PHTU21D – Smart and digital humidity and temperature sensor

PRODUCT DESCRIPTION PHTU21D

Since it is in most cases quite troublesome to solder the DFN-(Dual Flats No Leads) housing in reflow process for the testing and the assembly of samples of the HUT21D, therefore the PHTU21D was designed.
It consists of a printed circuit board with a 4-pole pin strip, the HTU21D and a decoupling capacitor between VDD and GND.
Using the plug connection of the relevant pin strip the relative humidity and temperature can be calculated with the help of a micro processor and the appropriate Software.

Figure 1: PHTU21D

Figure 2: PHTU21D Layout
Outer dimension: 10.1mm x 12.94mm

Figure 3: PHTU21D Circuit diagram

<table>
<thead>
<tr>
<th>Sensor</th>
<th>HTU21D</th>
<th>Humidity and temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacitor C1</td>
<td>0603, ±10%, X7R</td>
<td>100nF</td>
</tr>
<tr>
<td>Pin Strip 4-pole</td>
<td>RM 2.54</td>
<td>Single-row, straight</td>
</tr>
</tbody>
</table>

Table 1: Assembly list