

PHASE NOISE (1 Hz BW, typical)

TEL: (858) 621-2700  
 URL: www.zcomm.com  
 EMAIL: applications@zcomm.com

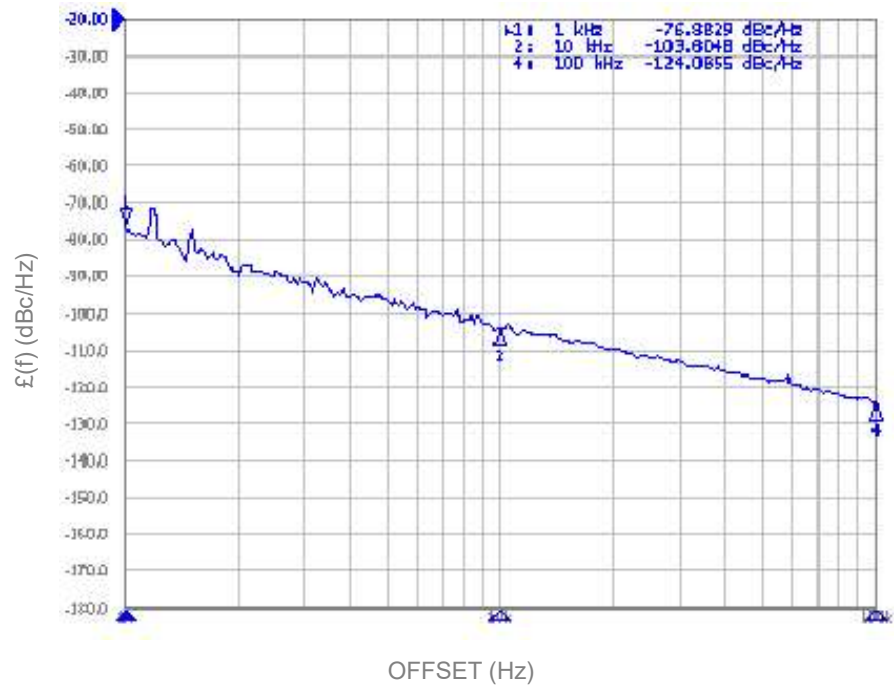
## Voltage-Controlled Oscillator Surface Mount Module

### Applications

Test Equipment  
 Radar Equipment

### Application Notes

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



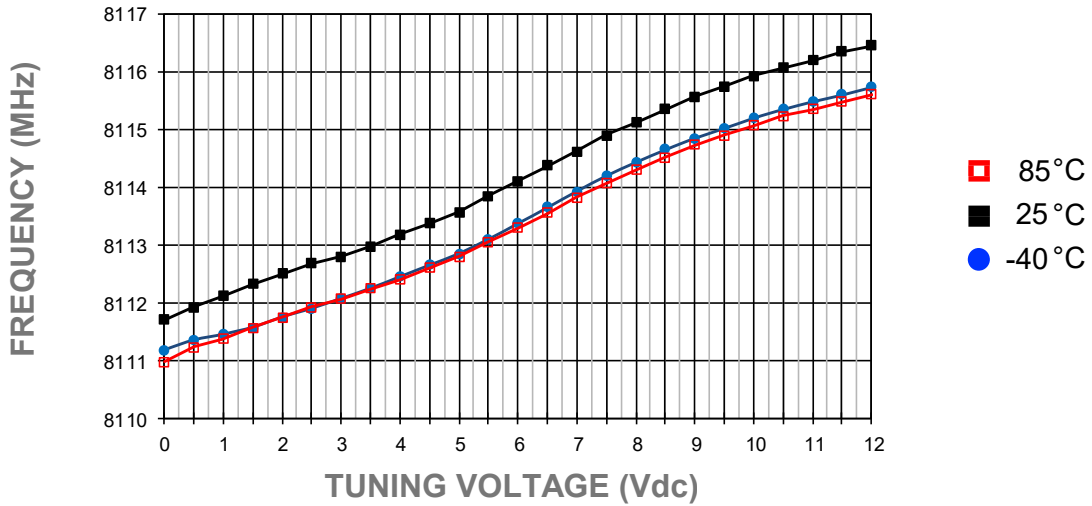
| Performance Specifications            | Min     | Typ  | Max     | Units              |
|---------------------------------------|---------|------|---------|--------------------|
| Oscillation Frequency Range           | 8115.47 |      | 8115.47 | MHz                |
| Phase Noise @ 10 kHz offset (1 Hz BW) |         | -102 |         | dBc/Hz             |
| Harmonic Suppression (2nd)            |         | -25  | -20     | dBc                |
| Tuning Voltage                        | 0       |      | 12      | Vdc                |
| Tuning Sensitivity (avg.)             |         | 0.75 |         | MHz/V              |
| Power Output                          | -3      | 0    | 3       | dBm                |
| Load Impedance                        |         | 50   |         | $\Omega$           |
| Input Capacitance                     |         |      | 50      | pF                 |
| Pushing                               |         |      | 1       | MHz/V              |
| Pulling ( dB Return Loss, Any Phase)  |         |      | 1       | MHz                |
| Operating Temperature Range           | -40     |      | 85      | $^{\circ}\text{C}$ |
| Package Style                         |         | SDRO |         |                    |

