# **GRUPO 4 Centigrade Temperature Sensor**

#### 1 Features

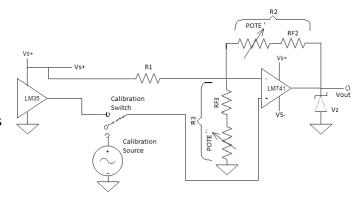
- Calibrated Directly in Celsius (Centigrade)
- Linear + 500-mV/°C Scale Factor
- Rated for 35°C to 45°C Range

#### **2 Applications**

Appliances

## **3 Description**

The device has an advantage over linear temperature sensors calibrated in Kelvin, as the user is not required to subtract a large constant voltage from the output to obtain convenient Centigrade scaling. The device does require an external calibration before



usage, that is done with the adjustment of presets, with a specified method. The device provides measurements with less than  $1^{\circ}$ C of error in a  $35^{\circ}$ C –  $45^{\circ}$ C range. The device ensures a -1V – 6V output voltage range and a 1Watt maximum power output.

## **Device Information:**

Body Size: 5mm x 5mm

#### **4 Specifications**

#### **4.1 Absolute Maximum Ratings**

	MIN	MAX	<u>UNIT</u>
Supply Voltage Vs+	6.5	7.5	V
Supply Voltage Vs-	-9	-2	V
Output Voltage	-1	6	V
Output Current		40	mA

## **4.2 Recommended Operating Conditions**

	MIN	MAX	<u>UNIT</u>
Specified operating temperature	35	45	°C
Supply Voltage Vs+	6.9	7.1	V
Supply Voltage Vs-	-4	-2	V

# **4.3 Electrical Characteristics**

<b>PARAMETER</b>	TEST	MIN	MAX	Average	<u>UNIT</u>
	<b>CONDITIONS</b>				
Accuracy	T in [35;45]		0.7		°C
Sensor gain	T in [35;45]			0.5	V/°C
(average slope)					