

## Programmable Phase Locked Loop Surface Mount Module

| Applications | Application Notes |
|--------------|-------------------|
|--------------|-------------------|

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| <ul style="list-style-type: none"> <li>Telecommunications</li> <li>Satellite</li> <li>Telemetry</li> </ul> | <ul style="list-style-type: none"> <li>AN-107: Manual Soldering Technique</li> <li>AN-202: Programming Z-COMM PLLs</li> </ul> |
|--|---|

| Performance Specifications            | Min  | Typ    | Max  | Units  |
|---------------------------------------|------|--------|------|--------|
| Frequency                             | 1600 |        | 1700 | MHz    |
| Phase Noise @ 10 kHz offset (1 Hz BW) |      | -98    |      | dBc/Hz |
| Harmonic Suppression (2nd)            |      | -10    |      | dBc    |
| Spurious Suppression                  |      | -65    |      | dBc    |
| Power Output                          | -1   | 1.25   | 3.5  | dBm    |
| Load Impedance                        |      | 50     |      | Ω      |
| Step Size                             |      | 1000   |      | kHz    |
| Phase Detector Frequency              |      | 1000   |      | kHz    |
| Settling Time                         |      | 2      |      | mS     |
| Charge Pump Output Current            |      | 1250   |      | μA     |
| Operating Temperature Range           | -40  |        | 85   | °C     |
| Package Style                         |      | PLL-24 |      |        |

| Power Supply Requirements        | Min | Typ | Max | Units |
|----------------------------------|-----|-----|-----|-------|
| Supply Voltage 1: PLL (Vcc, nom) |     | 5   |     | Vdc   |
| Supply Voltage 2: VCO (Vcc, nom) |     | N/A |     | Vdc   |
| Supply Current 1: PLL (Icc, typ) |     | 40  |     | mA    |
| Supply Current 2: VCO (Icc, typ) |     | N/A |     | mA    |

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

| Additional Notes |
|------------------|
|------------------|

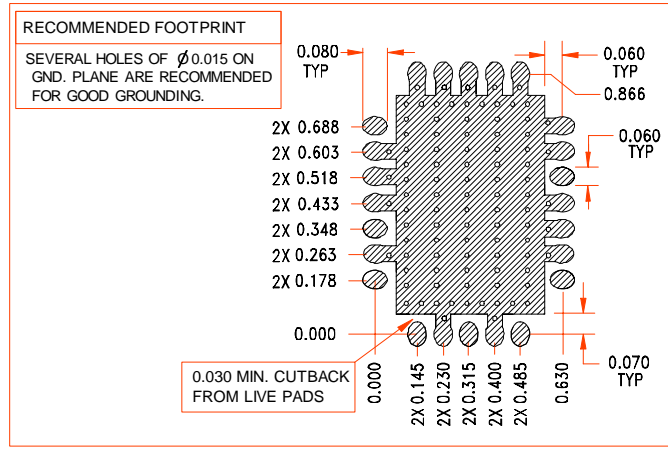
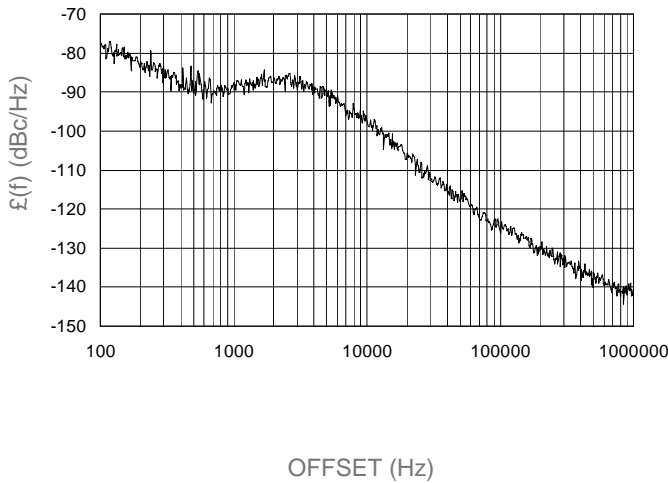
Phase Locked Loop Internal IC: Analog Devices / ADF4106  
 Reference Oscillator Signal: 5 MHz <math>f\_{osc}</math> <math>< 100\text{ MHz}</math>  
 Frequency Synthesizer: Analog Devices - ADF4106

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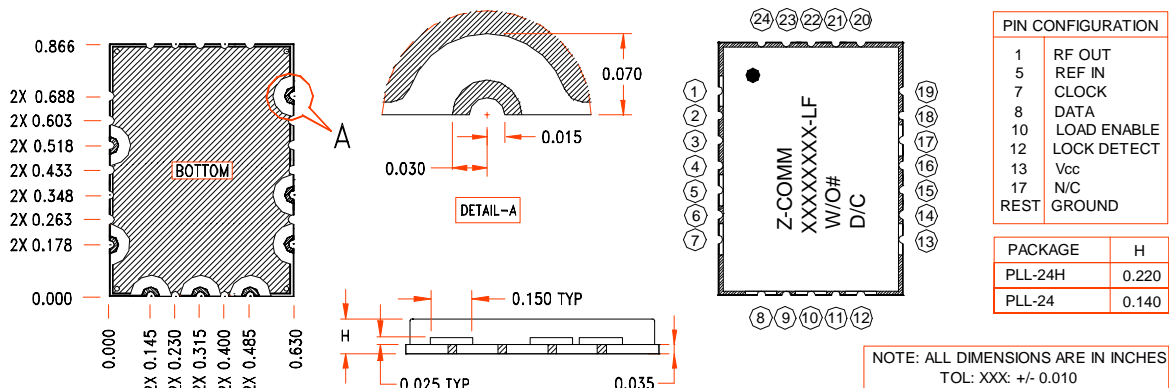
### Phase Noise, typ.

PHASE NOISE (1 Hz BW, typical)

### Footprint



### Physical Dimensions



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

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