PMI model number PE2-25-218-20-12-SFF-OPT6G8G is a low noise, medium power, amplifier designed for military & industrial applications. This amplifier is supplied in our standard PE2 housing that can be used as an SMA Connectorized or a surface mount component.

March 13, 2017

Designed By: PMI Engineering

Tested & Reported by:
Harold Holvick
TYPICAL CHARACTERISTICS
ON
PE2-25-218-20-12-SFF-OPT6G8G

Description:
PMI Model Number: PE2-25-218-20-12-SFF-OPT6G8G is a 6 to 8 GHz low
noise amplifier. This amplifier is supplied in our standard PE2 housing that can
be used as a SMA connectorized or a surface mount component.

This model provides the following performance. Data is available upon request.

Specifications:
Frequency Range: 6 to 8 GHz
Gain: 25 dB Min.
Gain Flatness: +/- 1.5 dB Max.
Noise Figure: 4.5 dB Typ, 5.5dB Max.
OP1dB: +23 dBm Min.
VSWR Input/Output: 2.0:1 Max.
DC Voltage Supply: +12 to +15 VDC
DC Current Draw: 350 mA Max.
Connectors In/Out: SMA Female

Features:
Internal Voltage Regulation
Unconditional Stability

Available Options:
Various Package types
Various Connector types
Temperature Compensation
Gain and Phase Matching
MIL-STD-883 Screening Available

Environmental Ratings:
Temperature: -55°C to + 85°C (Operating)
-66°C to +125°C (Storage)
Humidity: MIL-STD-202F, METHOD 103B COND B.
Shock: MIL-STD-202F, METHOD 213B COND B.
Altitude: MIL-STD-202F, METHOD 105C COND B.
Temperature Cycle: MIL-STD-202F, METHOD 107D COND A

Note: The above specifications are subject to change or revision.
<table>
<thead>
<tr>
<th>TEST. ITEM NO</th>
<th>PARAMETERS</th>
<th>SPECIFIED VALUE</th>
<th>TEST RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency Range:</td>
<td>6.0 to 8.0 GHz</td>
<td>6.0 to 8.0 GHz</td>
</tr>
<tr>
<td>2</td>
<td>Gain:</td>
<td>+25dB Min.</td>
<td>27.5 dB (See Plot)</td>
</tr>
<tr>
<td>3</td>
<td>Gain Flatness:</td>
<td>±1.5 dB Max.</td>
<td>±0.26 dB (See Plot)</td>
</tr>
<tr>
<td>4</td>
<td>Noise Figure:</td>
<td>4.5dB Typ. 5.5 Max.</td>
<td>3.2 dB (See Plot)</td>
</tr>
<tr>
<td>5</td>
<td>OP1dB:</td>
<td>+23dBm Min.</td>
<td>≥+23 dBm (See Plot)</td>
</tr>
<tr>
<td>6</td>
<td>VSWR (In/Out):</td>
<td>2.0:1/2.0:1 Max.</td>
<td>1.15:1/1.12:1 (See Plot)</td>
</tr>
<tr>
<td>7</td>
<td>DC Supply:</td>
<td>±12 to +15VDC @ 350 Max.</td>
<td>285 mA</td>
</tr>
</tbody>
</table>

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TYPICAL CHARACTERISTICS ON
PE2-25-218-20-12-SFF-OPT6G8G

Small Signal Gain

Gain 27.5dB (avg)
Flatness +/-0.26dB

Noise Figure vs Frequency

0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0
Noise Figure [dB]

6 6.5 7 7.5 8
Frequency [GHz]

Gain 27.5dB (avg)
Flatness +/-0.26dB

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