566 | 30841 | 32142 | -3.69 | -4.13 | 4.22 | -1.14 | 1.12 |
| 55 | 28471 | 29710 | 30975 | -3.67 | -4.17 | 4.26 | -1.16 | 1.14 |
| 56 | 27421 | 28625 | 29855 | -3.65 | -4.21 | 4.30 | -1.18 | 1.15 |
| 57 | 26416 | 27586 | 28782 | -3.64 | -4.24 | 4.34 | -1.19 | 1.17 |
| 58 | 25453 | 26590 | 27753 | -3.62 | -4.28 | 4.37 | -1.21 | 1.18 |
| 59 | 24529 | 25634 | 26765 | -3.60 | -4.31 | 4.41 | -1.23 | 1.20 |
| 60 | 23643 | 24717 | 25817 | -3.58 | -4.35 | 4.45 | -1.24 | 1.21 |
| 61 | 22794 | 23838 | 24908 | -3.56 | -4.38 | 4.49 | -1.26 | 1.23 |
| 62 | 21979 | 22994 | 24035 | -3.54 | -4.42 | 4.53 | -1.28 | 1.25 |
| 63 | 21197 | 22184 | 23196 | -3.53 | -4.45 | 4.56 | -1.29 | 1.26 |

R25 : 100,000 Ω ± 3%
B25/50 : 3950 K ± 1%

| Temperature (℃) | Resistance (Ω) | | | Temp. Coef. | Resist. Tol. (%) | | Temp. Tol. (℃) | |
|---|---|---|---|---|---|---|---|---|
| | MIN. | CENTER | MAX. | (%/℃) | MIN. | MAX. | MIN. | MAX. |
| **64** | 20446 | 21406 | 22391 | -3.51 | -4.48 | 4.60 | -1.31 | 1.28 |
| **65** | 19726 | 20659 | 21617 | -3.49 | -4.52 | 4.64 | -1.33 | 1.29 |
| **66** | 19034 | 19942 | 20874 | -3.47 | -4.55 | 4.67 | -1.35 | 1.31 |
| **67** | 18371 | 19254 | 20161 | -3.46 | -4.58 | 4.71 | -1.36 | 1.33 |
| **68** | 17733 | 18592 | 19475 | -3.44 | -4.62 | 4.75 | -1.38 | 1.34 |
| **69** | 17121 | 17956 | 18815 | -3.42 | -4.65 | 4.78 | -1.40 | 1.36 |
| **70** | 16532 | 17345 | 18181 | -3.40 | -4.68 | 4.82 | -1.42 | 1.38 |
| **71** | 15967 | 16758 | 17572 | -3.39 | -4.72 | 4.86 | -1.43 | 1.39 |
| **72** | 15424 | 16193 | 16985 | -3.37 | -4.75 | 4.89 | -1.45 | 1.41 |
| **73** | 14902 | 15650 | 16421 | -3.35 | -4.78 | 4.93 | -1.47 | 1.43 |
| **74** | 14400 | 15128 | 15879 | -3.34 | -4.81 | 4.96 | -1.49 | 1.44 |
| **75** | 13916 | 14625 | 15356 | -3.32 | -4.85 | 5.00 | -1.50 | 1.46 |
| **76** | 13452 | 14142 | 14854 | -3.31 | -4.88 | 5.03 | -1.52 | 1.48 |
| **77** | 13004 | 13676 | 14369 | -3.29 | -4.91 | 5.07 | -1.54 | 1.49 |
| **78** | 12575 | 13229 | 13904 | -3.27 | -4.94 | 5.10 | -1.56 | 1.51 |
| **79** | 12161 | 12798 | 13456 | -3.26 | -4.97 | 5.14 | -1.58 | 1.53 |
| **80** | 11763 | 12383 | 13024 | -3.24 | -5.01 | 5.17 | -1.60 | 1.54 |
| **81** | 11379 | 11983 | 12607 | -3.23 | -5.04 | 5.21 | -1.61 | 1.56 |
| **82** | 11010 | 11598 | 12206 | -3.21 | -5.07 | 5.24 | -1.63 | 1.58 |
| **83** | 10655 | 11227 | 11819 | -3.20 | -5.10 | 5.28 | -1.65 | 1.59 |
| **84** | 10312 | 10870 | 11447 | -3.18 | -5.13 | 5.31 | -1.67 | 1.61 |
