Electrical Specifications

Frequency	5.8 GHz
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
Phase noise (dBc/Hz)	Typ.
L(100 Hz)	-85
L(1 kHz)	-110
L(10 kHz)	-120
L(100 kHz)	-125
L(1 MHz)	-145
L(10 MHz)	
Spurious (max)	-60 dBc
Harmonics/Sub-Harm. (typ.)	-20 / -20 dBc
DC Power	
+5.5 VDC ± 0.5 VDC	500 mA
Power Out (nom. / min. @ 25°C)	+15 / +13 dBm
Power Variation (typ.)	2 dB
Load VSWR (max.)	2:1
Phase-Lock Indicator (LD)	Open Collector (note 4)

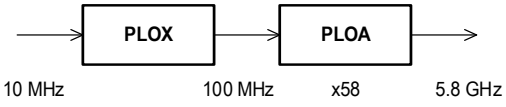
Reference Specifications

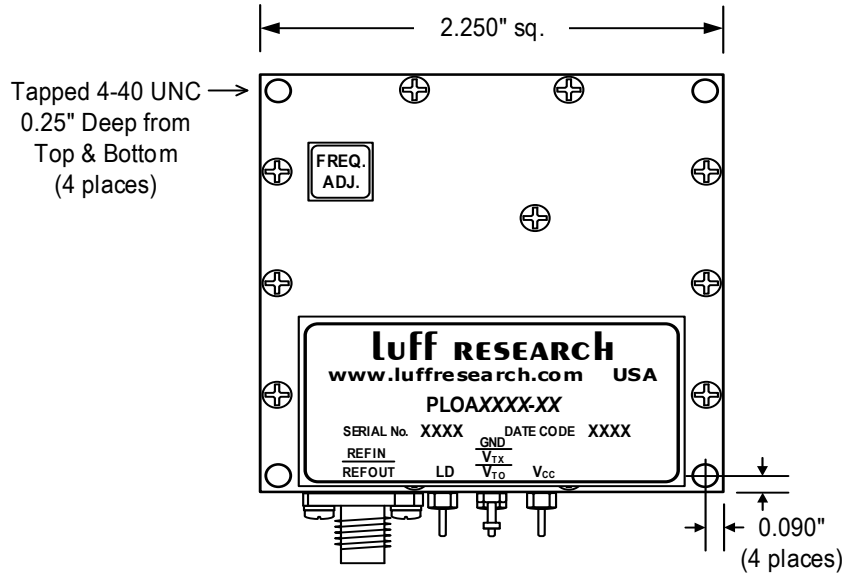
Input Reference Frequency	10 MHz
Input Level	0 dBm ± 3 dBm

Environment Specifications

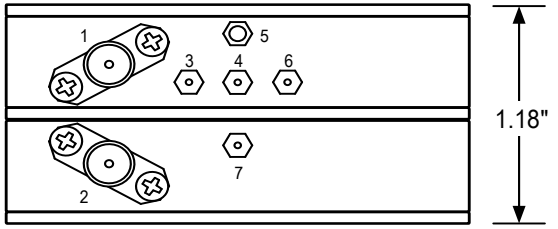
Operating Temp. Range (surface)	-5°C to 65°C (note 3)
Storage Temp. Range	-40°C to 85°C
Relative Humidity (non-condensing)	90%RH @ 40°C
Shock	30G / 10 ms
Vibration	4G / 20 Hz - 20 kHz

Block Diagram





1. Reference Input
2. RF Output
3. Lock Detector
4. V_{TX} (Test Point)
5. Ground Lug
6. DC Power (V_{CC})
7. V_{TO} (Test Point)



Notes:

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

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Product Data Sheet

Analog Phase Locked Ceramic Resonating Oscillator

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