

# Chip NTC Thermistor

ABNTC-0402

RoHS/RoHS II Compliant



1.0 x 0.5 x 0.5 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-0402-332Δ-3950□	3.3	3950	0.55	<3sec	1.0	100
ABNTC-0402-682Δ-3950□	6.8	3950	0.38			
ABNTC-0402-103Δ-3380□	10	3380	0.31			
ABNTC-0402-103Δ-3950□	10	3950	0.33			
ABNTC-0402-103Δ-4050□	10	4050	0.33			
ABNTC-0402-153Δ-3450□	15	3450	0.25			
ABNTC-0402-223Δ-3950□	22	3950	0.23			
ABNTC-0402-333Δ-3500□	33	3500	0.14			
ABNTC-0402-473Δ-4100□	47	4100	0.12			
ABNTC-0402-503Δ-4100□	50	4100	0.12			
ABNTC-0402-683Δ-4150□	68	4150	0.11			
ABNTC-0402-104Δ-4150□	100	4150	0.10			
ABNTC-0402-104Δ-4250□	100	4250	0.10			
ABNTC-0402-154Δ-4150□	150	4150	0.08			
ABNTC-0402-224Δ-4250□	220	4250	0.06			
ABNTC-0402-334Δ-4300□	330	4300	0.05			
ABNTC-0402-684Δ-4400□	680	4400	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:

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

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## ELECTRICAL CHARACTERISTICS CURVES



## OPTIONS AND PART IDENTIFICATION:

ABNTC-0402- [ ] [ ] - [ ] [ ] - [ ]



## OUTLINE DIMENSION:



L	W	T	a
1.0±0.15	0.5±0.15	0.5±0.15	0.25±0.1

## Recommended Land Pattern



A	B	C
0.45~0.55	0.40~0.50	0.45~0.55

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: 10,000pcs / reel



A	B	P	T (max)
0.65±0.1	1.15±0.1	2.0±0.05	0.8



Dimension: mm

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