## Features
- Noise Figure ≤ 5.5 dB
- Unconditionally Stable at all temperatures
- Internally Regulated DC Voltage
- 50 Ohm Matched Input/Output
- Field Replaceable 2.92mm K 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
- Improved IN and OUT VSWR
- Gain and Phase matching
- Lower Noise Figure

## Specifications (23 °C)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>35</td>
<td>-</td>
<td>40</td>
<td>GHz</td>
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<tr>
<td>Noise Figure*</td>
<td>-</td>
<td>5.0</td>
<td>5.5</td>
<td>dB</td>
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<tr>
<td>Gain</td>
<td>25</td>
<td>27</td>
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<td>dB</td>
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<tr>
<td>Gain Flatness (+/-)</td>
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<td>±1.0</td>
<td>±1.5</td>
<td>dB</td>
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<tr>
<td>P1 Output Power</td>
<td>+18</td>
<td>+20</td>
<td>-</td>
<td>dBm</td>
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<tr>
<td>Input VSWR</td>
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<td>-</td>
<td>2.0:1</td>
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<tr>
<td>Output VSWR</td>
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<td>-</td>
<td>2.0:1</td>
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<tr>
<td>Operating Temperature</td>
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<td>-</td>
<td>+85</td>
<td>°C</td>
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<tr>
<td>Non-Operating Temp Range</td>
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<td>-</td>
<td>+125</td>
<td>°C</td>
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<tr>
<td>RF Input Power (no-damage)</td>
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<td>+13</td>
<td>dBm</td>
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<tr>
<td>Humidity (non-condensing)</td>
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<td>95</td>
<td>%</td>
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<td>Voltage</td>
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<td>+15</td>
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<td>Current</td>
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<td>mA</td>
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<td>Input Impedance</td>
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<td>Ohms</td>
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<td>RF Connector</td>
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<tr>
<td>Dimensions</td>
<td>29.9 x 18.7 x 7.6 mm</td>
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</tbody>
</table>

* Noise Source used for measurement from 18GHz to 42 GHz is HP346C-K01.
NF Uncertainty (approx. 0.3 dB). 0.2 dB due to ENR of HP 346C-K01, and 0.1 dB due to the gain modulation of the unit caused by the HP 346C-K01 source impedance change in the ON and OFF state.

**Typical Data**

![S21 Gain vs Frequency](image1)
![Noise Figure vs Frequency](image2)
![P1 Output Power vs Frequency](image3)

![S21 Group Delay vs Frequency](image4)
![S11 Return Loss vs Frequency](image5)
![S22 Return Loss vs Frequency](image6)

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