

14118 Stowe Drive, Suite B  
 Poway, CA 92064  
 TEL: (858) 621-2700 | FAX: (858) 486-1927  
 URL: www.zcomm.com  
 EMAIL: applications@zcomm.com

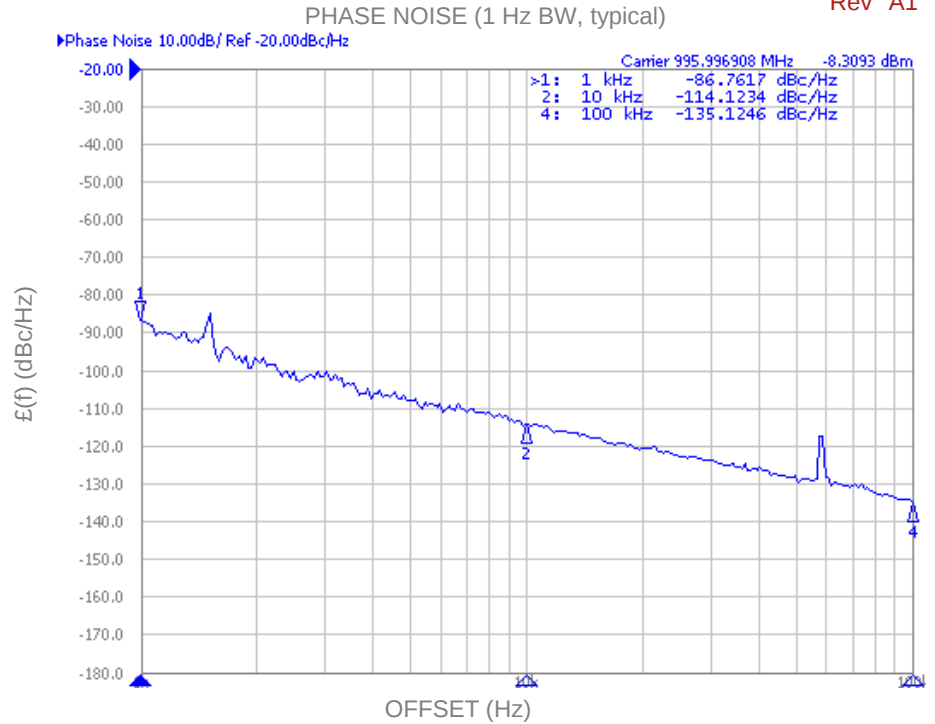
## Voltage-Controlled Oscillator Surface Mount Module

### Applications

- Microwave Radio
- Instrumentation 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            | 993      |      | 996 | MHz                |
| Phase Noise @ 10 kHz offset (1 Hz BW)  |          | -114 |     | dBc/Hz             |
| Harmonic Suppression (2nd)             |          | -20  | -17 | dBc                |
| Tuning Voltage                         | 0.5      |      | 2.5 | Vdc                |
| Tuning Sensitivity (avg.)              |          | 18   |     | MHz/V              |
| Power Output                           | -4.5     | -2   | 0.5 | dBm                |
| Load Impedance                         |          | 50   |     | $\Omega$           |
| Input Capacitance                      |          |      | 150 | pF                 |
| Pushing                                |          |      | 1   | MHz/V              |
| Pulling (12 dB Return Loss, Any Phase) |          |      | 1   | MHz                |
| Operating Temperature Range            | -40      |      | 85  | $^{\circ}\text{C}$ |
| Package Style                          | MINI-14S |      |     |                    |

| Power Supply Requirements  | Min | Typ | Max | Units |
|----------------------------|-----|-----|-----|-------|
| Supply Voltage (Vcc, nom.) |     | 3   |     | Vdc   |
| Supply Current (Icc)       |     | 15  | 18  | mA    |

### Additional Notes

