Description

A general purpose x6 multiplier in the full E-band frequency range.

Features

• Wide band coverage
• Compact outline
• Low power consumption

Applications

• LO chains
• Radar sources
• Communication sources
• Test equipment
• 5G communication

Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Unit</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Frequency</td>
<td>GHz</td>
<td>10</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Output Frequency</td>
<td>GHz</td>
<td>60</td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>Multiplication Factor</td>
<td></td>
<td>6</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Pin</td>
<td>dBm</td>
<td>0</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Pout</td>
<td>dBm</td>
<td>7</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Harmonic Level</td>
<td>dBC</td>
<td>-25</td>
<td>-20</td>
<td>-15</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>V</td>
<td>5.5</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Current (RF off)</td>
<td>mA</td>
<td>580</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Current (RF on)</td>
<td>mA</td>
<td>780</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>Operating temp.(case)</td>
<td>ºC</td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Input Connector</td>
<td></td>
<td></td>
<td></td>
<td>SMA(F)</td>
</tr>
<tr>
<td>Output Connector</td>
<td></td>
<td></td>
<td>WR-12 UG-387/U</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>mm</td>
<td>47x30x21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fig. 1. 6-th harmonic output power vs output frequency

Fig. 2. Input Return Loss vs input frequency

Fig. 3. Harmonic products (Fin = 10-15 GHz)
Notes:

1. Farran Technology reserves the right to change, without notice, the characteristic data and other specifications applied to this product. The product may be subject to Irish export restrictions.