

PHASE LOCKED OSCILLATOR

MODEL 621519 (1500 MHz)



Features

- Low Phase Noise: -134 dBc/Hz @ 100 kHz
- Low Spurious: -70 dBc Typical
- External Reference
- Environmental Screening Available

Specifications

| CHARACTERISTIC | TYPICAL Ta= 25 °C | MIN/MAX Ta = -20 °C to +70 °C |
|----------------------------------|---|----------------------------------|
| Frequency | 1500 MHz | 1500 MHz |
| Output Power (dBm) | +13 | +12 |
| Variation Over Temperature (dBm) | +/- 0.75 dBm | +/- 1 dBm |
| Spurious (dBc) | -70 | -60 |
| Phase Noise (dB) | -103 dBc/Hz @ 100 Hz -126 dBc/Hz @ 1 kHz -128 dBc/Hz @ 10 kHz -126 dBc/Hz @ 30 kHz -134 dBc/Hz @ 100 kHz -145 dBc/Hz @ 1 MHz | |
| VSWR | 1.5 | 2.0 |
| Harmonics (dBc) | -25 | -20 |
| External Reference | 100 MHz | 1 / 200 MHz |
| Lock Indicator | TTL (High=Locked) | TTL (Low=Unlocked) |
| Storage Temperature | -55 °C | +125 °C |
| Supply Power DC | 15 | 15 |
| mA | 120 | 125 |

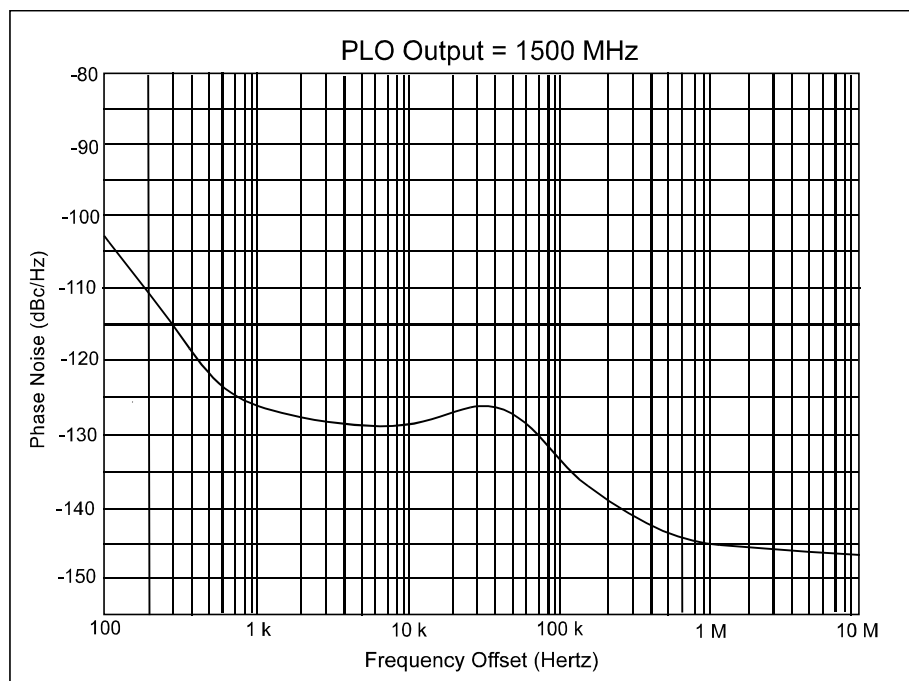
Description

Spectrum Microwave's Series 600 Phase Locked Oscillators use a High "Q" Coaxial Resonator in the resonant circuit. The circuit is lightly loaded to obtain the lowest phase noise possible.

The resonator is soldered to a printed circuit board and well grounded to minimize modulation sidebands during shock and vibration.

Buffer amplifiers are used to provide isolation from load VSWRs; Regulators filter noise on the DC input voltage.

Internal reference models are also available. A lock indicator circuit is provided to signal an out-of-lock condition.



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Outline Drawing

