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
SMD NTC Thermistors with Enhanced Stability

ELECTRICAL DATA AND ORDERING INFORMATION

<table>
<thead>
<tr>
<th>VISHAY SAP ORDERING NUMBER</th>
<th>(R_{25})-VALUE ((k\Omega))</th>
<th>TOLERANCE ON (R_{25}) (%)</th>
<th>(B_{25/85})-VALUE ((K))</th>
<th>(B_{25/85})-TOLERANCE (%)</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTCS0402E3214SMT</td>
<td>210</td>
<td>1</td>
<td>3590</td>
<td>± 1</td>
<td>SMD NTC thermistor 0402 Ni barrier</td>
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<td>3590</td>
<td>± 1</td>
<td>SMD NTC thermistor 0603 Ni barrier</td>
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<td>NTCS0805E3104SMT</td>
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<td>1</td>
<td>3590</td>
<td>± 1</td>
<td>SMD NTC thermistor 0805 Ni barrier</td>
</tr>
</tbody>
</table>

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.