Dual-Band WLAN Dual Diplexer
2.4–2.5 GHz and 5–6 GHz

Applications
■ WLAN Systems Including 802.11a,b,g

Features
■ LTCC Technology
■ Dual Diplexer
■ SMD Package, 5.0 x 3.25 x 1.0 mm
■ Dual-Band Diplex Receive, Dual-Band Diplex Transmit

Description
The DD126BC2 is a ceramic dual diplexer for dual-band WLAN systems using LTCC design and manufacturing technology. The part consists of two diplexers, one for dual-band receive and one for dual-band transmit. The design is compatible with the 802.11 WLAN specifications.

Electrical Specifications at 25°C

<table>
<thead>
<tr>
<th>Mode</th>
<th>Parameter</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Passband</td>
<td>2.4</td>
<td>2.45</td>
<td>2.5</td>
<td>GHz</td>
</tr>
<tr>
<td>Low Pass</td>
<td>Insertion Loss</td>
<td>0.50</td>
<td>0.8</td>
<td>dB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attenuation @ 4.8 GHz</td>
<td>30</td>
<td>dB</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return Loss</td>
<td>15</td>
<td>dB</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passband</td>
<td>5.15</td>
<td>5.50</td>
<td>5.85</td>
<td>GHz</td>
</tr>
<tr>
<td>High Pass</td>
<td>Insertion Loss</td>
<td>0.50</td>
<td>0.80</td>
<td>dB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attenuation @ 2.5 GHz</td>
<td>15</td>
<td>dB</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return Loss</td>
<td>15</td>
<td>dB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Integrated Module Technology Inc. Tel 886-3-4091046 Fax 886-3-4090756 Email sales@imt.com.tw
Specifications subject to change without notice. Rev. Feb 04.
Dual-Band WLAN Dual Diplexer 2.4–2.5 GHz and 5–6 GHz

Typical Performance Data

IN 1 to LP1, Wideband

IN 1 to LP1, In Band

IN 1 to HP1, Wideband

IN 1 to HP1, In Band

IN 2 to LP2, Wideband

IN 2 to LP2, In Band

Specifications subject to change without notice. Rev. Feb 04.
Dual-Band WLAN Dual Diplexer 2.4–2.5 GHz and 5–6 GHz

IN 2 to HP2, Wideband

Block Diagram

IN 1
LP1
HP1
HP2
LP2

IN 2

Pin Out (Top View)

Suggested Land Pattern

0.33 PLATED THRU HOLES
0.56 x 0.61 TYP.
0.23 TYP.
Represented by