

INTRODUCING

HIGH PRECISION DISCRETE NTC THERMISTORS AND PROBE ASSEMBLIES

- Take advantage of industry leading precision, accuracy and superior long-term stability for maximum performance
- Broad portfolio enables simple selection and flexibility in design



TE Connectivity (TE) is a leading designer and manufacturer of high precision discrete NTC (negative temperature coefficient) thermistors and probe assemblies. NTCs offer many advantages in temperature sensing including miniature size, superior long-term stability, high accuracy and precision. NTC thermistors are suitable for a wide range of temperature sensing, control and compensation applications from -80°C to +300°C. Our precision discrete NTC thermistors provide solutions for thermal sensing ranging from basic to complex application and environmental conditions. Our NTC sensors offer excellent performance for value. We provide dependable delivery of high-quality sensors with a wide variety of standard parts available in-stock.

KEY BENEFITS

- Take advantage of industry leading precision, accuracy and superior long-term stability for maximum performance in even the most complex applications
- Enable simple selection and flexibility in design with TE's broad product portfolio
- Utilize a knowledgeable team, with decades of engineering proficiency, that will help support suitable product selection for your application
- Achieve excellent value for performance with demonstrated, high-quality sensors

APPLICATIONS

- Catheters, Dialysis, Patient Monitoring
- Satellites, Missiles, Spacecraft, Aircraft, Atmospheric Monitoring, Fire Control Equipment
- Air Conditioning, Air Flow, Mobile and Case Refrigeration, Fire Detectors, Building Management and Boiler Control Systems, Thermal Well Applications
- Clothes Dryers, Coffee Makers, Microwave Ovens, Industrial Ovens, Pool/Spa Control
- Blood/DNA Analysis, Liquid/Air/Gas Flow Sensing, Chemical Analysis, Environmental/Metrological Monitoring, Laboratory Equipment

MARKET INFORMATION

- Amphenol
- Epcos
- Honeywell
- Murata
- Quality
- US Sensors
- TEWA
- Vishay

TYPICAL NTC SPECIFICATIONS

- Sensitivity (Alpha): -4 to -6% per °C
- Operating Temperature Range:
 - -100°C to +150°C (Epoxy Package)
 - -100°C to +250°C (Glass Package)
- Standard Base Values (25°C):
 - 100Ω to 1MΩ (See Datasheets for Std Values)
- Accuracy: ±0.1°C +/-2°C (Typical)
- Long-term Stability: ±0.1°C (or Better)
- Four tolerance categories are available:
 - A = (+/-0.1°C from 0°C to 70°C)
 - B = (+/-0.2°C from 0°C to 70°C)
 - C = (+/-0.5°C from 0°C to 70°C)
 - D = (+/-1.0°C from 0°C to 70°C)

TARGET MARKETS

- Medical
- Aerospace
- Industrial
- Appliance
- Instrumentation

LEARN MORE

[Discrete NTC Thermistors Selection Guide](#)

[NTC Performance in Environments with Radiation Exposure FAQs](#)

[Temperature Sensors—Product Design Selection Application Note](#)

[NTC Thermistor Sensor Performance Application Note](#)

[NTC Thermistor Testing Considerations Application Note](#)

[NTC Thermistors for Gas Flow Measurements Application Note](#)