

Chip NTC Thermistor

ABNTC-0805

RoHS/RoHS II Compliant



2.0 x 1.25 x 0.85 mm

FEATURES:

- Large B constant for high temperature sensing capability
- Designed for high density
- Available in standard EIA compatible case size
- Internal electrode designed for enhanced reliability
- Excellent aging stability

APPLICATIONS:

- For temperature measurement or sensor: Digital thermometer, measuring instruments, temperature controller
- For temperature compensation: transistor circuit, TCXO, Crystal Oscillator
- LED lighting driver, Notebook, Cell Phone, Power Supplies, Disk Drive

STANDARD SPECIFICATIONS:

Operating Temperature: -55°C ~+125°C

Storage Temperature: -10°C ~ +40°C and RH 75% (Max.)

| Part Number | Resistance at 25°C R25 (kΩ) | B constant (25-50°C) (K) | Max. Permissive Operating Current (25°C) (mA) | Thermal Time Constant | Dissipation Factor (mW/°C) | Rated Electric Power (mW) |
|-----------------------|--------------------------------|-----------------------------|--|--------------------------|-------------------------------|------------------------------|
| ABNTC-0805-202Δ-3950□ | 2.0 | 3950 | 1.0 | <5sec | 2.0 | 200 |
| ABNTC-0805-502Δ-3950□ | 5.0 | 3950 | 0.60 | | | |
| ABNTC-0805-682Δ-3950□ | 6.8 | 3950 | 0.50 | | | |
| ABNTC-0805-103Δ-3450□ | 10 | 3450 | 0.40 | | | |
| ABNTC-0805-103Δ-3950□ | 10 | 3950 | 0.44 | | | |
| ABNTC-0805-153Δ-3500□ | 15 | 3500 | 0.32 | | | |
| ABNTC-0805-223Δ-4050□ | 22 | 4050 | 0.31 | | | |
| ABNTC-0805-473Δ-4150□ | 47 | 4150 | 0.20 | | | |
| ABNTC-0805-503Δ-4150□ | 50 | 4150 | 0.18 | | | |
| ABNTC-0805-683Δ-4150□ | 68 | 4150 | 0.16 | | | |
| ABNTC-0805-104Δ-4250□ | 100 | 4250 | 0.14 | | | |
| ABNTC-0805-154Δ-4300□ | 150 | 4300 | 0.11 | | | |
| ABNTC-0805-224Δ-4350□ | 220 | 4350 | 0.08 | | | |
| ABNTC-0805-334Δ-4400□ | 330 | 4400 | 0.06 | | | |
| ABNTC-0805-474Δ-4500□ | 470 | 4500 | 0.05 | | | |
| ABNTC-0805-684Δ-4500□ | 680 | 4500 | 0.04 | | | |
| ABNTC-0805-135Δ-4700□ | 1300 | 4700 | 0.03 | | | |

Δ Please specify the tolerance code of R25 (F=±1%, H=±3%, J=±5%, K=±10%).

□: Please specify the tolerance code of B value (F=±1%, H=±3%).

Test Conditions

Unless otherwise specified, the standard atmospheric conditions for measurement/test as:

- Ambient Temperature: 20±15°C
- Relative Humidity: 65±20%
- Air Pressure: 86 kPa to 106 kPa

Chip NTC Thermistor

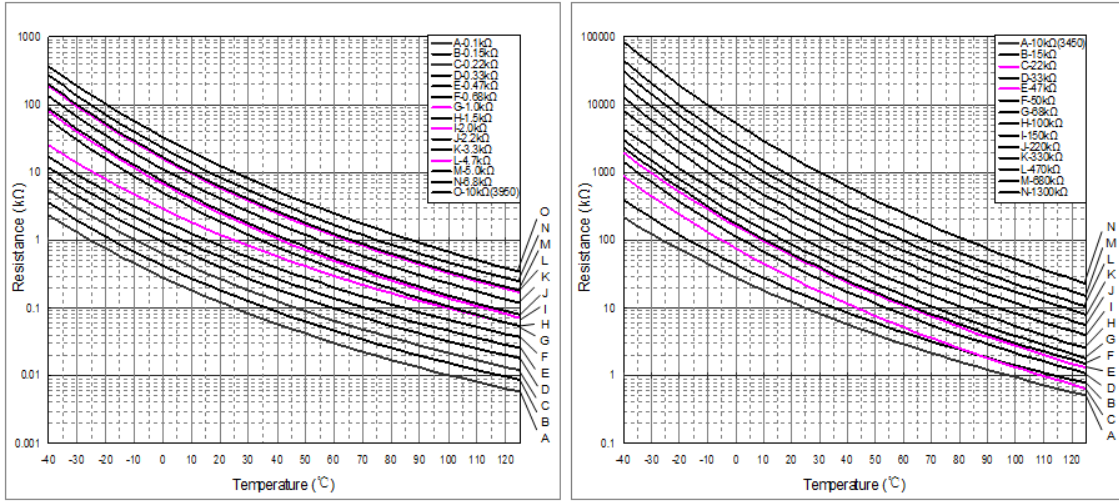
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2.0 x 1.25 x 0.85 mm

ELECTRICAL CHARACTERISTICS CURVES



OPTIONS AND PART IDENTIFICATION:

ABNTC-0805- [] [] - [] [] - T

| | | | | |
|--|--|--|--------------------------------------|---|
| R25 Code Please refer to the table above | R 25 Tolerance F=±1% H=±3% J=±5% K=±10% | B Constant Please refer to the table above | B Tolerance F=±1% H=±3% | Packaging T: Tape and Reel (4kpcs / reel) |
|--|--|--|--------------------------------------|---|

OUTLINE DIMENSION:



| L | W | T | a |
|---------|----------|----------|---------|
| 2.0±0.2 | 1.25±0.2 | 0.85±0.2 | 0.5±0.3 |

Recommended Land Pattern



| A | B | C |
|-----------|-----------|-----------|
| 0.80~1.20 | 0.80~1.20 | 0.90~1.60 |

Dimension: mm

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REFLOW PROFILE:



| | |
|-----------------------------|-------------------------------|
| Preheat Condition | 150 to 200 °C; 60 to 120 sec. |
| Allowed time above 217 °C | 60 to 90 sec. |
| Max temperature | 260 °C |
| Max time at max temperature | 10 sec. |
| Solder paste | Sn/3.0Ag/0.5Cu |
| Allowed Reflow time | 2x max. |

TAPE & REEL:

Packing

T: 4,000pcs / reel

Sprocket Hole $\Phi 1.5 (+0.1,0)$

Chip Cavity



Dimension: mm

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