

## Electrical Specifications

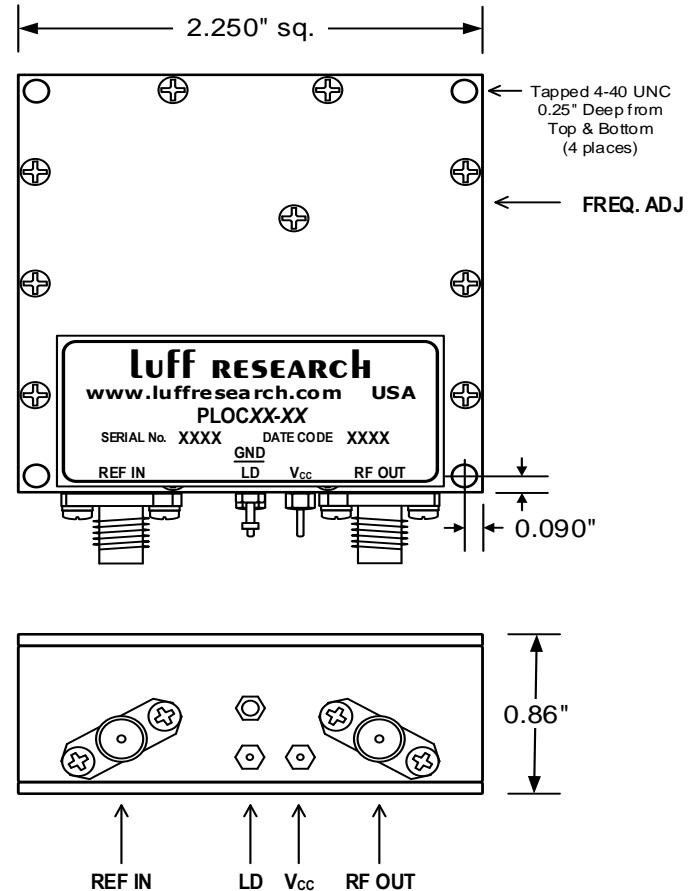
|                                  |  |         |
|----------------------------------|--|---------|
| Frequency                        | 10.0 MHz                                 |         |
| Frequency Stability and Accuracy |  |         |
| External Ref.                    | Same as input                            |         |
| Internal Ref.                    | $\pm 5 \times 10^{-8}$ (Over Temp Range) |         |
| Aging (after 30 days)            | $\pm 5 \times 10^{-10}$ (per day)        |         |
| Adjustability                    | 10 years                                 |         |
| Phase noise (dBc/Hz)             | Typ.                                     |         |
| L(10 Hz)                         | -125                                     |         |
| L(100 Hz)                        | -150                                     |         |
| L(1 kHz)                         | -160                                     |         |
| L(10 kHz)                        | -165                                     |         |
| L(100 kHz)                       | -165                                     |         |
| L(1 MHz)                         | -165                                     |         |
| Spurious (max)                   | -60 dBc                                  |         |
| Harmonics (typ.)                 | -40 dBc                                  |         |
| DC Power                         | Typ.                                     | Warm-up |
| +15 VDC ± 5%                     | 300 mA                                   | 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)    | -20°C to 70°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    |  |



### Notes:

1. The output signal is generated via precision OCXO at 10 MHz phase-locked to a 100 MHz input reference.
2. This unit features an automatic switch to the internal OCXO when the external reference is removed.
3. Proper heatsinking may be required to keep surface temp. lower than +70°C.
4. TTL Compatible Lock Detect available upon quote.

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Product Data Sheet

Frequency Standard Phase Noise Clean-up Phase-Locked Oscillator

PLOC10-10

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