

Sensors are designed to detect or measure physical phenomena such as light, pressure, or temperature. Electronic sensors convert (or “transduce”) physical stimuli from the environment into electrical signals and trigger an actuating device that performs a specific function like switching on a motor or turning on the lights in your home.

Specialized sensors such as NTC (negative temperature coefficient) thermistors and PTC (Positive temperature coefficient) thermistors, are used to measure ambient temperature using temperature-sensitive resistive elements. These devices can be implemented in IoT, HVAC systems, industrial process control, and more.

Current sense resistors



- Low sensing resistance
- 0402 (1005 metric) to 1210 (3225 metric)
- High power dissipation
- Moisture sensitivity level (MSL): 1

Current sense transformers



- EE4.4 to EE 8.3 SMT package (4.8 x 3.65 x 3.55 mm to 13 x 11 x 7.8 mm)
- Very low DC resistance
- Wide selection of turns ratios
- Sensed current – primary rated up to 15 A
- Frequency range: 50 kHz to 1 MHz
- Moisture sensitivity level (MSL): 1

Current sense shunts



- Ultra low and stable resistance
- 2512 (6432 metric) to 5930 (15076 metric) package
- High power ratings, up to 15 W
- AEC-Q200 compliant
- Moisture sensitivity level (MSL): 1

Diodes and Rectifiers

Fast Recovery Diodes



- Plastic package meets UL 94V-0 flammability standard
- Low reverse leakage current
- Hyperfast recovery time and soft recovery characteristics
- Low recovery loss

TVS Diodes



- AEC-Q101
- Single-line, bi-directional device for placement flexibility
- Low capacitance to meet the needs for high speed single transient voltage protection
- Lead free, halogen free and RoHS compliant for global applications
- Provides ESD protection with fast response time (<1ns) allowing equipment to pass IEC 61000-4-2 level 4 test
- Solid-state silicon-avalanche technology

NTC and PTC thermistors surface mount



- Highly reliable monolithic structure
- Ideal for temperature compensation and sensing applications
- 0402 (1005 metric), 0603 (1608 metric), and 0805 (2012 metric) surface mount package
- Superior heat resistance to reflow soldering and excellent solderability
- Excellent thermal dissipation factor and temperature coefficient
- Moisture sensitivity level (MSL): 1

NTC thermistors through hole



- Faster thermal response
- Temperature sensing, quick response time
- Radial, axial, and ring lug options available
- Epoxy sealed and glass sealed options available
- Non-linear change in resistance vs temperature
- Wide resistance range: 1 kΩ to 470 kΩ