NTC THERMISTOR

NTCS....E3....SMT

SMD NTC Thermistors with Enhanced Stability

KEY BENEFITS

- Enhanced stability throughout component lifetime (maximum variation of initial R25 °C of ± 0.5 % after 10 000 hours at any temperature)
- High R25 values (> = 100 kΩ) reduce self-heating effects
- Ideal for wave and reflow soldering
- One R25 °C-value per case in 0402, 0603, and 0805

APPLICATIONS

- Temperature sensing circuits and compensation for:
  - Heat counters and other smart meters
  - Body thermometers
  - Other medical applications such as pacemakers and other implantable devices

RESOURCES

- Datasheet: NTCS....E3....SMT www.vishay.com/doc?29151
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912
- For technical questions contact nlr@vishay.com

Pb-free

e3 RoHS COMPLIANT

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

SMD NTC Thermistors with Enhanced Stability

ELECTRICAL DATA AND ORDERING INFORMATION					
VISHAY SAP ORDERING NUMBER	R_{25}-VALUE (kΩ)	TOLERANCE ON R_{25} (%)	$B_{25/85}$-VALUE (K)	$B_{25/85}$-TOLERANCE (%)	DESCRIPTION
NTCS0402E3214SMT	210	1	3590	± 1	SMD NTC thermistor 0402 Ni barrier
NTCS0603E3124SMT	122	1	3590	± 1	SMD NTC thermistor 0603 Ni barrier
NTCS0805E3104SMT	100	1	3590	± 1	SMD NTC thermistor 0805 Ni barrier

RELIABILITY INFORMATION

After a test of storage at any temperature within the temperature range, the drift of electrical resistance at 25 °C is always lower than ± 0.5 % (see typical figures below for drift after storage during 10 000 h at maximal temperature 125 °C). The same type of stability is also observed in thermal shocks between the two extreme values of the temperature range. The tests are performed according to IEC 60068-2-2 and 2-14.

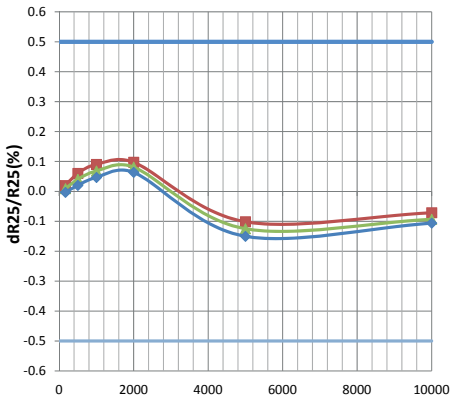

Fig. 1 - R25 °C Drift after Storage at 125 °C for 0603 Case

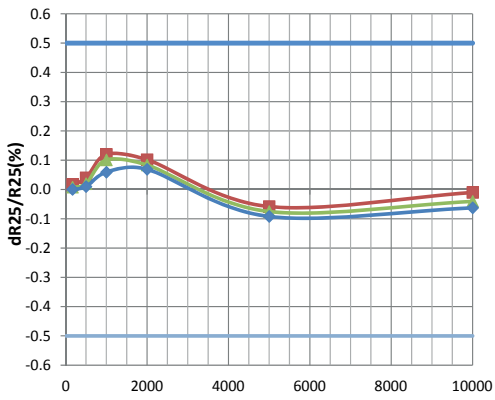

Fig. 2 - Drift in Storage at 125 °C for 0402 Case

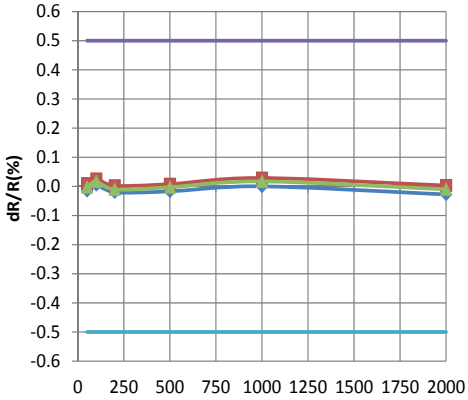

Fig. 3 - R25 °C Drift in Thermal Shocks -40 °C,15 min/125 °C, 15 min