| **85** | 9982 | 10525 | 11088 | -3.17 | -5.16 | 5.35 | -1.69 | 1.63 |
| **86** | 9665 | 10194 | 10742 | -3.15 | -5.19 | 5.38 | -1.71 | 1.65 |
| **87** | 9359 | 9874 | 10408 | -3.14 | -5.22 | 5.41 | -1.72 | 1.66 |
| **88** | 9063 | 9565 | 10086 | -3.12 | -5.25 | 5.45 | -1.74 | 1.68 |
| **89** | 8779 | 9268 | 9776 | -3.11 | -5.28 | 5.48 | -1.76 | 1.70 |
| **90** | 8504 | 8981 | 9476 | -3.09 | -5.31 | 5.51 | -1.78 | 1.72 |
| **91** | 8239 | 8704 | 9187 | -3.08 | -5.34 | 5.55 | -1.80 | 1.73 |
| **92** | 7984 | 8437 | 8908 | -3.07 | -5.37 | 5.58 | -1.82 | 1.75 |
| **93** | 7738 | 8180 | 8639 | -3.05 | -5.40 | 5.61 | -1.84 | 1.77 |
| **94** | 7501 | 7931 | 8379 | -3.04 | -5.43 | 5.64 | -1.86 | 1.79 |
| **95** | 7271 | 7691 | 8128 | -3.02 | -5.46 | 5.68 | -1.88 | 1.80 |
| **96** | 7051 | 7460 | 7886 | -3.01 | -5.49 | 5.71 | -1.90 | 1.82 |
| **97** | 6837 | 7236 | 7651 | -3.00 | -5.51 | 5.74 | -1.92 | 1.84 |
| **98** | 6631 | 7020 | 7425 | -2.98 | -5.54 | 5.77 | -1.93 | 1.86 |
| **99** | 6432 | 6812 | 7207 | -2.97 | -5.57 | 5.80 | -1.95 | 1.88 |
| **100** | 6240 | 6610 | 6996 | -2.96 | -5.60 | 5.84 | -1.97 | 1.89 |
| **101** | 6055 | 6416 | 6792 | -2.94 | -5.63 | 5.87 | -1.99 | 1.91 |
| **102** | 5875 | 6227 | 6594 | -2.93 | -5.66 | 5.90 | -2.01 | 1.93 |
| **103** | 5702 | 6046 | 6405 | -2.92 | -5.68 | 5.93 | -2.03 | 1.95 |
| **104** | 5535 | 5870 | 6220 | -2.90 | -5.71 | 5.96 | -2.05 | 1.97 |
| **105** | 5373 | 5700 | 6042 | -2.89 | -5.74 | 5.99 | -2.07 | 1.98 |
| **106** | 5217 | 5536 | 5870 | -2.88 | -5.77 | 6.02 | -2.09 | 2.00 |
| **107** | 5066 | 5378 | 5704 | -2.87 | -5.79 | 6.05 | -2.11 | 2.02 |
| **108** | 4920 | 5224 | 5542 | -2.85 | -5.82 | 6.09 | -2.13 | 2.04 |
| **109** | 4779 | 5076 | 5386 | -2.84 | -5.85 | 6.12 | -2.15 | 2.06 |
| **110** | 4642 | 4932 | 5235 | -2.83 | -5.88 | 6.15 | -2.17 | 2.08 |
| **111** | 4510 | 4793 | 5089 | -2.82 | -5.90 | 6.18 | -2.19 | 2.10 |
| **112** | 4383 | 4659 | 4948 | -2.80 | -5.93 | 6.21 | -2.21 | 2.11 |
| **113** | 4259 | 4529 | 4811 | -2.79 | -5.96 | 6.24 | -2.23 | 2.13 |
| **114** | 4140 | 4403 | 4679 | -2.78 | -5.98 | 6.27 | -2.25 | 2.15 |
| **115** | 4024 | 4281 | 4551 | -2.77 | -6.01 | 6.30 | -2.27 | 2.17 |

R25 : 100,000 Ω ± 3%
B25/50 : 3950 K ± 1%

| Temperature (℃) | Resistance (Ω) | | | Temp. Coef. | Resist. Tol. (%) | | Temp. Tol. (℃) | |
|---|---|---|---|---|---|---|---|---|
| | MIN. | CENTER | MAX. | (%/℃) | MIN. | MAX. | MIN. | MAX. |
