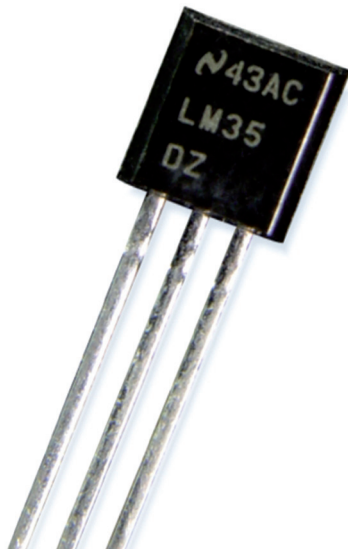


DATA SHEET



Precision temperature sensor LM35DZ

Description



Features

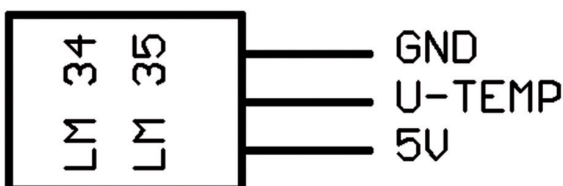
- Calibrated directly in ° Celsius (Centigrade)
- Linear + 10,0 mV/°C scale factor
- 0,6 °C accuracy guaranteeable (at +25 °C)
- Rated for 0...100 °C range
- Suitable for remote applications
- Low cost due to wafer-level trimming
- Operates from 4 to 30 volts
- Less than 60 µA current drain
- Low self-heating, 0,08 °C in still air
- Nonlinearity only ±0,25 °C typical
- Low impedance output, 0,1 W for 1 mA load

Technical data

| Precision temperature sensor LM35DZ | |
|-------------------------------------|---------------------|
| Voltage output | 10 mV / °C |
| Operating range | 0...100 °C |
| Housing | TO92 |
| Accuracy | ±0,6 °C (at +25 °C) |

| Article | Art.No. |
|---------------------------|--------------|
| Temperature sensor LM35DZ | 0365 0003-10 |

Front view



General description

The LM35 series are precision integrated-circuit temperature sensors, whose output voltage is linearly proportional to the Celsius (Centigrade) temperature. The LM35 thus has an advantage over linear temperature sensors calibrated in ° Kelvin, as the user is not required to subtract a large constant voltage from its output to obtain convenient Centigrade scaling. The LM35 does not require any external calibration or trimming to provide typical accuracies of ±0,25 °C at room temperature and ±0,75 °C over a full 0...100 °C temperature range. Low cost is assured by trimming and calibration at the wafer level. The LM35DZ's low output impedance, linear output, and precise inherent calibration make interfacing to readout or control circuitry especially easy. It can be used with single power supplies, or with plus and minus supplies. As it draws only 60 µA from its supply, it has very low self-heating, less than 0.1 °C in still air. The LM35DZ is rated to operate over a 0...100 °C temperature range. The LM35 series is available packaged in the plastic TO-92 transistor package.

For further information, visit our website: www.bb-sensors.com