

100K OHM NTC Thermistors For Reprap 3D Printer



Description:

NTC thermistor for temperature sensor is one where the thermistor chip is welded with leads by alloy soldering process, then partially treated by glass sealing. The element has a bead form with good stability, small size and rapid response

Widely used in temperature sensors, electronic thermometers and eternity calendar, temperature compensation, various kinds of household appliances as well as Industrial, medical, environmental protection, weather and food processing equipment etc.

Features:

- Fastest response time and high accuracy
- Better Stability ,as chip is welded with leads by alloy soldering process
- High resistance and mechanical strength
- Small size, lightweight and cheap
- Mass production for high accurate element
- Operation temperature range: -50 to +260 degrees Celsius
- Thermal time constant: less than 5s (In still air)
- Usable in high-temperature and high-moisture environments

Applications:

- Temperature sensors
- Electronic thermometers and eternity calendar
- Temperature compensation
- Household appliances (air conditioners, microwave ovens, electric fans, electric heaters)
- Industrial, medical, environmental protection, weather and food processing equipment
- Apparatus coils, integrated circuits, quartz crystal oscillators and thermocouples.
- Medical instrument

Others Characteristics:

- Resistance value: $R (25^{\circ}\text{C}) = 100\text{K} \pm 1\%$
- B Value: $B = 3950 \pm 1\%$ (calculated from resistance value at 25°C and 50C)
- Insulation resistance $50\text{M}\Omega$ or over by DC500V megger (between glass and lead wire)
- Thermal time constant (τ): $\tau \leq 10 \sim 17\text{s}$ (in still air)
- Thermal dissipation constant (δ): $\delta = 1.1 \sim 1.6\text{mW}/^{\circ}\text{C}$ (in still air)
- Operating temperature range: $-50 \sim +260^{\circ}\text{C}$