

TEMPERATURE SENSOR

Features

- Technology: screen printed, self-healable temperature sensor
- Substrate: different polymeric substrates (from 1 to 250 µm thickness)
- Fully customized sensor layout
- Temperature coeff. of resistivity: $2,5 \times 10^{-3}/^{\circ}\text{C}$
- Sensor powering: AC or DC supply current
- Temperature measurement range: 20 °C to 70 °C

YOUR BENEFIT

- Sensors in single, array or matrix configuration
- Fully customized design for your application
- Unique properties: self-healability of sensors

Smart Sensor Solutions

PERFORMANCE

The resistance change upon temperature change

| Parameter | | Value | Unit |
|----------------------|----------|---------------------------------------|--------------------|
| Resistance (at 25°C) | R_0 | 3.6 ... 207 | Ω * |
| Sensitivity (TCR) | α | $2.5 \times 10^{-3}/^{\circ}\text{C}$ | K^{-1} |
| Current limitation | I | 10 | mA |
| Temperature range | T | 20 ... 70 | $^{\circ}\text{C}$ |

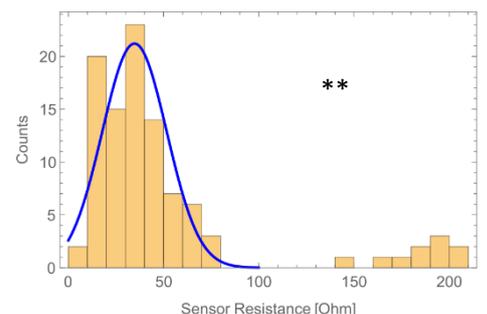
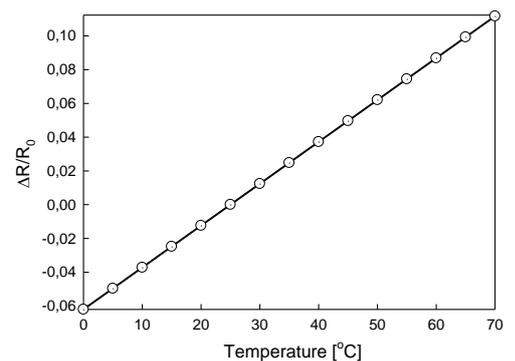
* individual calibration required

** typical (R_0) resistance distribution over 10x10 sensor matrix

$$R(T) = R_0 \cdot (1 + \alpha \cdot \Delta T)$$

R_0 – resistance at reference point ($T_0 = 20^{\circ}\text{C}$)

CHARACTERISTICS



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