Typical Characteristics  
On  
LM-500M8G-2-33DBM-12V  

0.5-8.0GHz State of the Art Active Limiter

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Tested & Reported by:  
Kevin Mason
Typical Characteristics
On
LM-500M8G-2-33DBM-12V

Specifications:

Description:
500MHz to 8 GHz Active Limiter Measuring The Following Specifications:

Environmental Ratings:

-55 to +125 Deg. C (Triples)
MIL-STD-202F, METHOD 103B COND B.
MIL-STD-202F, METHOD 213B COND B.

Frequency Range: 0.5 to 8 GHz

Input Power: 20dBm Min.

Output Power: 20dBm Max.

Max. Input Power: +32dBm Max.

D.C. Supply: +12VDC @ 100mA Typ.

Note: The above specifications are subject to change or revision.

MECHANICAL OUTLINE

FUNCTIONAL BLOCK DIAGRAM

Limiting Amplifier
Fixed Attenuator

Typical Characteristics

On

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## Typical Characteristics

On

LM-500M8G-2-33DBM-12V

<table>
<thead>
<tr>
<th>TEST. ITEM NO</th>
<th>PARAMETERS</th>
<th>SPECIFIED VALUE</th>
<th>TEST RESULTS</th>
<th>QA QC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency Range:</td>
<td>0.5 to 8.0 GHz</td>
<td>0.5 to 8.0 GHz</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Insertion Loss:</td>
<td>2.0dB Max</td>
<td>6.36dB GAIN (See Plot)</td>
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<tr>
<td>3</td>
<td>Max Input Power:</td>
<td>+33dBm CW</td>
<td>Pass</td>
<td></td>
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<tr>
<td>4</td>
<td>Output Leakage Power:</td>
<td>+2.3dBm Max</td>
<td>-0.27dBm</td>
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<tr>
<td>5</td>
<td>VSWR:</td>
<td>2.0:1 Max</td>
<td>Pass (See Plot)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>DC Supply:</td>
<td>+12VDC @ 180mA Typ</td>
<td>138mA</td>
<td></td>
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</tbody>
</table>
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Insertion Loss & Return Loss

![Graph showing insertion loss and return loss characteristics for LM-500M8G-2-33DBM-12V.](image-url)
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Input Power vs. Output Power

LIMITER RESPONSE WITH FREQUENCY

OUTPUT POWER (dBm)

RF INPUT POWER (dBm)

0.5GHz
2GHz
8GHz
P-I-P/O