

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)	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-0603-222Δ-3950□	2.2	3950	0.67	<5sec	1.0	100
ABNTC-0603-302Δ-3950□	3.0	3950	0.55			
ABNTC-0603-472Δ-3500□	4.7	3500	0.44			
ABNTC-0603-472Δ-3950□	4.7	3950	0.46			
ABNTC-0603-502Δ-3950□	5.0	3950	0.44			
ABNTC-0603-682Δ-3950□	6.8	3950	0.38			
ABNTC-0603-103Δ-3450□	10	3450	0.31			
ABNTC-0603-103Δ-3950□	10	3950	0.33			
ABNTC-0603-153Δ-3950□	15	3950	0.25			
ABNTC-0603-223Δ-4050□	22	4050	0.21			
ABNTC-0603-333Δ-4050□	33	4050	0.17			
ABNTC-0603-473Δ-4150□	47	4150	0.14			
ABNTC-0603-503Δ-4150□	50	4150	0.13			
ABNTC-0603-683Δ-4150□	68	4150	0.12			
ABNTC-0603-104Δ-4250□	100	4250	0.10			
ABNTC-0603-154Δ-4300□	150	4300	0.08			
ABNTC-0603-224Δ-4350□	220	4350	0.06			
ABNTC-0603-334Δ-4400□	330	4400	0.05			
ABNTC-0603-474J-4000F	470	4000	0.04			
ABNTC-0603-684Δ-4500□	680	4500	0.03			
ABNTC-0603-135Δ-4700□	1300	4700	0.02			

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:

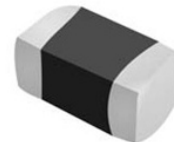
- a. Ambient Temperature: 20±15°C
- b. Relative Humidity: 65±20%
- c. Air Pressure: 86 kPa to 106 kPa



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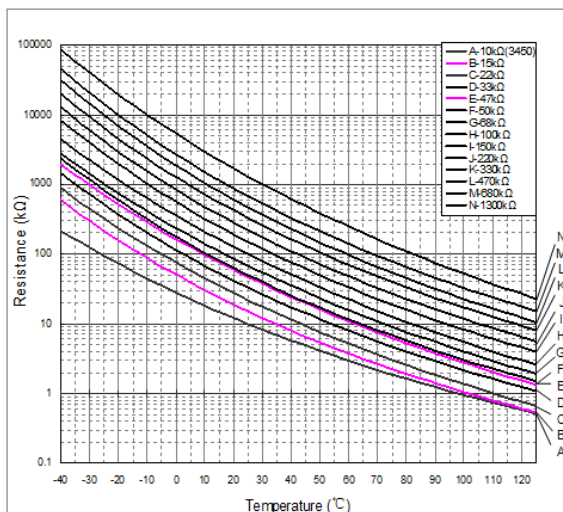
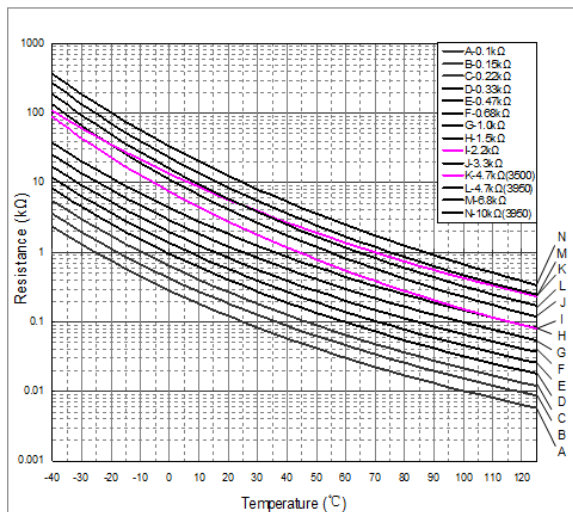
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ELECTRICAL CHARACTERISTICS CURVES



OPTIONS AND PART IDENTIFICATION:

ABNTC-0603- - - T

R25 Code
Please refer to the table above

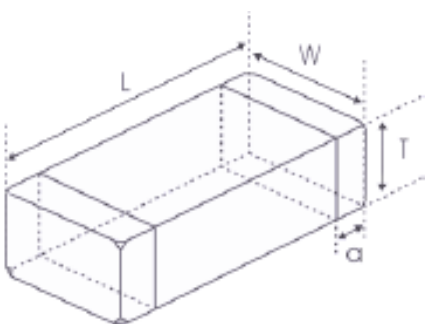
R 25 Tolerance
F=±1%
H=±3%
J=±5%
K=±10%

B Constant
Please refer to the table above

B Tolerance
F=±1%
H=±3%

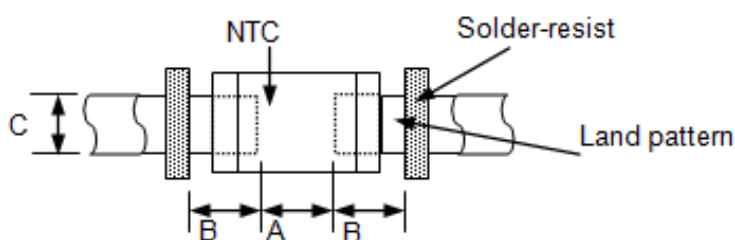
Packaging
T: Tape and Reel (4kpcs / reel)

