

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

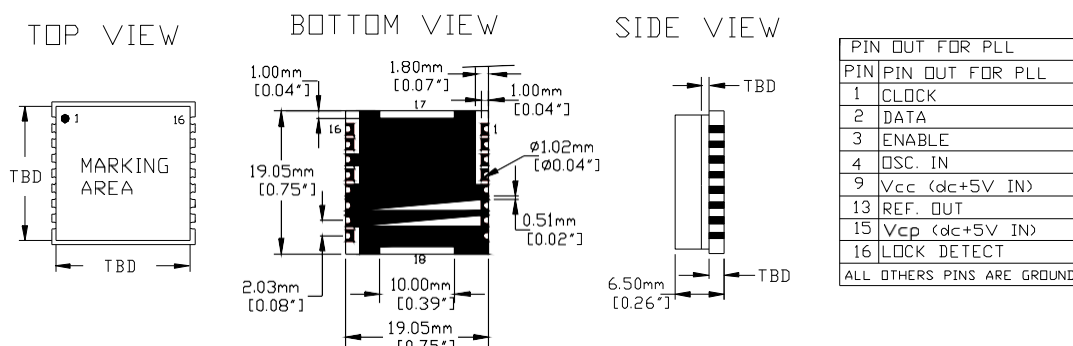
Description

The PLQ-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 PLQ-series is developed and manufactured in its ISO9002:2k 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



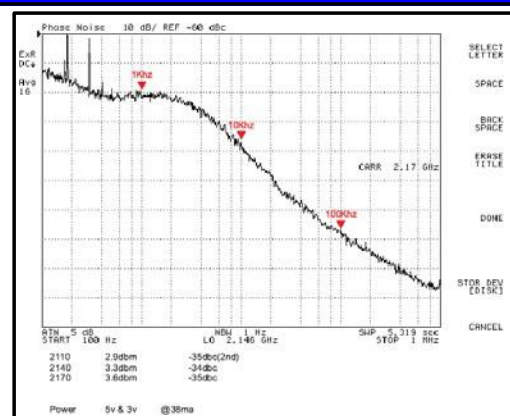
Electrical Specification

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	V _{CC}	3.3		5	V
Supply Current(VCO/PLL)	Dependent on Frequency and Output Power	I _{CC}			40	mA
Output Power	Output Power Tolerance is typ. ±6dBm ± 2 dB	P _{OUT}	4	+6	+8	dBm
Harmonic Suppression	Dependent on Tuning Range and Freq	a(2fo)		-25		dBc
Input Frequency		f _{IN}		10		MHz
Input Frequency Amplitude		f _{IN} (A)	0.5		2	Vp-p

General Specification

1. Load Impedance is 50 Ohms.
2. Operating temperature range is typically -40°C...+85°C.
3. The package is non-hermetic. Substrate is glass-reinforced laminate, the cover is folded nickel-silver.
4. Bypass-capacitors (ceramic) from V_{CC} to Ground are recommended: 1nF||100pF.
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

Raltron Electronics/RAMI Technology USA, LLC, including its affiliates, employees, agents and other persons acting on its behalf (collectively Raltron/RAMI Tech), disclaim any and all liability for any errors or inaccuracies contained in this data sheet. While Raltron/RAMI Tech has made every reasonable effort to ensure the accuracy of all product information, specifications and data contained herein, Raltron/RAMI Tech does not guarantee that the information is accurate, reliable or current. The product information is provided for reference purposes only and is subject to change, correction or revision, at any time without notice. Raltron/RAMI Tech does not assume any liability arising out of an application or use of any product described herein and disclaims any warranties expressed or implied. The user of products in such applications shall assume all risks of such use and will agree to hold Raltron/RAMI Tech, harmless against all damages.