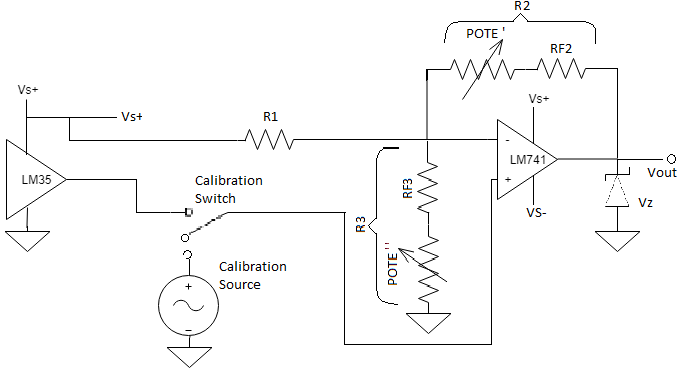
***GRUPO 4 Centigrade Temperature Sensor***

**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°C of error in a 35°C – 45°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** | **UNIT** |
| **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** | **UNIT** |
| **Specified operating temperature** | 35 | 45 | °C |
| **Supply Voltage Vs+** | 6.9 | 7.1 | V |
| **Supply Voltage Vs-** | -4 | -2 | V |

**4.3 Electrical Characteristics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **PARAMETER** | **TEST CONDITIONS** | **MIN** | **MAX** | **Average** | **UNIT** |
| **Accuracy** | **T in [35;45]** |  | 0.7 |  | °C |
| **Sensor gain**  **(average slope)** | **T in [35;45]** |  |  | 0.5 | V/°C |