OUTLINE DIMENSION:



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

Recommended Land Pattern



A	B	C
0.60~0.80	0.60~0.80	0.60~0.80

Dimension: mm

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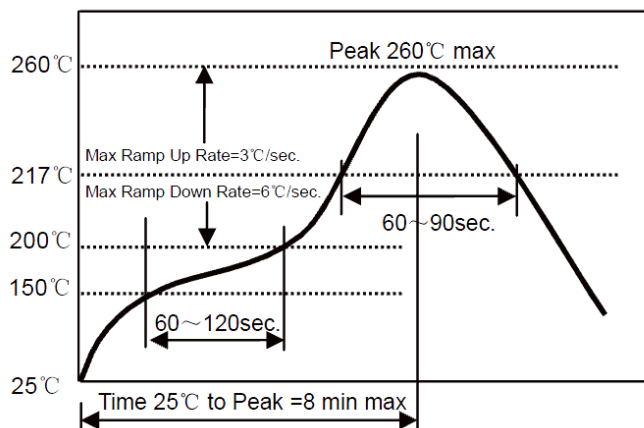
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REFLOW PROFILE:



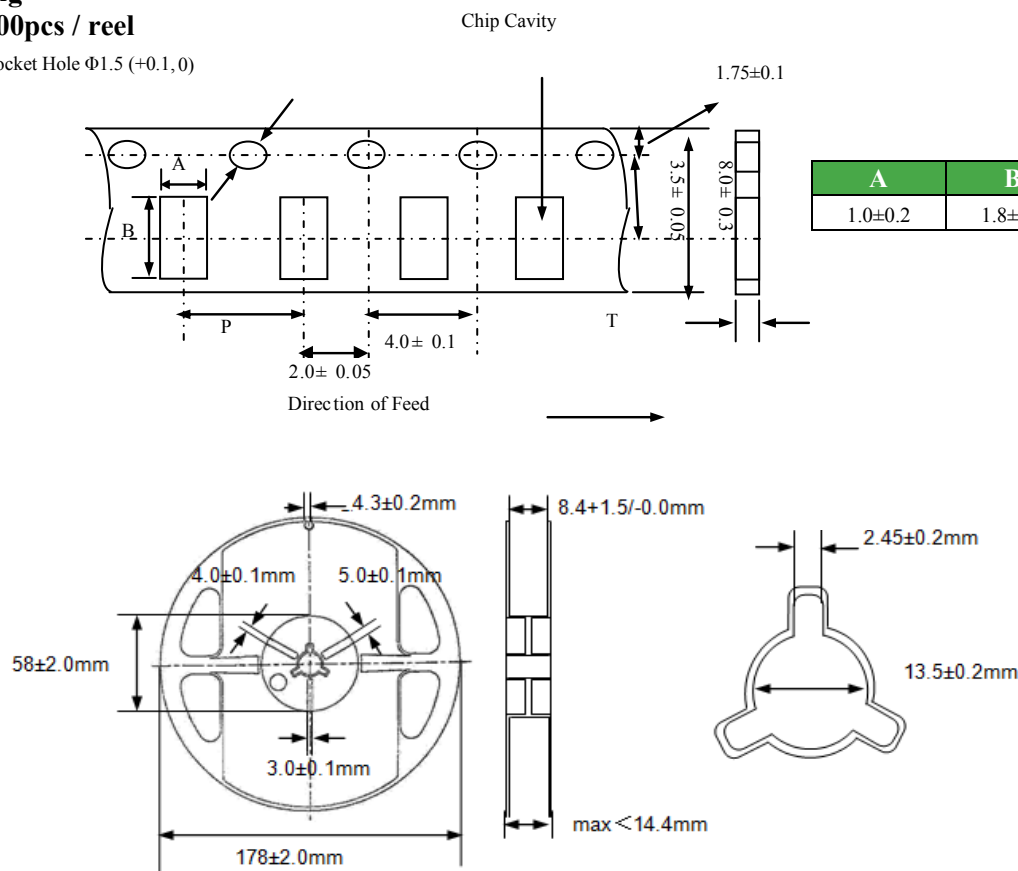
Preheat Condition	150 to 200 °C; 60 to 120 sec.
Allowed time above 217 °C	60 to 90 sec.
Max temperature	260 °C
Max time at max temperature	10 sec.
Solder paste	Sn/3.0Ag/0.5Cu
Allowed Reflow time	2x max.

TAPE & REEL:

Packing

T: 4,000pcs / reel

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



A	B	P	T (max)
1.0±0.2	1.8±0.2	4.0±0.1	1.1

Dimension: mm

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