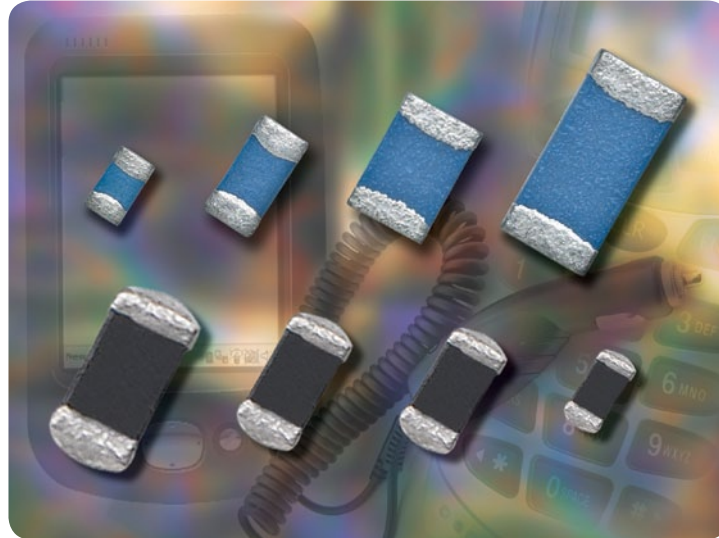


NTC Thermistors, Surface-Mount Chips



KEY BENEFITS

- Nickel/tin and tin/lead terminations available
- Wraparound terminations
- Allows design flexibility for use with hybrid circuitry
- High-density monolithic construction
- Customized values available

APPLICATIONS

- Battery chargers for cell phones, laptops, PDAs, LED display compensation
- Hard disk drives

RESOURCES

- Datasheet: NTCS0402 Series - <http://www.vishay.com/doc?29003>
- Datasheet: NTCS0603 Series - <http://www.vishay.com/doc?29056>
- Datasheet: NTCS0805 Series - <http://www.vishay.com/doc?29044>
- Datasheet: NTHS Series - <http://www.vishay.com/doc?33008>
- For technical questions contact nlr@vishay.com or thermistor1@vishay.com
- Material categorization: For definitions of compliance please see <http://www.vishay.com/doc?99912>


 RoHS
COMPLIANT

 HALOGEN
FREE

One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components



NTC Thermistors, Surface-Mount Chips

NTCS Thermistors



QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Resistance value at 25 °C	2K to 680K	Ω
Tolerance on R_{25} -value	±1, ±2, ±3, ±5	%
$B_{25/85}$ -value	3430 to 4125	K
Tolerance on $B_{25/85}$ -value	±1 to ±3	%
Maximum dissipation at 25 °C	70 to 210	mW
Thermal time constant τ	≈ 5	s
Dissipation factor D	≈ 2.0/3.5	mW/K
Operating temperature range at zero power	- 40 to + 150	°C
Weight	≈ 1.2 to 15	mg

Revision 16-Mar-11

FEATURES

- TCR ranging from - 6.5 %/K at - 40 °C to - 2 %/K at 150 °C
- Tolerance on R_{25} down to 1 %
- Suitable for wave or reflow soldering
- NiSn terminations
- Fully glass coated and protected
- cUL recognized for safety applications (file E148885)
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

APPLICATIONS

- Temperature sensing, protection and compensation in automotive, industrial, telecom and consumer applications. Examples are:
 - Battery chargers
 - Power suppliers
 - Office equipment
 - LCD compensation
 - In-car entertainment

DESCRIPTION

Size 0402, 0603, 0805 chip thermistors with a negative temperature coefficient. The device has no marking.

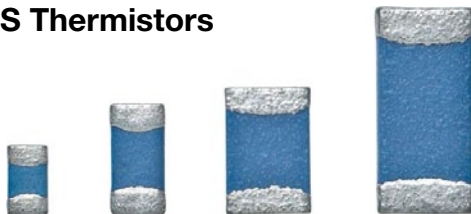
PACKAGING

Available in 8 mm punched paper tape on reel package of 4000/10 000 units.

DESIGN-IN SUPPORT

For complete Curve Computation, visit: www.vishay.com/resistors-non-linear/curve-computation-list/

NTHS Thermistors



QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Resistance value at 25 °C	1.0K to 350K	Ω
Tolerance on R_{25} -value	± 1, ± 2, ± 3, ± 5, ± 10	%
$B_{25/75}$ -value	3181 to 4247	K
$B_{25/85}$ -value	3185 to 4261	K
Tolerance on $B_{25/85}$ - value, $B_{25/75}$ -value	± 3	%
Operating temperature range at zero power (intermittent)	- 40 to + 125 (150)	°C

Revision 25-Jan-12

FEATURES

- Extended resistance values available in standard sizes
- Wraparound Ni barrier terminations with 100 % Sn
- Allows design flexibility for use with hybrid circuitry
- High-density monolithic construction with glass overcoat
- Sn90Pb10 plated terminations version available
- Compliant to RoHS Directive 2011/65/EU
- Halogen-free according to IEC 61249-2-21 definition

APPLICATIONS

Temperature sensing, protection and compensation in automotive, industrial, telecom and consumer applications. Examples are:

- Battery chargers
- Power suppliers
- Office equipment
- LCD compensation
- In-car entertainment

DESIGN-IN SUPPORT

For complete curve computation please visit the "My Vishay NTC curve" at : www.vishay.com/resistors-non-linear/ntc-curve-list/ or sent your part number to thermistor1@vishay.com to obtain a calculation spreadsheet.