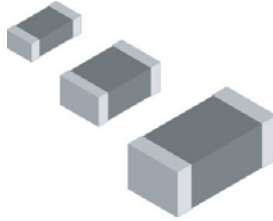


NTC Thermistors, Surface Mount Chip



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

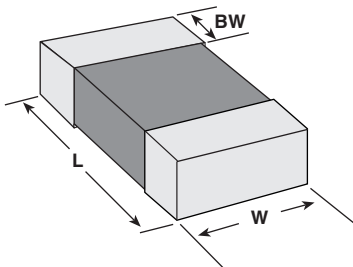
New Global Part Numbering: **NTHS1206N02N1002JR** (preferred part numbering format)

| | | | | | | | | | | | | | | | | | |
|--|----------------|----------|--|----------------|----------|------------------|----------|--------------------------------------|----------|--|----------|----------|----------|----------|----------|----------|----------|
| 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 NTHS0603 NTHS0805 NTHS1206 NTHS1012 | Nickel Barrier | | 01 02 03 04 05 06 10 11 17 | N | | 1002 = 10K | | F = ± 1 % J = ± 5 % K = ± 10 % | | F = Lead (Pb)-free, Bulk E = Lead (Pb)-free, T/R (Full) P = Tin/Lead, Bulk 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 | RESISTANCE VALUE | TOLERANCE | PACKAGING |

DIMENSIONS in inches [millimeters]



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



Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.