

## NTR SERIES



[www.niccomp.com/products/catalog/ntr.pdf](http://www.niccomp.com/products/catalog/ntr.pdf)



### Product Family

SMT Thin Film Chip Resistors

### Description

Construction is nickel chromium sputtered thin film resistive element on alumina substrate. Wrap around terminations with nickel barrier and tin finish are compatible with tin-lead and lead-free soldering processes. Available in 0201 to 2512 component sizes, supplied on 8mm carrier tape for automatic pick and placement.

### General Specifications

- High precision thin film construction
- Tight tolerances (0.01% ~ 1.0%)
- Ultra-stable (1PPM to 50PPM) over -55°C to +155°C
- Low noise figure and distortion
- E24, E96 & E192 standard resistance values

### Applications/Functions

- Telecommunications
- Industrial
- Test and Instrumentation
- Medical
- Audio

### Competition

- Bourns: CRT
- Kamaya: RNC20, RNC32
- KOA: N73H, RN73\_
- SEI: RNC
- Susumu: RG
- Vishay: P, PHR, PLT, PLTT, TNPU
- Yageo: RT

### Trends

Growth of telecommunication, test equipment and digital equipment with higher operating frequencies should result in increasing demand for high precision, temperature stable NTR type thin film resistors.

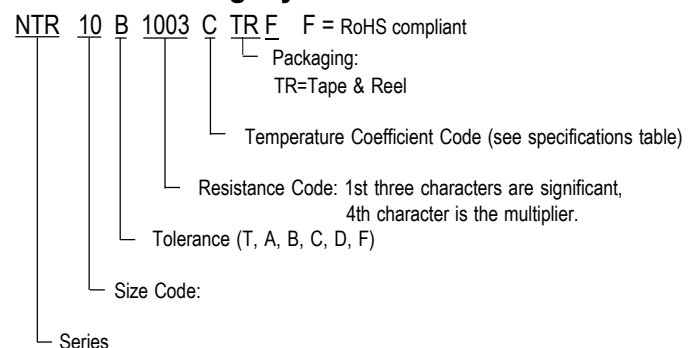
### Performance Data

For performance data see [www.niccomp.com](http://www.niccomp.com) or contact NIC tech support: [tpmg@niccomp.com](mailto:tpmg@niccomp.com)

#### Key Parameters - Substitutes & Selling Tips

- + Low TCR (temperature coefficient of resistance value)
  - ... TCR 5PPM to 50PPM/°C standard
  - ... TCR 1PPM to 3PPM/°C special order
- + Best choice for applications requiring:
  - ... low noise (-100db)
  - ... tighter than ±1% tolerances
  - ... low distortion
  - ... stability over temperature
  - ... better ESD performance than thick film
- + If require **AEC-Q200** auto-grade: see **NTR-A**
- + If used in **harsh** environments: see **NTR-C**
- + If require **higher power** ratings: see **NTR-H**

### Part Numbering System



+ NIC Global Locations: [LINK](#)

North America: [sales@niccomp.com](mailto:sales@niccomp.com)

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→ Please contact your internal sales person at NIC who will be happy to provide you with a quotation