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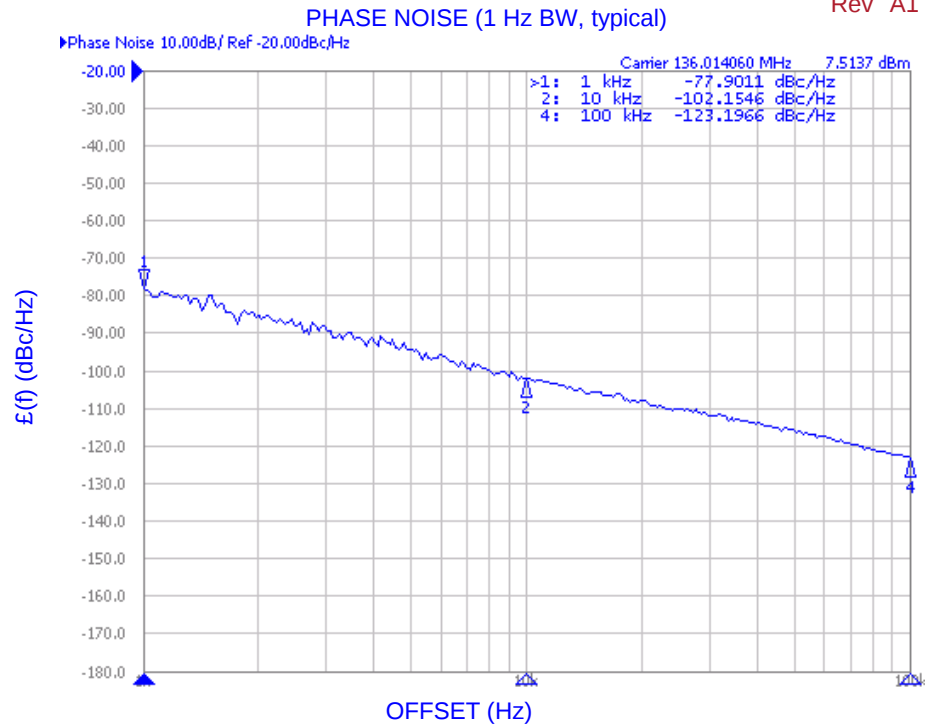
### Voltage-Controlled Oscillator Surface Mount Module

#### Applications

- Portable Radios
- Basestations
- Test Instruments

#### Application Notes

- AN-101: Mounting and Grounding
- AN-102: Output Loading
- AN-107: Manual Soldering



#### Performance Specifications

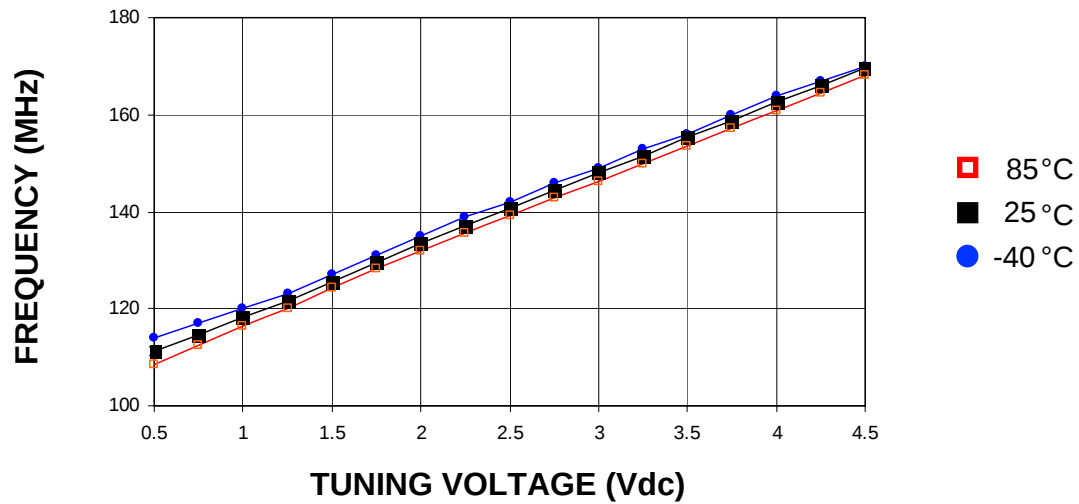
|                                        | Min | Typ   | Max | Units              |
|----------------------------------------|-----|-------|-----|--------------------|
| Oscillation Frequency Range            | 135 |       | 145 | MHz                |
| Phase Noise @ 10 kHz offset (1 Hz BW)  |     | -100  |     | dBc/Hz             |
| Harmonic Suppression (2nd)             |     | -6    |     | dBc                |
| Tuning Voltage                         | 0.5 |       | 4.5 | Vdc                |
| Tuning Sensitivity (avg.)              |     | 14    |     | MHz/V              |
| Power Output                           | 12  | 13.5  | 15  | dBm                |
| Load Impedance                         |     | 50    |     | $\Omega$           |
| Input Capacitance                      |     |       | 500 | pF                 |
| Pushing                                |     |       | 2   | MHz/V              |
| Pulling (14 dB Return Loss, Any Phase) |     |       | 1   | MHz                |
| Operating Temperature Range            | -40 |       | 85  | $^{\circ}\text{C}$ |
| Package Style                          |     | SUB-L |     |                    |

