The MDS Series are fixed frequency synthesizers or user programmable frequency synthesizers. The units have internal or external reference. Output frequency is available from 100 MHz to 6 GHz fundamental, which can be expanded up to 24 GHz with external multiplier. The unit is designed for rugged, low cost applications. Fine frequency step size is also available.

FEATURES

- Programmable
- Internal Voltage Regulator
- Phase Lock Indicator Alarm
- Low Phase Noise
- Low Cost

- Fine Resolution / Step Size
- Low Power Consumption
- +10 dBm Output Power
- Available from 100 MHz - 24 GHz
- Compact Design 2.25” x 2.25” x .67”

SPECIFICATIONS

Model Number | MDS-XXX-N-XXXX (see chart below)
--- | ---
Frequency | 100 MHz -14 GHz, up to 26 GHz with X2 or 4
Power Output | +10 dBm
Power Requirements | + 8 VDC min, +15 VDC, 150-250mA, TYP (depends on model)
Reference Input Frequency / Power | 10 - 100 MHz / 0 dBm
Phase Noise | -90 dBC/Hz @ 10 KHz (for 5.8 GHz)
Spurious / Harmonics | -40 dBC / - 15 dBC
Operating Temperature | 0 to 50 °C Standard; -40 to + 85 °C Optional
Size / Connectors | 2.25” x 2.25” x .67” / SMA Female

MODELS

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Reference Type</th>
<th>Frequency</th>
<th>Programming Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDS-300-N-XXXX</td>
<td>Internal Reference</td>
<td>Single XXXX</td>
<td>None</td>
</tr>
<tr>
<td>MDS-301-N-XXYY</td>
<td>Internal Reference</td>
<td>Range XXYY</td>
<td>USB Programmable</td>
</tr>
<tr>
<td>MDS-400-N-XXXX</td>
<td>External Reference</td>
<td>Single XXXX</td>
<td>None</td>
</tr>
<tr>
<td>MDS-401-N-XXYY</td>
<td>External Reference</td>
<td>Range XXYY</td>
<td>USB Programmable</td>
</tr>
</tbody>
</table>

*N: Blank (fundamental)  
*N: 2 or 4 with multiplier

OUTLINE DRAWING