

SPECIFICATIONS

Output Frequency

| | | | |
|---|----------------------------|------|--|
| Frequency: | 100 MHz | | |
| Frequency stability and accuracy | | | |
| External reference | Same as input | | |
| Internal reference | ±0.5 PPM (over temp range) | | |
| Aging (After 2 months): | ±1 PPM max per year @ 25°C | | |
| Adjustability (typ.): | 10 years | | |
| Phase noise in dBc/Hz (note 3): | Typ. | Max. | |
| | L(1 Hz) | -75 | |
| | L(10 Hz) | -100 | |
| | L(100 Hz) | -115 | |
| | L(1 kHz) | -150 | |
| | L(10 kHz) | -165 | |
| | L(100 kHz) | -165 | |
| L(1 MHz) | -165 | | |
| Spurious (max.): | -60 dBc | | |
| Harmonics (typ.): | -40 dBc | | |
| Power out (min.) @ 25°C: | +13 dBm | | |
| Power variation (freq. & temp.) (max.): | 2 dB | | |
| Load VSWR (max.): | 2:1 | | |
| Phase-lock indicator (LD), High = lock: | Open collector (note 4) | | |

Reference Frequency

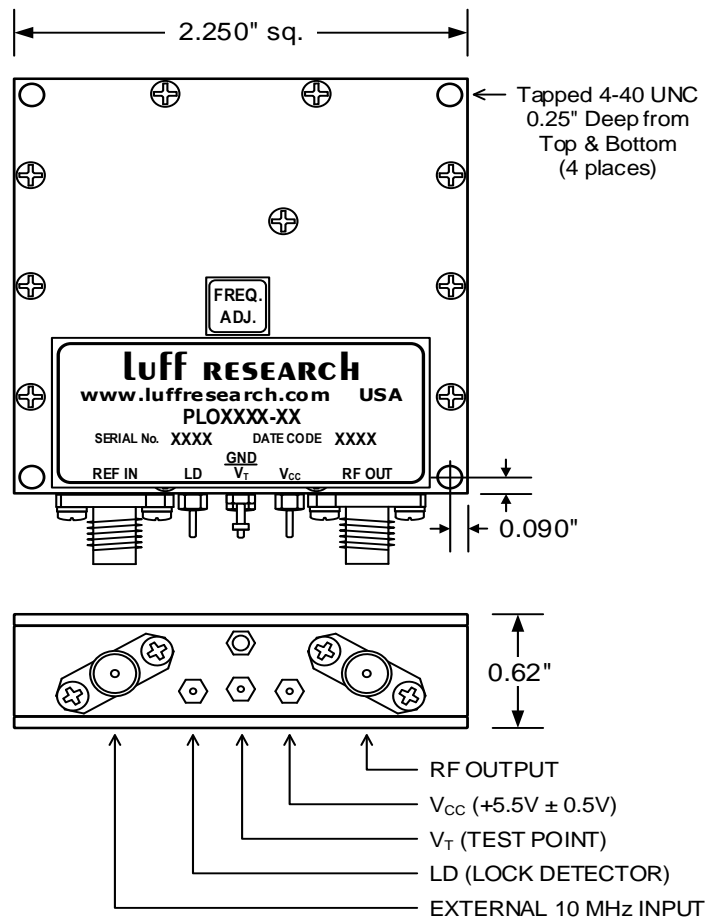
| | |
|----------------------------|-------------|
| Input reference frequency: | 10 MHz |
| Input level: | 0 dBm ±3 dB |

DC Power

| | |
|-------------------|--------|
| +5.5 Vdc ±0.5 Vdc | 200 mA |
|-------------------|--------|

Environment

| | |
|--|----------------------|
| Operating temperature range (surface): | 0°C to 60°C |
| Storage temperature range: | -40°C to 85°C |
| Relative humidity (non-condensing): | 90%RH @ 40° |
| Shock: | 30 G / 10msec |
| Vibration: | 4 G / 20 Hz - 20 kHz |
| Specifications @: | +25°C |



Notes:

1. This phase-locked crystal oscillator has the feature that when the external reference is removed, the internal TCXO reference is automatically switched in as the reference.
2. The internal reference is a TCXO. This unit is also available with an optional OCXO. For the internal OCXO reference, please order model PLOX-xxx-OX. (±50 PPB typ.)
3. Phase noise at offsets of 1 Hz, 10 Hz and 100 Hz is determined by the phase noise of the 10 MHz reference.
4. For TTL compatible lock detector output, add -T at the end of the model number

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PRODUCT DATA SHEET

Phase-Locked Crystal Oscillator

Model: PLOX100-10

Rev. B

11/20/17