

Electrical Specifications

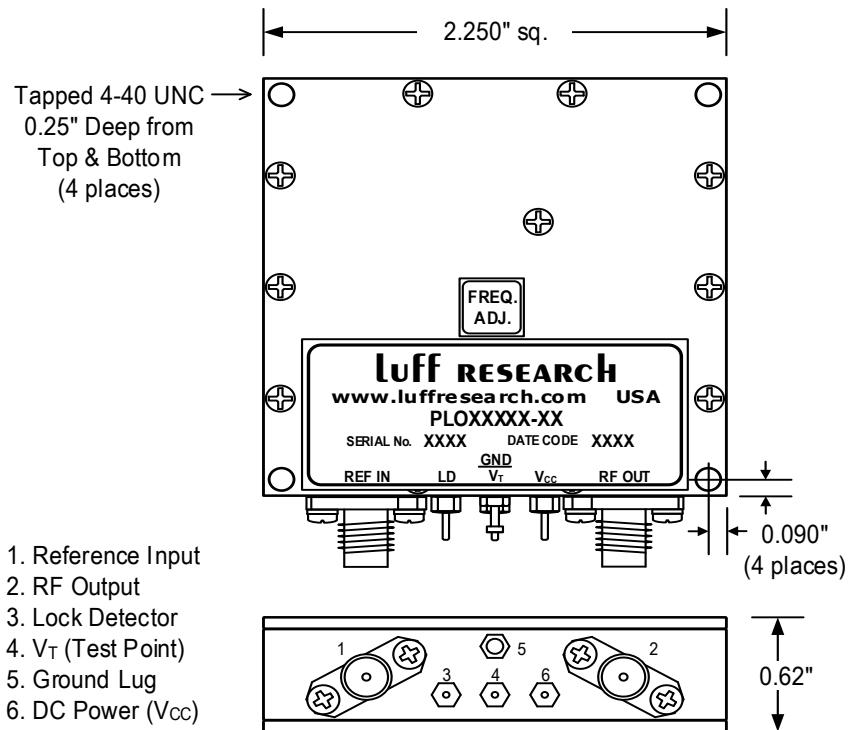
Frequency	100 MHz
Frequency Stability and Accuracy	
External Ref.	Same as input
Internal Ref.	± 0.5 PPM (Over Temp Range)
Aging (after 2 months)	± 1.0 PPM max per year @ 25°C
Adjustability	10 years
Typical Phase noise (dBc/Hz)	
L(100 Hz)	-100
L(1 kHz)	-117
L(10 kHz)	-150
L(100 kHz)	-160
L(1 MHz)	-165
L(10 MHz)	-165
Spurious (max)	-80 dBc
Harmonics (typ.)	-40 dBc
DC Power	
+5.5 VDC ± 0.5 VDC	200 mA
Power Out (min. @ 25°C)	+13 dBm
Power Variation (typ.)	2 dB
Load VSWR (max.)	2:1
Phase-Lock Indicator (LD)	Open Collector (note 5)

Reference Specifications

Input Reference Frequency	10 MHz
Input Level	0 dBm ± 3 dBm

Environment Specifications

Operating Temp. Range (surface)	-0°C to 60°C (note 4)
Storage Temp. Range	-40°C to 85°C
Relative Humidity (non-condensing)	90%RH @ 40°C
Shock	30G / 10 ms
Vibration	4G / 20 Hz - 20 kHz



Notes:

1. This unit features an automatic switch to an internal TCXO reference (±0.5 PPM) when the external reference is removed.
2. The unit's internal TCXO reference may be changed to an OCXO (±50 PPB) upon quote.
3. Phase noise is reference dependent for offsets lower or equal to 100 Hz.
4. Proper heatsinking may be required to keep surface temp. lower than +65°C.
5. TTL Compatible Lock Detect available upon quote.

luff RESEARCH, inc.

luffresearch.com | 20 N. Tyson Ave. Floral Park, NY 11001

Product Data Sheet

Phase Locked Crystal Oscillator

PLOX100-10

April 17, 2018