| **116** | 3912 | 4163 | 4426 | -2.76 | -6.04 | 6.33 | -2.29 | 2.19 |
| **117** | 3803 | 4048 | 4305 | -2.75 | -6.06 | 6.36 | -2.32 | 2.21 |
| **118** | 3698 | 3938 | 4189 | -2.73 | -6.09 | 6.39 | -2.34 | 2.23 |
| **119** | 3597 | 3831 | 4077 | -2.72 | -6.11 | 6.42 | -2.36 | 2.25 |
| **120** | 3498 | 3727 | 3967 | -2.71 | -6.14 | 6.44 | -2.38 | 2.26 |
| **121** | 3402 | 3626 | 3861 | -2.70 | -6.16 | 6.47 | -2.40 | 2.28 |
| **122** | 3311 | 3529 | 3758 | -2.69 | -6.19 | 6.50 | -2.42 | 2.30 |
| **123** | 3221 | 3435 | 3659 | -2.68 | -6.22 | 6.53 | -2.44 | 2.32 |
| **124** | 3134 | 3343 | 3562 | -2.67 | -6.24 | 6.56 | -2.46 | 2.34 |
| **125** | 3050 | 3254 | 3468 | -2.65 | -6.27 | 6.59 | -2.48 | 2.36 |
| **126** | 2969 | 3168 | 3378 | -2.64 | -6.29 | 6.62 | -2.50 | 2.38 |
| **127** | 2890 | 3085 | 3290 | -2.63 | -6.32 | 6.65 | -2.53 | 2.40 |
| **128** | 2814 | 3004 | 3204 | -2.62 | -6.34 | 6.67 | -2.55 | 2.42 |
| **129** | 2740 | 2926 | 3122 | -2.61 | -6.37 | 6.70 | -2.57 | 2.44 |
| **130** | 2668 | 2850 | 3042 | -2.60 | -6.39 | 6.73 | -2.59 | 2.46 |
| **131** | 2598 | 2776 | 2964 | -2.59 | -6.42 | 6.76 | -2.61 | 2.48 |
| **132** | 2531 | 2705 | 2889 | -2.58 | -6.44 | 6.79 | -2.63 | 2.50 |
| **133** | 2465 | 2635 | 2815 | -2.57 | -6.46 | 6.81 | -2.65 | 2.52 |
| **134** | 2401 | 2568 | 2744 | -2.56 | -6.49 | 6.84 | -2.68 | 2.54 |
| **135** | 2340 | 2503 | 2675 | -2.55 | -6.51 | 6.87 | -2.70 | 2.56 |
| **136** | 2280 | 2439 | 2607 | -2.54 | -6.54 | 6.90 | -2.72 | 2.58 |
| **137** | 2222 | 2378 | 2543 | -2.53 | -6.56 | 6.92 | -2.74 | 2.60 |
| **138** | 2165 | 2318 | 2479 | -2.52 | -6.58 | 6.95 | -2.76 | 2.62 |
| **139** | 2111 | 2260 | 2418 | -2.51 | -6.61 | 6.98 | -2.79 | 2.64 |
| **140** | 2057 | 2203 | 2357 | -2.50 | -6.63 | 7.01 | -2.81 | 2.66 |
| **141** | 2006 | 2149 | 2300 | -2.49 | -6.65 | 7.03 | -2.83 | 2.68 |
| **142** | 1956 | 2096 | 2244 | -2.48 | -6.68 | 7.06 | -2.85 | 2.70 |
| **143** | 1907 | 2044 | 2189 | -2.47 | -6.70 | 7.09 | -2.87 | 2.72 |
| **144** | 1860 | 1994 | 2136 | -2.46 | -6.72 | 7.11 | -2.90 | 2.74 |
| **145** | 1814 | 1945 | 2084 | -2.45 | -6.75 | 7.14 | -2.92 | 2.76 |
| **146** | 1770 | 1898 | 2034 | -2.44 | -6.77 | 7.17 | -2.94 | 2.78 |
| **147** | 1726 | 1852 | 1985 | -2.43 | -6.79 | 7.19 | -2.96 | 2.80 |
| **148** | 1684 | 1807 | 1937 | -2.42 | -6.82 | 7.22 | -2.99 | 2.82 |
| **149** | 1643 | 1764 | 1892 | -2.41 | -6.84 | 7.24 | -3.01 | 2.84 |
| **150** | 1604 | 1722 | 1847 | -2.40 | -6.86 | 7.27 | -3.03 | 2.86 |
