HM-T SERIES FSK TX MODULE

GENERAL
HM-T series FSK transmission module is specially designed by Hope Microelectronics Co. for replacing those applications that used ASK technology module already. It used together with HM-R series FSK receiver module. Due to the benefits from FSK technology, the module is robust to interference, and longer working distance can be achieved.

FEATURES
1. HIGHLY INTEGRATED, SMALL SIZE
2. HIGH SENSITIVITY, LOW POWER CONSUMPTION
3. FSK TECHNOLOGY, SUITABLE FOR REPLACING ASK MODULES
4. LESS INTERFERENCE, LONGER WORKING DISTANCE
5. CAN BE USED TO REPLACE ASK MODULE W/O THE NEED OF SOFTWARE CHANGE
6. NO TUNING REQUIRED DURING PRODUCTION

MECHANICAL AND PIN DEFINITION

IF DATA pin is idle for more than 70mS, then the module will enter standby mode automatically.

APPLICATION
Pin to pin replace the old ASK module. Special design can be made for more sophisticated applications.

PARAMETER
1. DC Characteristic

<table>
<thead>
<tr>
<th></th>
<th>min</th>
<th>typical</th>
<th>Max</th>
<th>unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>voltage</td>
<td>2.5</td>
<td>3</td>
<td>5</td>
<td>V</td>
</tr>
<tr>
<td>temperature</td>
<td>-35</td>
<td>80</td>
<td></td>
<td>℃</td>
</tr>
<tr>
<td>Data rate</td>
<td>600</td>
<td>4800</td>
<td>9600</td>
<td>bps</td>
</tr>
</tbody>
</table>

note: data rate can be defined by customer from 300bps~100kbps
2. RF Characteristic

VDD=3.0V T=25°C

<table>
<thead>
<tr>
<th>Model</th>
<th>HM-T433</th>
<th>HM-T868</th>
<th>HM-T915</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>434</td>
<td>869</td>
<td>915</td>
<td>MHz</td>
</tr>
<tr>
<td>Typical output power</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>dBm</td>
</tr>
<tr>
<td>TX current</td>
<td>30</td>
<td>31</td>
<td>31</td>
<td>mA</td>
</tr>
</tbody>
</table>

Note:
1. testing area: 1. open space; 2. antenna is above the ground for 2 meters;
2. if 5V power supplied, even longer distance is possible, however more power consumption will be introduced accordingly.

Naming Rules

HM-T 315

Frequency: 315—315MHz;
TX/RX: T—TX module;
Product Code

Mechanical Dimension
This document may contain preliminary information and is subject to change by Hope Microelectronics without notice. Hope Microelectronics assumes no responsibility or liability for any use of the information contained herein. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Hope Microelectronics or third parties. The products described in this document are not intended for use in implantation or other direct life support applications where malfunction may result in the direct physical harm or injury to persons. NO WARRANTIES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE OFFERED IN THIS DOCUMENT.

©2006, HOPE MICROELECTRONICS CO., LTD. All rights reserved.