

# PHASE LOCKED OSCILLATOR

## MODEL 612110 (3000 MHz)



### Features

- Low Phase Noise: -130 dBc/Hz @ 100 KHz
- Low Spurious: -70 dBc Typical
- Internal Reference Design
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -20 °C to +70 °C
Frequency (MHz)	3000	3000
Output Power (dBm)	+10	+9
Variation Over Temperature (dBm)	±0.75	±1
Spurious (dBc)	-70	-60
Phase Noise (dB)	-50 dBc/Hz @ 10 Hz -80 dBc/Hz @ 100 Hz -105 dBc/Hz @ 1 KHz -120 dBc/Hz @ 10 KHz -130 dBc/Hz @ 100 KHz	
VSWR	1.5	2.0
Harmonics (dBc)	-25	-20
Lock Indicator	TTL (High=Locked)	TTL (Low=Unlocked)
Stability (ppm)	±1	±15
Storage Temperature	-55 °C	+125 °C
Supply Power DC	15	15
mA	150	160

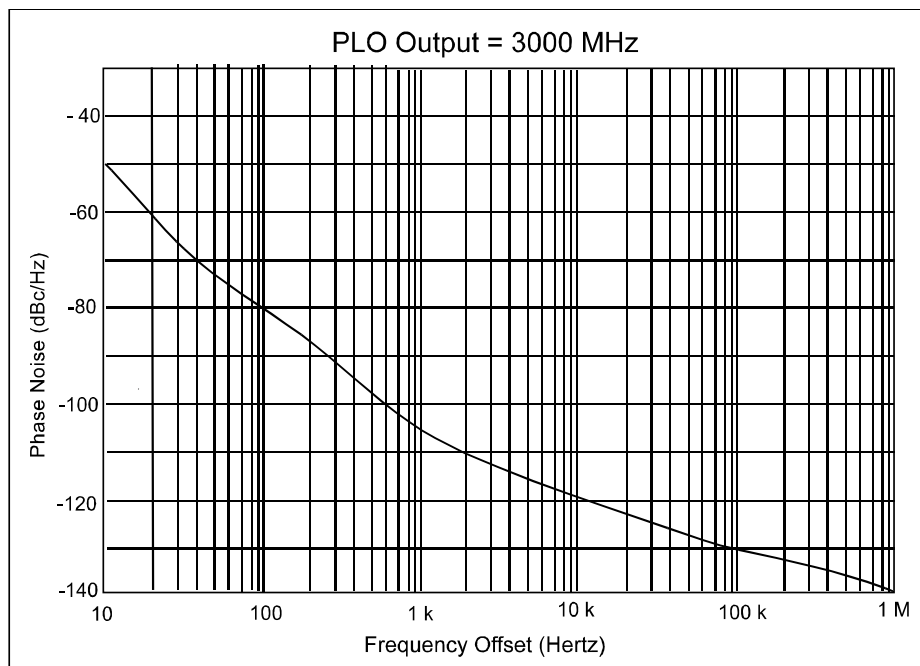
### Description

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

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

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

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



# PHASE LOCKED OSCILLATOR

## MODEL 612110 (3000 MHz)



### Outline Drawing