| **151** | 1564 | 1680 | 1803 | -2.39 | -6.88 | 7.30 | -3.05 | 2.88 |
| **152** | 1528 | 1641 | 1761 | -2.38 | -6.91 | 7.32 | -3.08 | 2.90 |
| **153** | 1491 | 1602 | 1720 | -2.37 | -6.93 | 7.35 | -3.10 | 2.92 |
| **154** | 1455 | 1564 | 1679 | -2.36 | -6.95 | 7.37 | -3.12 | 2.94 |
| **155** | 1421 | 1527 | 1640 | -2.35 | -6.97 | 7.40 | -3.15 | 2.96 |
| **156** | 1388 | 1492 | 1603 | -2.34 | -6.99 | 7.42 | -3.17 | 2.99 |
| **157** | 1355 | 1457 | 1566 | -2.33 | -7.02 | 7.45 | -3.19 | 3.01 |
| **158** | 1323 | 1423 | 1529 | -2.32 | -7.04 | 7.47 | -3.22 | 3.03 |
| **159** | 1292 | 1390 | 1494 | -2.32 | -7.06 | 7.50 | -3.24 | 3.05 |
| **160** | 1262 | 1358 | 1460 | -2.31 | -7.08 | 7.52 | -3.26 | 3.07 |
| **161** | 1233 | 1327 | 1427 | -2.30 | -7.10 | 7.55 | -3.29 | 3.09 |
| **162** | 1205 | 1297 | 1395 | -2.29 | -7.12 | 7.57 | -3.31 | 3.11 |
| **163** | 1176 | 1267 | 1363 | -2.28 | -7.15 | 7.60 | -3.33 | 3.13 |
| **164** | 1150 | 1239 | 1333 | -2.27 | -7.17 | 7.62 | -3.36 | 3.15 |

R25 : 100,000 Ω ± 3%
B25/50 : 3950 K ± 1%

| Temperature (℃) | Resistance (Ω) | | | Temp. Coef. | Resist. Tol. (%) | | Temp. Tol. (℃) | |
|---|---|---|---|---|---|---|---|---|
| | MIN. | CENTER | MAX. | (%/℃) | MIN. | MAX. | MIN. | MAX. |
| **165** | 1124 | 1211 | 1304 | -2.26 | -7.19 | 7.65 | -3.38 | 3.18 |
| **166** | 1098 | 1183 | 1274 | -2.25 | -7.21 | 7.67 | -3.40 | 3.20 |
| **167** | 1073 | 1157 | 1246 | -2.25 | -7.23 | 7.70 | -3.43 | 3.22 |
| **168** | 1049 | 1131 | 1218 | -2.24 | -7.25 | 7.72 | -3.45 | 3.24 |
| **169** | 1026 | 1106 | 1192 | -2.23 | -7.27 | 7.75 | -3.47 | 3.26 |
| **170** | 1002 | 1081 | 1165 | -2.22 | -7.29 | 7.77 | -3.50 | 3.28 |
| **171** | 981 | 1058 | 1140 | -2.21 | -7.31 | 7.79 | -3.52 | 3.31 |
| **172** | 958 | 1034 | 1115 | -2.20 | -7.33 | 7.82 | -3.55 | 3.33 |
| **173** | 938 | 1012 | 1091 | -2.20 | -7.35 | 7.84 | -3.57 | 3.35 |
| **174** | 917 | 990 | 1068 | -2.19 | -7.38 | 7.87 | -3.59 | 3.37 |
| **175** | 896 | 968 | 1044 | -2.18 | -7.40 | 7.89 | -3.62 | 3.39 |
| **176** | 877 | 947 | 1022 | -2.17 | -7.42 | 7.91 | -3.64 | 3.41 |
| **177** | 858 | 927 | 1001 | -2.16 | -7.44 | 7.94 | -3.67 | 3.44 |
| **178** | 839 | 907 | 979 | -2.16 | -7.46 | 7.96 | -3.69 | 3.46 |
| **179** | 822 | 888 | 959 | -2.15 | -7.48 | 7.98 | -3.72 | 3.48 |
| **180** | 804 | 869 | 939 | -2.14 | -7.50 | 8.01 | -3.74 | 3.50 |
| **181** | 786 | 850 | 918 | -2.13 | -7.52 | 8.03 | -3.77 | 3.53 |
