

Chip NTC Thermistor

ABNTC-0603

RoHS/RoHS II Compliant



1.6 x 0.8 x 0.8 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) | R25 Tolerance | B constant (25-50°C) (K) | B Tolerance | Max. Permissible Operating Current (25°C) (mA) | Thermal Time Constant | Dissipation Factor (mW/ °C) | Rated Electric Power (mW) |
|-----------------------|--------------------------------|------------------|-----------------------------|-------------|---|-----------------------------|-----------------------------------|------------------------------------|
| ABNTC-0603-472Δ-3950□ | 4.7 | H, J, K | 3950 | H | 0.46 | <5sec | 1.0 | 100 |
| ABNTC-0603-502Δ-3950□ | 5.0 | H, J, K | 3950 | H | 0.44 | | | |
| ABNTC-0603-682Δ-3950□ | 6.8 | F, H, J, K | 3950 | F, H | 0.38 | | | |
| ABNTC-0603-103Δ-3450□ | 10 | F, H, J, K | 3450 | F, H | 0.31 | | | |
| ABNTC-0603-103Δ-3950□ | 10 | F, H, J, K | 3950 | F, H | 0.33 | | | |
| ABNTC-0603-153Δ-3950□ | 15 | H, J, K | 3950 | F, H | 0.25 | | | |
| ABNTC-0603-223Δ-4050□ | 22 | F, H, J, K | 4050 | H | 0.21 | | | |
| ABNTC-0603-333Δ-4050□ | 33 | F, H, J, K | 4050 | F, H | 0.17 | | | |
| ABNTC-0603-473Δ-4150□ | 47 | F, H, J, K | 4150 | F, H | 0.14 | | | |
| ABNTC-0603-503Δ-4150□ | 50 | F, H, J, K | 4150 | F, H | 0.13 | | | |
| ABNTC-0603-683Δ-4150□ | 68 | F, H, J, K | 4150 | F, H | 0.12 | | | |
| ABNTC-0603-104Δ-4250□ | 100 | F, H, J, K | 4250 | F, H | 0.10 | | | |

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

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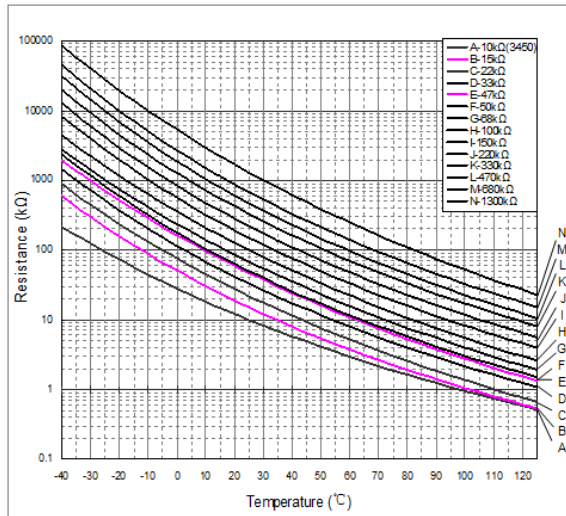
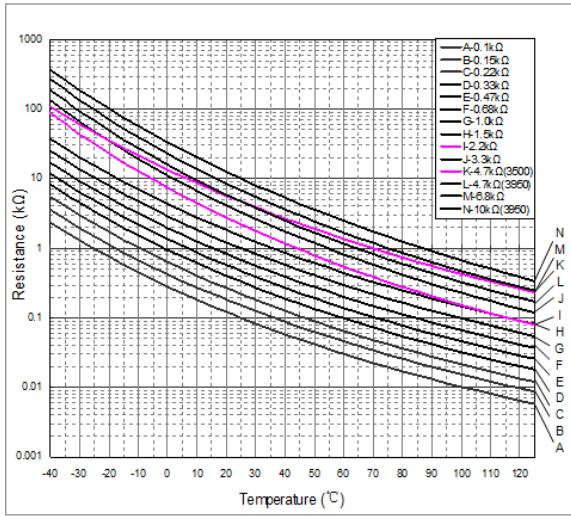
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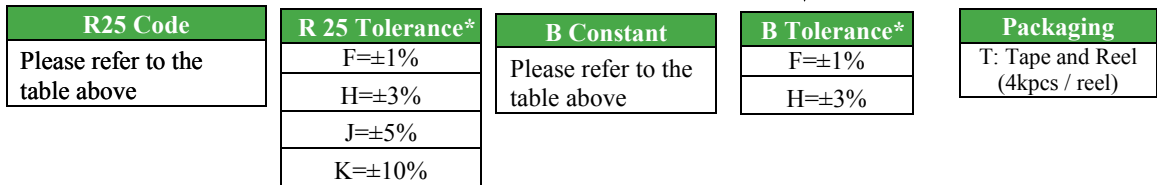
1.6 x 0.8 x 0.8 mm

