## Applications

- Microwave Radios
- Satellite Communications

## Application Notes

- AN-107: Manual Soldering Technique
- AN-205: Measuring Phase Noise for SFS Series

## Performance Specifications

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>3694</td>
<td>3694</td>
<td></td>
<td>MHz</td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-106</td>
<td></td>
<td></td>
<td>dBc/Hz</td>
</tr>
<tr>
<td>Harmonic Suppression (2nd)</td>
<td>-15</td>
<td></td>
<td></td>
<td>dBc</td>
</tr>
<tr>
<td>Spurious Suppression</td>
<td>-65</td>
<td></td>
<td></td>
<td>dBc</td>
</tr>
<tr>
<td>Power Output</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>dBm</td>
</tr>
<tr>
<td>Load Impedance</td>
<td>50</td>
<td></td>
<td></td>
<td>Ω</td>
</tr>
<tr>
<td>Settling Time</td>
<td>2</td>
<td></td>
<td></td>
<td>mS</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td>85</td>
<td></td>
<td>°C</td>
</tr>
<tr>
<td>Package Style</td>
<td>PLL-V12C</td>
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</tbody>
</table>

## Power Supply Requirements

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Supply Voltage 1: PLL (Vcc, nom)</td>
<td>3.3</td>
<td></td>
<td></td>
<td>Vdc</td>
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<tr>
<td>Supply Voltage 2: VCO (Vcc, nom)</td>
<td>5</td>
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<td></td>
<td>Vdc</td>
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<tr>
<td>Supply Current 1: PLL (Icc, typ)</td>
<td>11</td>
<td></td>
<td></td>
<td>mA</td>
</tr>
<tr>
<td>Supply Current 2: VCO (Icc, typ)</td>
<td>32</td>
<td></td>
<td></td>
<td>mA</td>
</tr>
</tbody>
</table>

## Reference Oscillator Signal

<table>
<thead>
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<th></th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>10</td>
<td></td>
<td></td>
<td>MHz</td>
</tr>
<tr>
<td>Phase Noise @1 kHz Offset</td>
<td>-145</td>
<td></td>
<td></td>
<td>dBc/Hz</td>
</tr>
</tbody>
</table>

## Additional Notes

LFSuffix = RoHS Compliant. All specifications are subject to change without notice.

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Fixed Frequency Synthesizer
Surface Mount Module

**Phase Noise, typ.**

**Footprint**

**Physical Dimensions**

**Phase Noise, typ.**

PHASE NOISE (1 Hz BW, typical)

![Phase Noise Graph](image)

**Footprint**

RECOMMENDED FOOTPRINT
SEVERAL HOLES OF 0.015 ON GND. PLANE ARE RECOMMENDED FOR GOOD GROUNDING.

0.030 MIN. CUTBACK FROM LIVE PADS

0.054 TYP

0.070 TYP

0.500

**Physical Dimensions**

NOTE: ALL DIMENSIONS ARE IN INCHES
TOL: XXX: +/- 0.010

![Physical Dimensions Diagram](image)

**SFS PIN CONFIGURATION**

1. Vcc (VCO)
2. 1 timed
3. RF OUT
4. MUX OUT
5. Vcc (CHIP)
6. RV/C
7. REF IN
8. REST
9. GROUND

**PVA PIN CONFIGURATION**

1. Vcc (VCO)
2. RF OUT
3. MUX OUT
4. Vcc (CHIP)
5. CLOCK
6. DATA
7. ENABLE
8. REF IN
9. REST
10. GROUND

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