

Features

- Frequency up to 3 GHz
- Low Profile available: 3.9 mm
- Low Phase Noise
- Custom options available

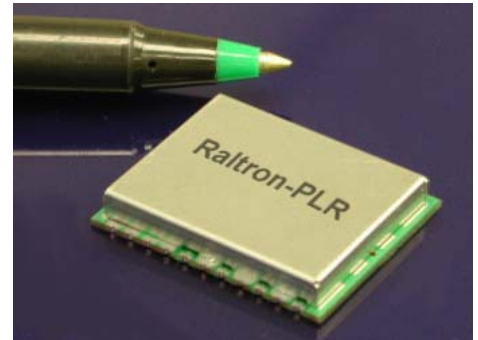
Applications

- Telecommunications
- High Performance Radio
- Base Stations
- Instrumentation

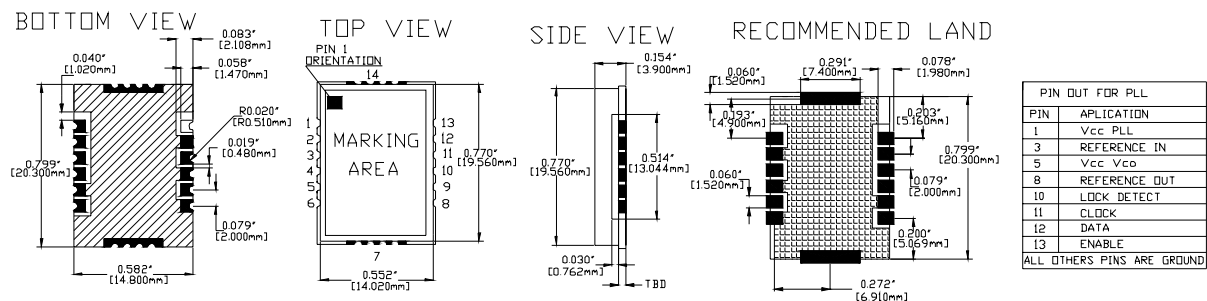
Description

The PLR-type is a RF PLL synthesizer designed to meet the requirements for a variety of applications. Stationary or battery-operated, the unit is available in many different versions from LowNoise, HighPower, LinearTuning, LowProfile or WideBand. Components are selected for high-Q and tight tolerances.

Raltron's PLR-series is developed and manufactured in its ISO900:2k certified facilities. RF-simulation (CAE), automated test-equipment (Agilent VCO/PLL-Analyzer) and statistical process control (SPC) are integral part of R&D and manufacturing – which ensures minimal process variances and a high degree of repeatability.



Mechanical Specification



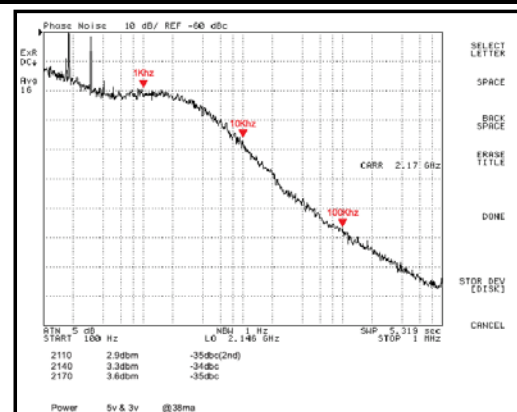
Electrical Specification

PARAMETER	COMMENTS, EXAMPLES	SYMBOL	MIN	TYP	MAX	UNIT
Max Frequency	Currently available in PLR-package	fo	700		3000	MHz
Step Size	Based-on PLL IC used.		10		1000	KHz
Supply Voltage	Battery operated 3.3V and 5V	Vcc	3.3		5	V
Supply Current(VCO/PLL)	Dependent on Frequency and Output Power	Icc			40	mA
Output Power	Output Power Tolerance is typ. $\pm 6\text{dBm} \pm 2\text{ dB}$	Pout	4	+6	+8	dBm
Harmonic Suppression	Dependent on Tuning Range and Freq	a(2fo)		-25		dBc
Input Frequency		fin		10		MHz
Input Frequency Amplitude		fin(A)	0.5		2	Vp-p

General Specification

1. Load Impedance is 50 Ohms.
2. Operating temperature range is typically $-40^{\circ}\text{C} \dots +85^{\circ}\text{C}$.
3. The package is non-hermetic. Substrate is glass-reinforced laminate, the cover is folded nickel-silver.
4. Bypass-capacitors (ceramic) from Vcc to Ground are recommended: $1\text{nF} || 100\text{pF}$.
5. Customized specifications may deviate from this General Specification.
6. Phase-noise performance depends on the individual specification. Phase Noise is strongly dependent on (a) frequency (b) supply voltage and (c) step size.
7. PLL Ics Available; AD4113
LMX2526
8. For other requirements contact factory.

Phase Noise



Typical at 2140MHz, Step Size 200kHz