#### Power Supply Requirements

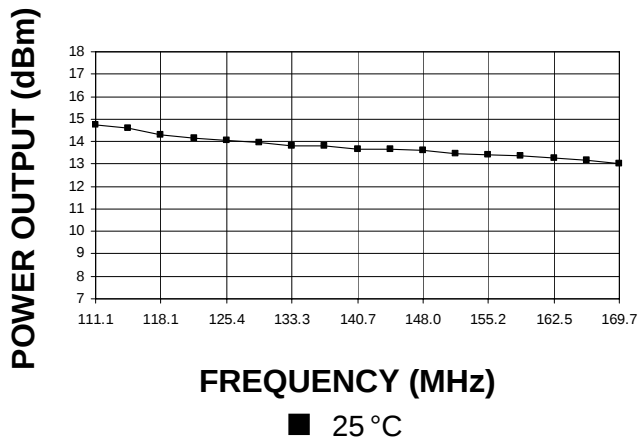
|                            | Min | Typ | Max | Units |
|----------------------------|-----|-----|-----|-------|
| Supply Voltage (Vcc, nom.) |     | 5   |     | Vdc   |
| Supply Current (Icc)       |     | 32  | 36  | mA    |

#### Additional Notes

**Tuning Curve, typ.**



**Power Curve, typ.**

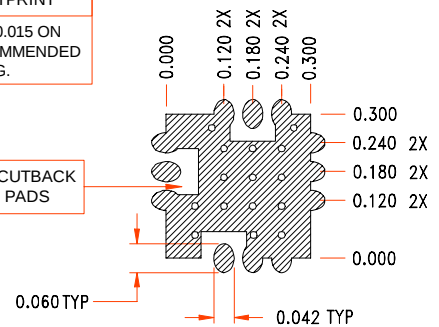


**Footprint**

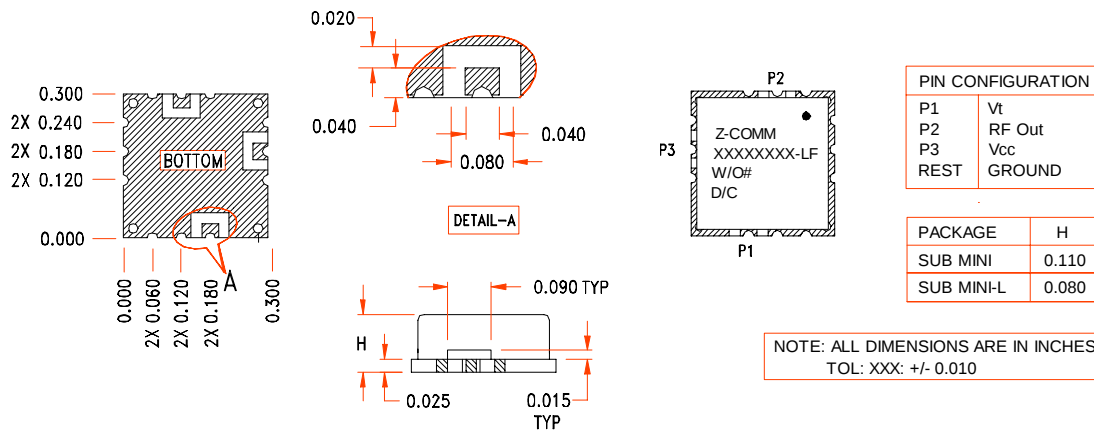
**RECOMMENDED FOOTPRINT**

SEVERAL HOLES OF  $\phi 0.015$  ON GND. PLANE ARE RECOMMENDED FOR GOOD GROUNDING.

0.030 MIN. CUTBACK FROM LIVE PADS



**Physical Dimensions**



**PIN CONFIGURATION**

|      |        |
|------|--------|
| P1   | Vt     |
| P2   | RF Out |
| P3   | Vcc    |
| REST | GROUND |

| PACKAGE    | H     |
|------------|-------|
| SUB MINI   | 0.110 |
| SUB MINI-L | 0.080 |

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

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