

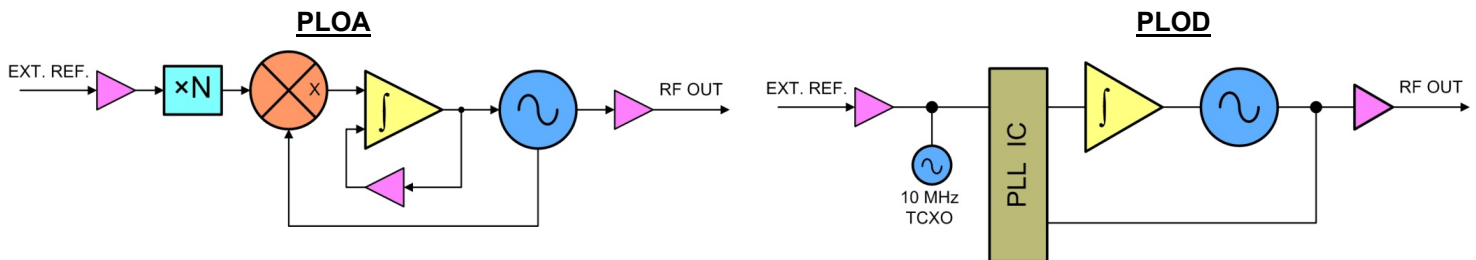
Model PLOA or PLOD: Phase-Locked Coaxial Resonator Oscillator (PLCRO)

• Features

- Output frequencies from 0.5 to 7 GHz
- Very low phase noise
- Full industrial temperature range -45° to $+85^{\circ}\text{C}$
- Internal or external reference frequency
- Small size (2.25" x 2.25" x 0.62")
- Low cost



• Block Diagram



• Description

This is a line of fixed frequency phase-locked oscillators that use a high-Q ceramic resonator oscillator and either analog sampling phase detector techniques (Luff model PLOA) or digital techniques (Luff model PLOD) to establish phase lock to the reference.

The PLOA configuration is used when the best possible spectral quality is needed. The PLOA configuration has the limitation that the output frequency must be an integer factor of the input frequency.

The PLOD has a much more flexible frequency plan, however, the phase noise of the PLOD is not as low as that of the PLOA.

Both units are housed in a rugged low profile assembly and employ our unique manufacturing techniques that result in units of excellent value.

• PLCRO Key Specifications

Output Frequency:	from 0.5 to 7 GHz
Spurious:	-70 dBc
Harmonics (typ.):	-40 dBc
Output Power (min.):	+13 dBm
External Reference:	1 to 200 MHz (0 dBm \pm 3 dB)
Internal Reference:	± 0.5 PPM (-10°C to $+70^{\circ}\text{C}$)
Alarm:	Open Collector or TTL
Power Requirements:	+5.0 Vdc @ 250 mA
Size:	2.25" x 2.25" x 0.62"