ELECTRICAL CHARACTERISTICS CURVES



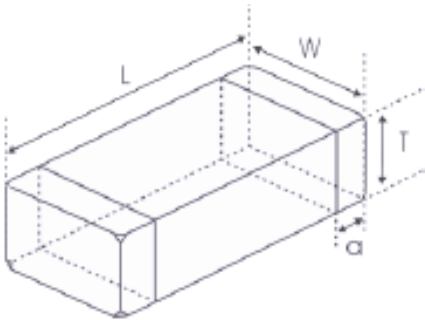
OPTIONS AND PART IDENTIFICATION:

ABNTC-0603- - - T

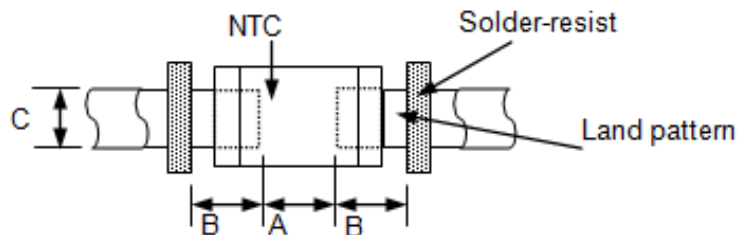


* Please Reference electrical specifications table for available tolerances for each varistor combination.

OUTLINE DIMENSION:



Recommended Land Pattern



| L | W | T | a |
|----------|----------|----------|---------|
| 1.6±0.15 | 0.8±0.15 | 0.8±0.15 | 0.3±0.2 |

| A | B | C |
|-----------|-----------|-----------|
| 0.60~0.80 | 0.60~0.80 | 0.60~0.80 |

Dimension: mm

Chip NTC Thermistor

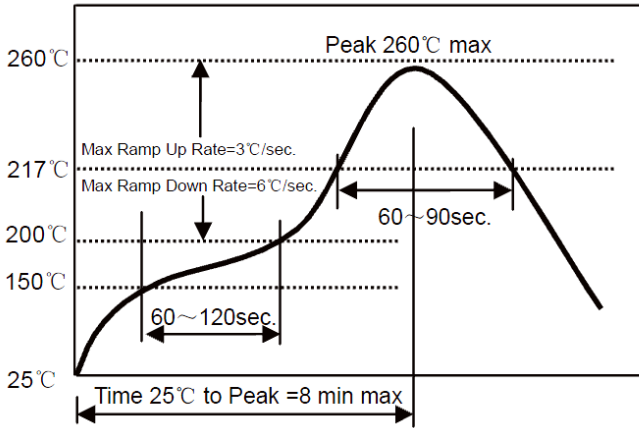
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1.6 x 0.8 x 0.8 mm

REFLOW PROFILE:



