Monolithic Amplifier

NOTES
1. SPECIFIED PERFORMANCE INCLUDES TEST FIXTURE: 1.5-INCH P.C. BOARD WITH SMA CONNECTORS.
2. TO ENSURE PROPER PERFORMANCE, CONNECT GROUND LEADS TO UPPER P.C. BOARD GROUND, AND INTERCONNECT TOP AND BOTTOM P.C. BOARD GROUND PLANES VERY CLOSE TO CASE LOCATION.
3. MTTF AT 150°C MAX. JUNCTION TEMP: 3 X 10^7 HOURS TYP.
4. THERMAL RESISTANCE, JUNCTION-TO-CASE: 125°C/W TYP.
5. TEMPERATURE RISE, AIR-AMBIENT TO CASE, FOR APPLICATIONS GUIDANCE ONLY: 10°C WHEN SOLDERED TO A 1.5-INCH SQUARE P.C BOARD ON THE FLOOR OF AN ALUMINUM HOUSING. P.C. BOARD HAS PLATED-THROUGH HOLES WITH 0.2-INCH TOTAL PERIPHERY, AT VNA-25 LOCATION.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>FREQUENCY (MHz)</th>
<th>POWER, dBm</th>
<th>DYNAMIC RANGE</th>
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<tbody>
<tr>
<td></td>
<td>MIN. TYP.</td>
<td>RF, dB INPUT</td>
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<td></td>
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<td>3RD ORDER TYP.</td>
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<tr>
<td>500 - 800</td>
<td>+16.5 +18.0</td>
<td>+10</td>
</tr>
<tr>
<td>800 - 1000</td>
<td>+17.5 +18.5</td>
<td>+10</td>
</tr>
<tr>
<td>1000 - 2000</td>
<td>+16.5 +17.5</td>
<td>+10</td>
</tr>
<tr>
<td>2000 - 2500</td>
<td>+15.5 +17.0</td>
<td>+10</td>
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</tbody>
</table>

FEATURES
- LOW-COST PACKAGE: STANDARD SOIC-8
- LOW NOISE FIGURE, 5.5 dB TYP.
- POWER OUTPUT 18.2 dBm TYP. IN CELLULAR BAND
- NO EXTERNAL BLOCKING CAPACITORS REQUIRED
- SEPARATE RF AND DC CONNECTIONS (NO RF CHOKE REQUIRED)
- USEFUL AT +3V TO +6V DC: POWER OUTPUT (1 GHz) 11.9, 18.2 & 19.6 dBm TYP. AT 3.5 & 6V DC

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DATA ON A TYPICAL UNIT

TYPICAL BIASING CONFIGURATION

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