### Features

- **Noise Figure ≤2.0 dB**
- Unconditionally Stable at all temperatures
- Internally Regulated DC Voltage
- 50 Ohm Matched Input/Output
- Field Replaceable SMA connectors
- Excellent Group Delay and Phase Linearity
- 0.009 inches diameter RF In/Out feed through
- Operating Temp. -55 C to 85 C
- 3 Year Warranty

### Options

- Optimized Performance over Selected Bandwidth
- Internally DC Block Input (Output DC Block Standard)
- Hermetically Sealed Package
- Improved Gain Flatness ±1.0 dB Max
- Improved IN and OUT VSWR
- Gain and Phase matching
- Internal D.C. Voltage regulation

### Specifications (23 ºC)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>0.5</td>
<td>6</td>
<td>GHz</td>
</tr>
<tr>
<td>Noise Figure *</td>
<td>≤2.0</td>
<td>dB</td>
<td></td>
</tr>
<tr>
<td>Gain</td>
<td>20</td>
<td>dB</td>
<td>20</td>
</tr>
<tr>
<td>Gain Flatness</td>
<td>±1.2</td>
<td>dB</td>
<td></td>
</tr>
<tr>
<td>P1dB Output Power**</td>
<td>20</td>
<td>dBm</td>
<td></td>
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<tr>
<td>Input VSWR</td>
<td>2.2:1</td>
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<td></td>
</tr>
<tr>
<td>Output VSWR</td>
<td>2.2:1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-55</td>
<td>+85</td>
<td>ºC</td>
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<tr>
<td>Voltage ***</td>
<td>14.5</td>
<td>+15.5</td>
<td>V</td>
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<tr>
<td>Current</td>
<td>170</td>
<td>195</td>
<td>mA</td>
</tr>
</tbody>
</table>

* Noise Sources used for measurement: 0.1- 6 GHz: HP346A, N.F. Uncertainty (approx. 0.15 dB). 0.1 dB due to ENR of HP 346A, and 0.05 dB, due to gain modulation of the unit, caused by the HP 346A source impedance change in the ON and OFF state.

**IMP: UNIT REQUIRES HEAT SINK.
*** Input +15V with Internal D.C. voltage Regulation available

### Performance Graphs

- **S21**
- **Noise Figure (dB)**
- **Power 1dB Compression**
- **Delay (pS)**
- **Input Return Loss (dB)**
- **Output Return Loss (dB)**

### Outline Drawing

### Mounting Drawing

### Drop In Module

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