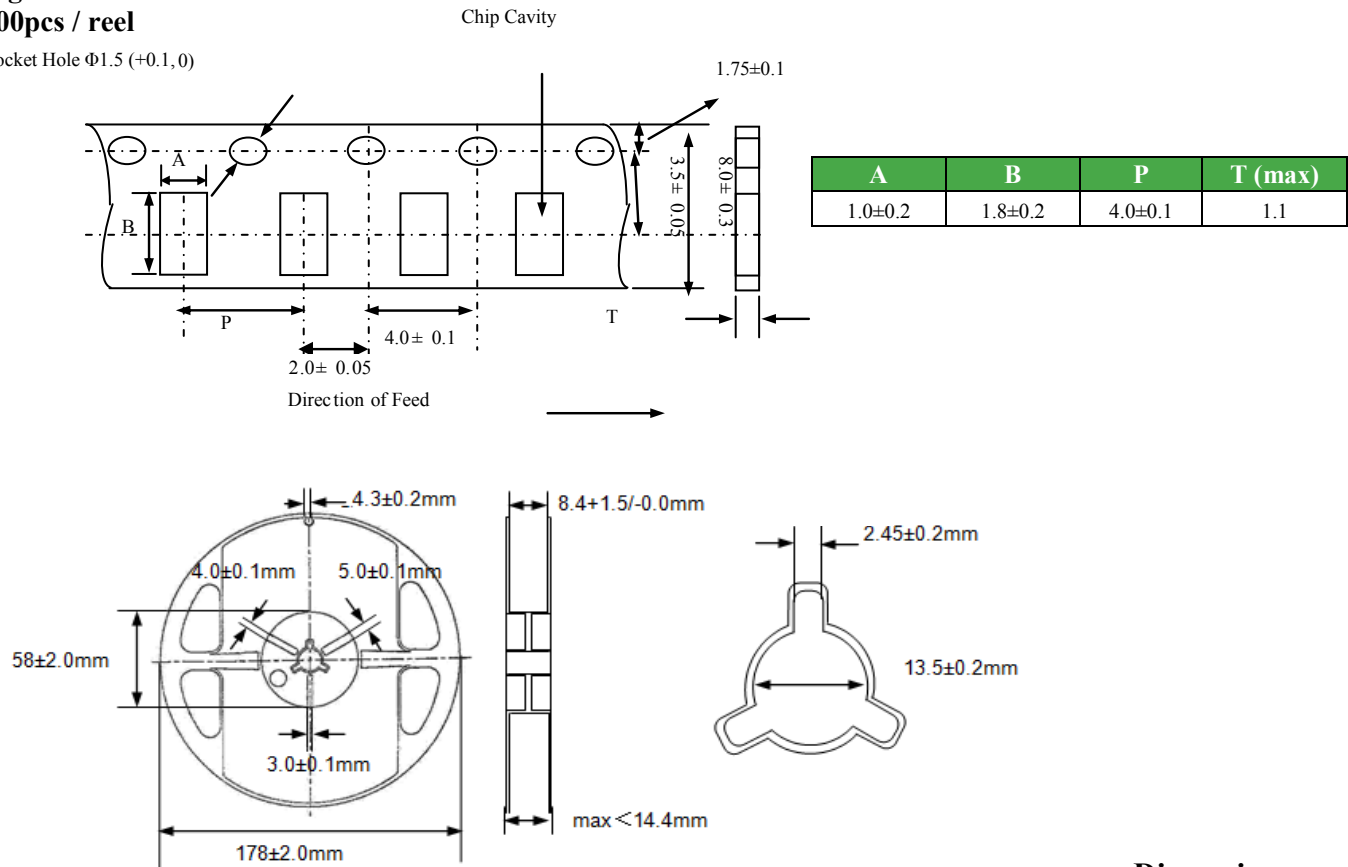
| | |
|-----------------------------|-------------------------------|
| Preheat Condition | 150 to 200 °C; 60 to 120 sec. |
| Allowed time above 217 °C | 60 to 90 sec. |
| Max temperature | 260 °C |
| Max time at max temperature | 10 sec. |
| Solder paste | Sn/3.0Ag/0.5Cu |
| Allowed Reflow time | 2x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

TAPE & REEL:

Packing

T: 4,000pcs / reel

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





Dimension: mm

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