

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

Chip NTC Thermistor

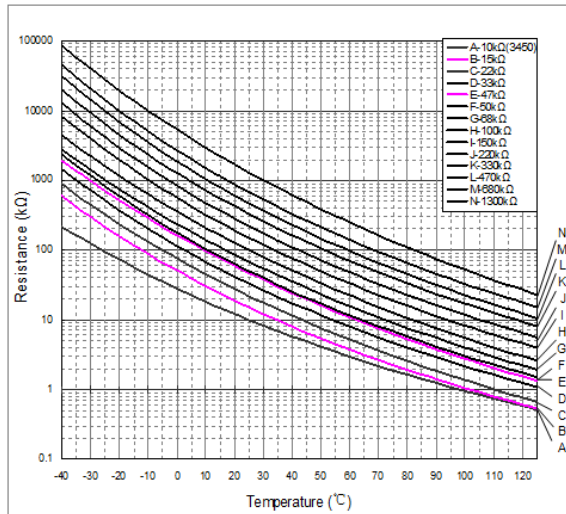
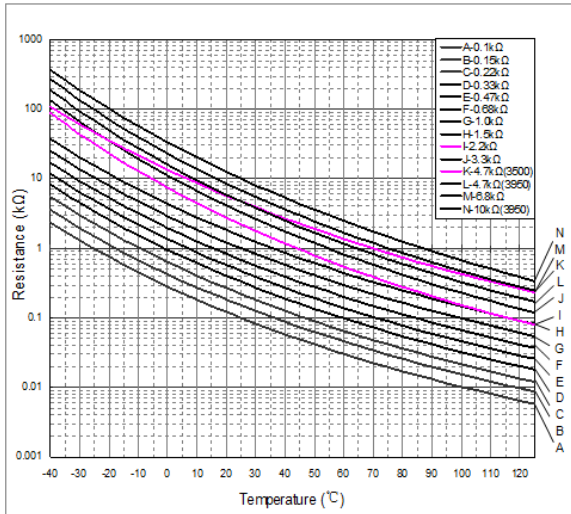
ABNTC-0603

RoHS/RoHS II Compliant



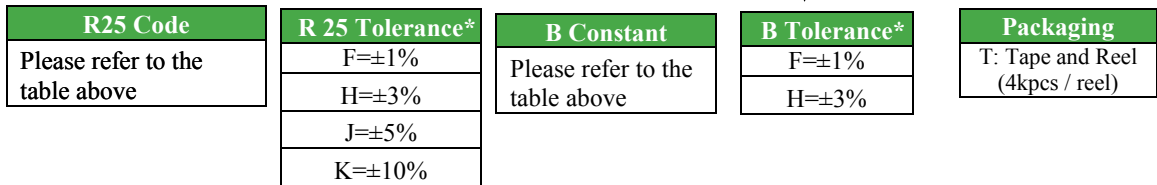
1.6 x 0.8 x 0.8 mm

ELECTRICAL CHARACTERISTICS CURVES



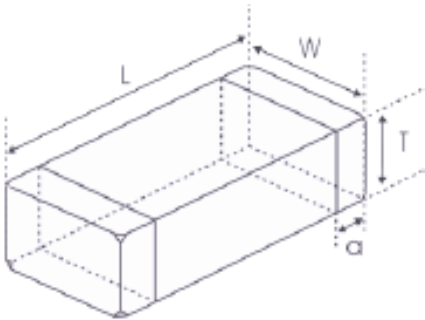
OPTIONS AND PART IDENTIFICATION:

ABNTC-0603- - - T

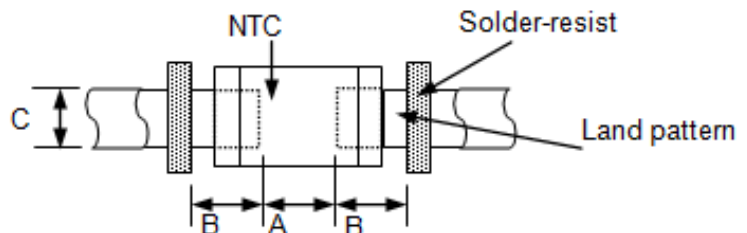


* Please Reference electrical specifications table for available tolerances for each varistor combination.

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

ABNTC-0603

RoHS/RoHS II Compliant



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

ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ABRACON:

[ABNTC-0603-333J-4050F-T](#) [ABNTC-0603-152J-3450F-T](#) [ABNTC-0603-302J-3950F-T](#) [ABNTC-0603-472J-3500F-T](#)
[ABNTC-0603-473J-4150F-T](#) [ABNTC-0603-151J-3380F-T](#) [ABNTC-0603-102J-3450F-T](#) [ABNTC-0603-332J-3950F-T](#)
[ABNTC-0603-471J-3450F-T](#) [ABNTC-0603-502J-3950F-T](#) [ABNTC-0603-153J-3950F-T](#) [ABNTC-0603-223J-4050F-T](#)
[ABNTC-0603-103J-3950F-T](#) [ABNTC-0603-334J-4400F-T](#) [ABNTC-0603-331J-3450F-T](#) [ABNTC-0603-474J-4500F-T](#)
[ABNTC-0603-472J-3950F-T](#) [ABNTC-0603-684J-4500F-T](#) [ABNTC-0603-682J-3950F-T](#) [ABNTC-0603-101J-3380F-T](#)
[ABNTC-0603-503J-4150F-T](#) [ABNTC-0603-135J-4700F-T](#) [ABNTC-0603-103J-3450F-T](#) [ABNTC-0603-104J-4250F-T](#)
[ABNTC-0603-224J-4350F-T](#) [ABNTC-0603-222J-3950F-T](#) [ABNTC-0603-683J-4150F-T](#) [ABNTC-0603-221J-3450F-T](#)
[ABNTC-0603-154J-4300F-T](#) [ABNTC-0603-681J-3450F-T](#) [ABNTC-0603-223J-4050H-T](#) [ABNTC-0603-472J-3950H-T](#)
[ABNTC-0603-502J-3950H-T](#)