

## LM35 Temperature Sensor

The LM35 is a precision temperature sensor that provides an analog output voltage proportional to the temperature in Celsius.

### **Working Principle:**

The sensor outputs 10 mV per °C rise in temperature. For example, 250 mV corresponds to 25°C. It does not require any external calibration.

### **Types:**

- LM35DZ (TO-92 package)
- LM35DT (TO-220 package)

### **Applications:**

- Environmental monitoring
- Industrial control
- Weather stations
- Arduino projects

### **Advantages:**

- High accuracy
- Linear output
- Easy to interface with ADCs

### **Disadvantages:**

- Analog output can be noisy
- Sensitive to long wires without shielding



Fig: LM35 Sensor