RF AMPLIFIER
MODEL TM9740

Available as:  TM9740, 4 Pin TO-8 (T4)
              TN9740, 4 Pin Surface Mount (SM3)
              FP9740, 4 Pin Flatpack (FP4)
              BX9740, Connectorized Housing (H1)

Features
- Output Power: +21.5 dBm Typical
- Third Order Intercept: +39 dBm Typical
- FET Design
- Operating Temp. 0 ºC to +70 ºC

Specifications

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>TYPICAL (Ta = 25 ºC)</th>
<th>MIN/MAX (Ta = 0 ºC to +70 ºC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>2000-2500 MHz</td>
<td>2000-2500 MHz</td>
</tr>
<tr>
<td>Gain (dB)</td>
<td>11</td>
<td>10 Min.</td>
</tr>
<tr>
<td>Power @ 1 dB Comp. (dBm)</td>
<td>+21.5</td>
<td>+20 Min.</td>
</tr>
<tr>
<td>Reverse Isolation (dB)</td>
<td>-22</td>
<td>-20 Max.</td>
</tr>
<tr>
<td>VSWR In</td>
<td>&lt;1.25:1</td>
<td>1.5:1 Max.</td>
</tr>
<tr>
<td>VSWR Out</td>
<td>&lt;1.5:1</td>
<td>1.5:1 Max.</td>
</tr>
<tr>
<td>Noise Figure (dB)</td>
<td>4.0</td>
<td>5.5 Max.</td>
</tr>
<tr>
<td>Power Vdc mA</td>
<td>+15</td>
<td>+15</td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>105 Max.</td>
</tr>
</tbody>
</table>

Note: Care should always be taken to effectively ground the case of each unit.

Typical Performance Data

Typical Intermodulation Performance at 25 ºC
Second Order Harmonic Intercept Point ...... +57 dBm (Typ.)
Second Order Two Tone Intercept Point ...... +51 dBm (Typ.)
Third Order Two Tone Intercept Point ........ +39 dBm (Typ.)

Maximum Ratings
Ambient Operating Temperature .................. -55ºC to + 100 ºC
Storage Temperature ................................ +62ºC to +125 ºC
Case Temperature .................................. +125 ºC
DC Voltage ......................................... + 18 Volts
Continuous RF Input Power ....................... + 13 dBm
Short Term RF Input Power ....................... 50 Milliwatts (1 Minute Max.)
Maximum Peak Power ............................... 0.5 Watt (3 µsec Max.)

Legend ——— + 25 ºC ——— + 70 ºC ————— 0 ºC