| **182** | 769 | 832 | 899 | -2.12 | -7.54 | 8.05 | -3.79 | 3.55 |
| **183** | 753 | 815 | 881 | -2.12 | -7.56 | 8.08 | -3.82 | 3.57 |
| **184** | 738 | 798 | 863 | -2.11 | -7.57 | 8.10 | -3.84 | 3.59 |
| **185** | 722 | 781 | 844 | -2.10 | -7.59 | 8.12 | -3.87 | 3.61 |
| **186** | 707 | 765 | 827 | -2.09 | -7.61 | 8.14 | -3.89 | 3.64 |
| **187** | 692 | 749 | 810 | -2.09 | -7.63 | 8.17 | -3.91 | 3.66 |
| **188** | 677 | 733 | 793 | -2.08 | -7.65 | 8.19 | -3.94 | 3.68 |
| **189** | 663 | 718 | 777 | -2.07 | -7.67 | 8.21 | -3.97 | 3.70 |
| **190** | 649 | 703 | 761 | -2.06 | -7.69 | 8.23 | -3.99 | 3.73 |
| **191** | 636 | 689 | 746 | -2.06 | -7.71 | 8.26 | -4.02 | 3.75 |
| **192** | 623 | 675 | 731 | -2.05 | -7.73 | 8.28 | -4.04 | 3.77 |
| **193** | 610 | 661 | 716 | -2.04 | -7.75 | 8.30 | -4.07 | 3.80 |
| **194** | 598 | 648 | 702 | -2.03 | -7.77 | 8.32 | -4.09 | 3.82 |
| **195** | 586 | 635 | 688 | -2.03 | -7.79 | 8.35 | -4.12 | 3.84 |
| **196** | 573 | 622 | 674 | -2.02 | -7.80 | 8.37 | -4.14 | 3.86 |
| **197** | 562 | 610 | 661 | -2.01 | -7.82 | 8.39 | -4.17 | 3.89 |
| **198** | 551 | 598 | 648 | -2.01 | -7.84 | 8.41 | -4.19 | 3.91 |
| **199** | 540 | 586 | 635 | -2.00 | -7.86 | 8.43 | -4.22 | 3.93 |
| **200** | 529 | 574 | 623 | -1.99 | -7.88 | 8.45 | -4.25 | 3.96 |
| **201** | 519 | 563 | 611 | -1.98 | -7.90 | 8.48 | -4.27 | 3.98 |
| **202** | 508 | 552 | 599 | -1.98 | -7.91 | 8.50 | -4.30 | 4.00 |
| **203** | 498 | 541 | 587 | -1.97 | -7.93 | 8.52 | -4.32 | 4.03 |
| **204** | 488 | 530 | 575 | -1.96 | -7.95 | 8.54 | -4.35 | 4.05 |
| **205** | 479 | 520 | 565 | -1.96 | -7.97 | 8.56 | -4.38 | 4.07 |
| **206** | 469 | 510 | 554 | -1.95 | -7.99 | 8.58 | -4.40 | 4.10 |
| **207** | 460 | 500 | 543 | -1.94 | -8.01 | 8.60 | -4.43 | 4.12 |
| **208** | 452 | 491 | 533 | -1.94 | -8.02 | 8.62 | -4.45 | 4.14 |
| **209** | 442 | 481 | 523 | -1.93 | -8.04 | 8.65 | -4.48 | 4.17 |
| **210** | 434 | 472 | 513 | -1.92 | -8.06 | 8.67 | -4.51 | 4.19 |
| **211** | 426 | 463 | 503 | -1.92 | -8.08 | 8.69 | -4.53 | 4.21 |
| **212** | 417 | 454 | 494 | -1.91 | -8.09 | 8.71 | -4.56 | 4.24 |
| **213** | 410 | 446 | 485 | -1.90 | -8.11 | 8.73 | -4.59 | 4.26 |
| **214** | 401 | 437 | 475 | -1.90 | -8.13 | 8.75 | -4.61 | 4.29 |
| **215** | 394 | 429 | 467 | -1.89 | -8.15 | 8.77 | -4.64 | 4.31 |

R25 : 100,000 Ω ± 3%
B25/50 : 3950 K ± 1%

| Temperature (℃) | Resistance (Ω) | | | Temp. Coef. | Resist. Tol. (%) | | Temp. Tol. (℃) | |
|---|---|---|---|---|---|---|---|---|
