

Fixed Frequency Synthesizer Surface Mount Module

Applications

- Satellite Communications
- Microwave Radio
-

Application Notes

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

| Performance Specifications | Min | Typ | Max | Units |
|---------------------------------------|----------|------|------|--------------------|
| Frequency | 1685 | | 1685 | MHz |
| Phase Noise @ 10 kHz offset (1 Hz BW) | | -106 | | dBc/Hz |
| Harmonic Suppression (2nd) | | -25 | | dBc |
| Spurious Suppression | | -80 | | dBc |
| Power Output | 4 | 6 | 8 | dBm |
| Load Impedance | | 50 | | Ω |
| Settling Time | | 1.2 | | mS |
| Operating Temperature Range | -40 | | 85 | $^{\circ}\text{C}$ |
| Package Style | PLL-V12N | | | |

| Power Supply Requirements | Min | Typ | Max | Units |
|----------------------------------|-----|-----|-----|-------|
| Supply Voltage 1: PLL (Vcc, nom) | | 3 | | Vdc |
| Supply Voltage 2: VCO (Vcc, nom) | | 5 | | Vdc |
| Supply Current 1: PLL (Icc, typ) | | 9 | | mA |
| Supply Current 2: VCO (Icc, typ) | | 31 | | mA |

| Reference Oscillator Signal | Min | Typ | Max | Units |
|-----------------------------|-----|------|-----|--------|
| Frequency | | 10 | | MHz |
| Phase Noise @1 kHz Offset | | -145 | | dBc/Hz |

Additional Notes

For Reference oscillator frequency of <20MHz, ensure SR>50V/us. See Analog Devices ADF4106 application note for more details.

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

© Z-Communications, Inc. All Rights Reserved.

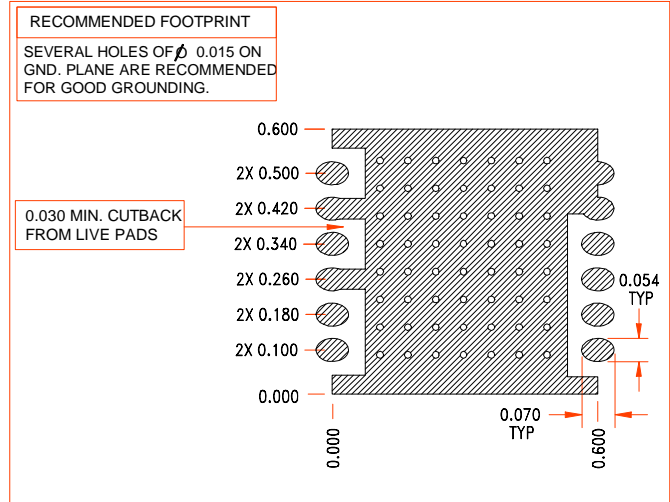
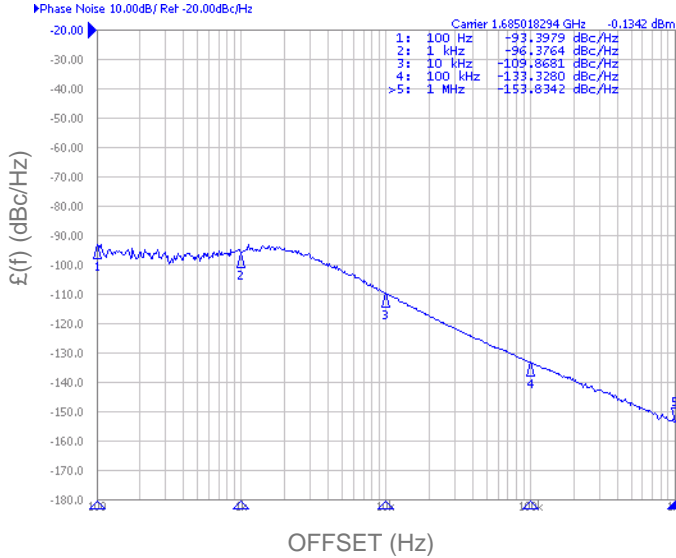
14118 Stowe Drive, Suite B | Poway, CA 92064 | TEL: (858) 621-2700 | FAX: (858) 486-1927

URL: www.zcomm.com | EMAIL: applications@zcomm.com

Phase Noise, typ.

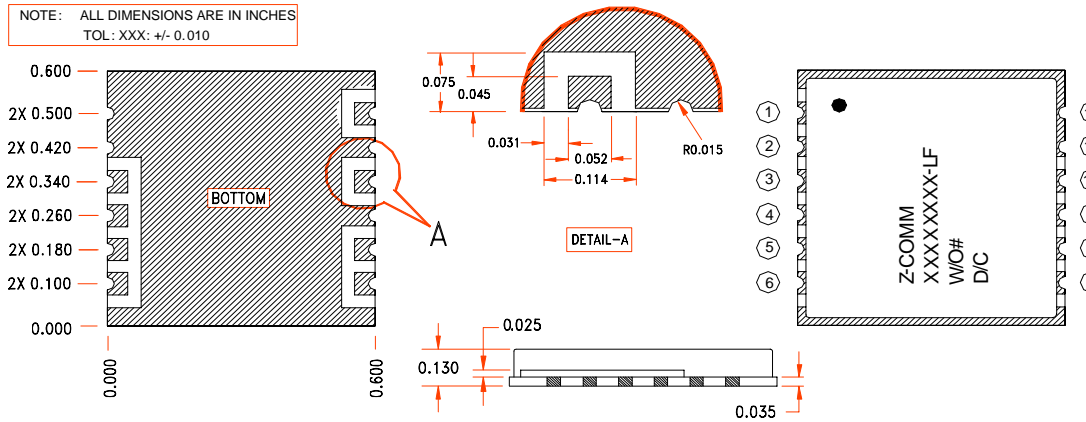
Footprint

PHASE NOISE (1 Hz BW, typical)



Physical Dimensions

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



| SFS PIN CONFIGURATION | |
|-----------------------|-----------|
| 1 | Vcc (VCO) |
| 3 | RF OUT |
| 5 | MUX OUT |
| 6 | Vcc(CHIP) |
| 8 | N/C |
| 10 | REF IN |
| REST | GROUND |

| PVA PIN CONFIGURATION | |
|-----------------------|-----------|
| 1 | Vcc (VCO) |
| 3 | RF OUT |
| 5 | MUX OUT |
| 6 | Vcc(CHIP) |
| 7 | CLOCK |
| 8 | DATA |
| 9 | ENABLE |
| 10 | REF IN |
| REST | GROUND |

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

© Z-Communications, Inc. All Rights Reserved.

URL: www.zcomm.com | EMAIL: applications@zcomm.com