| Power Supply Requirements  | Min | Typ | Max | Units |
|----------------------------|-----|-----|-----|-------|
| Supply Voltage (Vcc, nom.) |     | 5   |     | Vdc   |
| Supply Current (Icc)       |     | 25  | 30  | mA    |

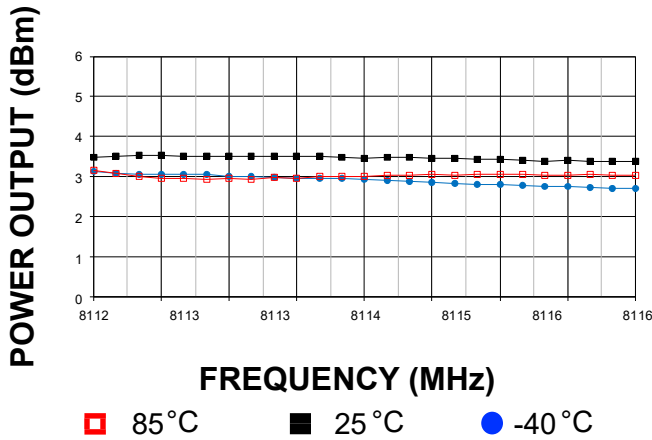
### Additional Notes

It is not recommended to solder the ground plane under the DRO. Only the outside castellations shall be soldered.

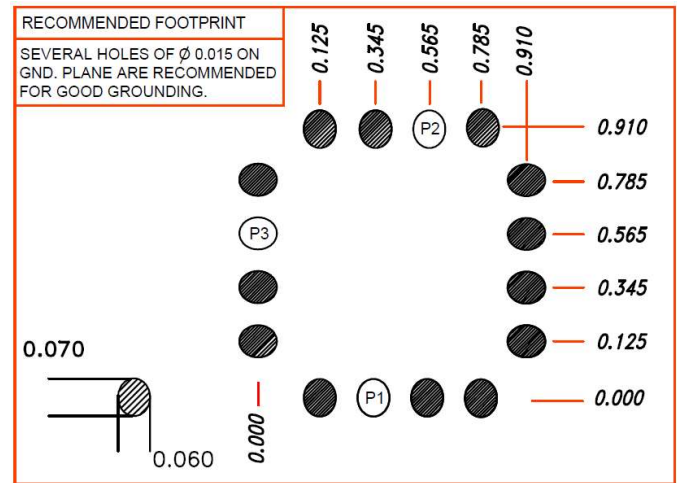
Tuning Curve, typ.



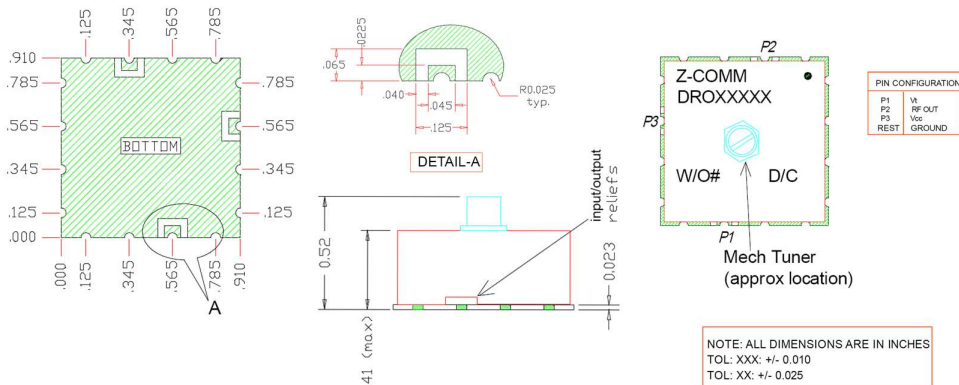
Power Curve, typ.



Footprint



Physical Dimensions



Note: It is not recommended to solder the ground plane under the DRO. Only the outside castellations require soldering for assembly.

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