| | MIN. | CENTER | MAX. | (%/℃) | MIN. | MAX. | MIN. | MAX. |
| **216** | 387 | 421 | 458 | -1.88 | -8.16 | 8.79 | -4.67 | 4.33 |
| **217** | 379 | 413 | 449 | -1.88 | -8.18 | 8.81 | -4.69 | 4.36 |
| **218** | 373 | 406 | 442 | -1.87 | -8.20 | 8.83 | -4.72 | 4.38 |
| **219** | 365 | 398 | 433 | -1.86 | -8.22 | 8.85 | -4.75 | 4.41 |
| **220** | 359 | 391 | 426 | -1.86 | -8.23 | 8.87 | -4.77 | 4.43 |
| **221** | 352 | 384 | 418 | -1.85 | -8.25 | 8.89 | -4.80 | 4.45 |
| **222** | 346 | 377 | 411 | -1.85 | -8.26 | 8.91 | -4.83 | 4.48 |
| **223** | 339 | 370 | 403 | -1.84 | -8.28 | 8.93 | -4.86 | 4.50 |
| **224** | 333 | 363 | 395 | -1.83 | -8.30 | 8.95 | -4.88 | 4.53 |
| **225** | 326 | 356 | 388 | -1.83 | -8.32 | 8.97 | -4.91 | 4.55 |
| **226** | 321 | 350 | 381 | -1.82 | -8.33 | 8.99 | -4.94 | 4.58 |
| **227** | 315 | 344 | 375 | -1.81 | -8.35 | 9.01 | -4.97 | 4.60 |
| **228** | 310 | 338 | 369 | -1.81 | -8.37 | 9.03 | -4.99 | 4.62 |
| **229** | 304 | 332 | 362 | -1.80 | -8.38 | 9.05 | -5.02 | 4.65 |
| **230** | 299 | 326 | 356 | -1.80 | -8.40 | 9.07 | -5.05 | 4.67 |
| **231** | 293 | 320 | 349 | -1.79 | -8.42 | 9.09 | -5.08 | 4.70 |
| **232** | 288 | 314 | 343 | -1.78 | -8.43 | 9.11 | -5.10 | 4.72 |
| **233** | 283 | 309 | 337 | -1.78 | -8.45 | 9.13 | -5.13 | 4.75 |
| **234** | 277 | 303 | 331 | -1.77 | -8.47 | 9.15 | -5.16 | 4.77 |
| **235** | 273 | 298 | 325 | -1.77 | -8.48 | 9.17 | -5.19 | 4.80 |
| **236** | 268 | 293 | 320 | -1.76 | -8.50 | 9.19 | -5.22 | 4.82 |
| **237** | 263 | 288 | 315 | -1.76 | -8.51 | 9.21 | -5.24 | 4.85 |
| **238** | 259 | 283 | 309 | -1.75 | -8.53 | 9.22 | -5.27 | 4.87 |
| **239** | 254 | 278 | 304 | -1.74 | -8.54 | 9.24 | -5.30 | 4.90 |
| **240** | 250 | 273 | 298 | -1.74 | -8.56 | 9.26 | -5.33 | 4.92 |
| **241** | 246 | 269 | 294 | -1.73 | -8.57 | 9.28 | -5.36 | 4.95 |
| **242** | 241 | 264 | 289 | -1.73 | -8.59 | 9.30 | -5.39 | 4.97 |
| **243** | 237 | 259 | 283 | -1.72 | -8.61 | 9.32 | -5.42 | 5.00 |
| **244** | 233 | 255 | 279 | -1.72 | -8.62 | 9.34 | -5.44 | 5.03 |
| **245** | 229 | 251 | 274 | -1.71 | -8.64 | 9.36 | -5.47 | 5.05 |
| **246** | 226 | 247 | 270 | -1.70 | -8.65 | 9.37 | -5.50 | 5.08 |
| **247** | 221 | 242 | 265 | -1.70 | -8.67 | 9.40 | -5.53 | 5.10 |
| **248** | 217 | 238 | 260 | -1.69 | -8.69 | 9.41 | -5.56 | 5.13 |
| **249** | 214 | 234 | 256 | -1.69 | -8.70 | 9.43 | -5.59 | 5.15 |
| **250** | 211 | 231 | 253 | -1.68 | -8.71 | 9.45 | -5.61 | 5.18 |