

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.



### Typical Applications

- HVAC,
- Refrigerator
- Ice house
- Library
- Portable equipment
- Industrial equipment

### Features

- Calibrated directly in ° Celsius (Centigrade)
- Linear + 10.0 mV/°C scale factor
- 0.5°C accuracy guarantee able (at +25°C)
- Rated for full -55° to +150°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 ±1/4°C typical
- Low impedance output, 0.1 W for 1 mA load

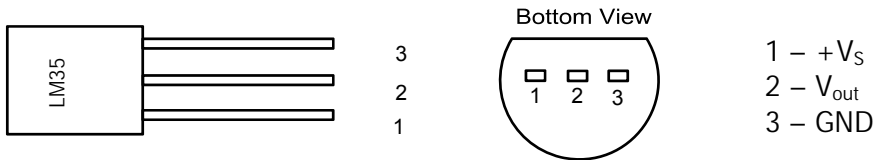
### Technical Data

item		Parameter				
Power Supply		4 - 30V				
Sensor		LM35A	LM35CA	LM35	LM35C	LM35 D
Measurement Range		-55 to +150°C	-40 to +110°C	-55 to +150°C	-40 to +110°C	0 to +100°C
Accuracy(°C)	25°C	±0.5	±0.5	±1	±1	
	T <sub>MAX</sub>	±1.0	±1.5	±1.5	±1.5	
	T <sub>MIN</sub>	±1.0	±1.5	±1.5	±2.0	
Quiescent Current <sup>(1)</sup>		133 µA	116 µA	161 µA	141 µA	
Output Current		10mA				
Sensor Gain		10±0.1 mV/°C		10±0.2 mV/°C		

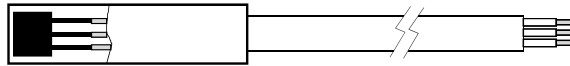
**Note :**

1. Full temperature range

### Dimensions (mm)



### Sensor Assembly



### Ordering Guide

SERIES	SENSOR	OUTPUT	T-SCALING <sup>(1)</sup>	HOUSES <sup>(2)</sup>
FST	(LM35):LM35 Series	(V): Voltage Output		

Note:

- (1) See Technical Data.
- (2) Please contact with sales department