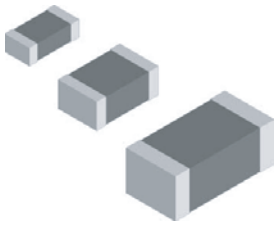
# NTC Thermistors, Surface Mount Chip



## FEATURES

- Solderable terminations
- Wraparound terminations
- Allows design flexibility for use with hybrid circuitry
- High-density monolithic construction

## NTHS PRODUCT $R_{25}$ °C VALUE RANGE BY CURVE AVAILABILITY

| CURVE | NTHS-0402 | NTHS-0603 | NTHS-0805 | NTHS-1206 | NTHS-1012 | % TOLERANCE AVAILABILITY |
|---|---|---|---|---|---|---|
| 3 | N/A | 1000 - 2000 | 1000 - 2000 | 1000 - 2000 | 500 - 700 | 5 %, 10 % |
| 6 | 4.7K - 5.0K | 2K - 3.5K | 1.5K - 2.8K | 1.5K - 3.5K | 1000 - 2000 | 5 %, 10 % |
| 2 | 10K - 12K | 6.8K - 12K | 4.7K - 10K | 4.7K - 10K | 1.3K - 4.3K | 3 %, 5 %, 10 % |
| 10 | 18K - 25K | 10K - 20K | 6K - 12K | 10K - 20K | 4.5K - 7K | 3 %, 5 %, 10 % |
| 11 | 30K - 34K | 22K - 32K | 12K - 30K | 20K - 33K | 9K - 13K | 3 %, 5 %, 10 % |
| 5 | 47K - 50K | 32K - 50K | 35K - 50K | 30K - 44K | 15K - 20K | 3 %, 5 %, 10 % |
| 1 | 68K - 100K | 32K - 100K | 33K - 100K | 32K - 70K | 10K - 30K | 1 % to 10 % |
| 17 | 250K | 150K - 200K | 100K - 200K | 100K - 200K | 30K - 93K | 3 %, 5 %, 10 % |
| 4 | 350K | 200K - 220K | 200K - 220K | 200K - 330K | 93K - 140K | 3 %, 5 %, 10 % |

## GLOBAL PART NUMBER INFORMATION

**New Global Part Numbering: NTHS1206N02N1002JR (preferred part numbering format)**

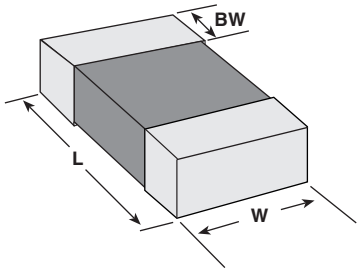
| N | T | H | S | 1 | 2 | 0 | 6 | N | 0 | 2 | N | 1 | 0 | 0 | 2 | J | R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| GLOBAL MODEL | CONDUCTOR TYPE | CURVE | CHARACTERISTIC | RESISTANCE VALUE | TOLERANCE CODE | PACKAGING |
|---|---|---|---|---|---|---|
| **NTHS0402**<br>**NTHS0603**<br>**NTHS0805**<br>**NTHS1206**<br>**NTHS1012** | Nickel Barrier | **01**<br>**02**<br>**03**<br>**04**<br>**05**<br>**06**<br>**10**<br>**11**<br>**17** | **N** | **1002** = 10K | **F** = ± 1 %<br>**J** = ± 5 %<br>**K** = ± 10 % | **F** = Lead (Pb)-free, Bulk<br>**E** = Lead (Pb)-free, T/R (Full)<br>**P** = Tin/Lead, Bulk<br>**R** = Tin/Lead, T/R (Full) |

**Historical Part Number example: NTHS1206N02N1002JR (will continue to be accepted)**

| NTHS1206 | N | 02 | N | 1002 | J | R |
|---|---|---|---|---|---|---|
| HISTORICAL MODEL | CONDUCTOR TYPE | CURVE | CHARACTERISTIC | RESITANCE VALUE | TOLERANCE | PACKAGING |

**DIMENSIONS** in inches [millimeters]




| PART NUMBER | L | W | BW |
|---|---|---|---|
| NTHS-0402 | 0.040 ± 0.004<br>[1.016 ± 0.102] | 0.022 ± 0.006<br>[0.5 ± 0.051] | 0.010 ± 0.004<br>[0.25 ± 0.102] |
| NTHS-0603 | 0.063 ± 0.008<br>[1.6 ± 0.20] | 0.031 ± 0.008<br>[0.80 ± 0.20] | 0.010 ± 0.006<br>[0.25 ± 0.15] |
| NTHS-0805 | 0.079 ± 0.008<br>[2.00 ± 0.20] | 0.049 ± 0.008<br>[1.25 ± 0.20] | 0.012 ± 0.006<br>[0.30 ± 0.15] |
| NTHS-1206 | 0.126 ± 0.008<br>[3.20 ± 0.20] | 0.063 ± 0.008<br>[1.60 ± 0.20] | 0.018 ± 0.008<br>[0.46 ± 0.20] |
| NTHS-1012 | 0.098 ± 0.008<br>[2.50 ± 0.20] | 0.126 ± 0.008<br>[3.20 ± 0.20] | 0.018 ± 0.008<br>[0.46 ± 0.20] |

| TYPICAL PRODUCT RTC CHARACTERISTICS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CURVE** | **1** | **2** | **3** | **4** | **5** | **6** | **10** | **11** | **17** |
| NTC%/°C at + 25 °C | - 4.4 | - 3.83 | - 3.5 | - 4.68 | - 4.3 | - 3.6 | - 3.9 | - 4.0 | - 4.54 |
| Beta + 25 °C/+ 75 °C | 3964 | 3477 | 3181 | 4247 | 3890 | 3254 | 3500 | 3700 | 4064 |

Beta Tolerance is ± 3 %

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