

NIC PRODUCT PROFILE

NCT Series

Negative Temperature (NTC) Thermistors

DESCRIPTION:

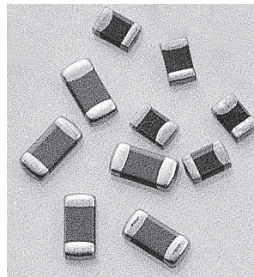
Negative Temperature Coefficient (NTC) Chip thermistors decrease in resistance with increases in operating temperature and increase resistance with decreasing temperature. NIC's NCT series offers these NTC characteristics in SMT Chip types operating from +25°C to +100°C

CHARACTERISTICS:

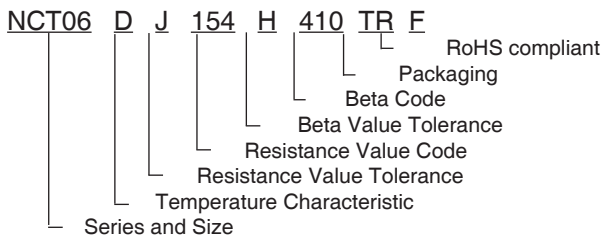
- Temperature Range :** -40°C ~ +125°C
- Operating Ranges :** +25°C ~ +50°C (D)
+25°C ~ +85°C (A)
+25°C ~ +100°C (E)
- Resistance :** 100 Ohm ~ 2 MegOhm
- Tolerance :** ±1%, ±2%, ±3%, ±5%, ±10%
- Beta Values:** 2610K ~ 4800K
- Beta Tolerances:** ±1%, ±2%, ±3%, ±5%
- Sizes:** 0201 ~ 0805

APPLICATIONS:

- Current Sensing
- Battery packs
- Car Audio Equipment
- Chargers / Adapters
- Thermal printers
- Temperature Gauges
- Fan Controller Circuits
- Sensors for Fire Protection



PART NUMBERING SYSTEM:



Competition Replace

- Dale *NTHS*
- Panasonic *ERTJ*
- TDK *NTCG*
- Murata *NCP*

[Visit www.niccomp.com for FULL Cross Reference List]

Key Parameters - Substitutes & Selling Tips

+ NCT Series

- NTC Thermistors can be used to monitor the temperature in its environment and assure proper design functions. When selecting the right thermistor to fit your needs, KEY parameters to look for include:
 - Size - NIC offers 0201 ~ 0805 Sizes
 - Operating Range
 - Beta Value - The amount of change in resistance the thermistor will show with changes in temperature. NCT series are available in BETA values multiples of 10 with tolerances as low as 1% to assure accuracy.

[Visit www.niccomp.com For Performance Data]

NIC Specification Data Sheet @

<http://www.niccomp.com/catalog/nct.pdf>

[STANDARD RESISTANCE VALUES (@25°C) AND BETA RANGE]

Beta Value	NCT02 (0201)	NCT04 (0402)	NCT06 (0603)	NCT08 (0805)
4610 ~ 4800K	100K ~ 1M	100K ~ 2M	68K ~ 2M	47K ~ 2M
4410 ~ 4600K	30K ~ 150K	10K ~ 2M	10K ~ 2M	10K ~ 2M
4210 ~ 4400K	20K ~ 120K	10K ~ 2M	10K ~ 2M	6.8K ~ 2M
4010 ~ 4200K	10K ~ 100K	10K ~ 220K	1K ~ 220K	1K ~ 220K
3810 ~ 4000K	10K ~ 50K	2K ~ 150K	1K ~ 150K	1K ~ 150K
3610 ~ 3800K	6.8K ~ 30K	2K ~ 150K	1K ~ 150K	1K ~ 150K
3410 ~ 3600K	2K ~ 20K	2K ~ 150K	1K ~ 150K	1K ~ 150K
3210 ~ 3400K	2K ~ 20K	2K ~ 150K	1K ~ 150K	680 ~ 150K
3010 ~ 3200K	1K ~ 5K	680 ~ 68K	470 ~ 150K	220 ~ 150K
2810 ~ 3000K	1K ~ 3K	500 ~ 47K	150 ~ 100K	100 ~ 100K
2610 ~ 2800K	470 ~ 1.5K	100 ~ 10K	100 ~ 1K	100 ~ 1K

