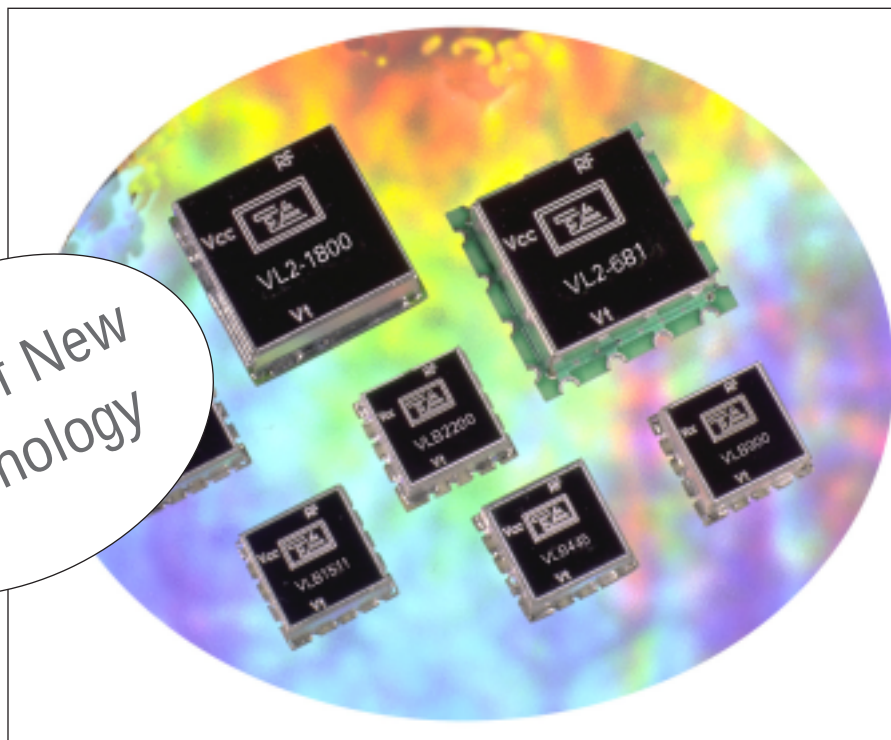


LOW COST VCO'S & PLL'S

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Spirit of New
Technology



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▶ PHASE LOCKED LOOPS - SURFACE MOUNT, LOW COST

Features

- RF Frequency up to 2.5 GHz
- Excellent Phase Noise
- Low Spurious
- 0.75" X 0.75"
- Surface Mount package
- Tape and reel packaging available

Description

This product family is designed for a low cost, medium to high volume market that may be supplied in tape and reel for automated pick and place assembly on surface mount circuit boards.

This PLL includes a VCO, a module prescaler, a phase comparator and a loop filter. The crystal reference source is external.

Applications

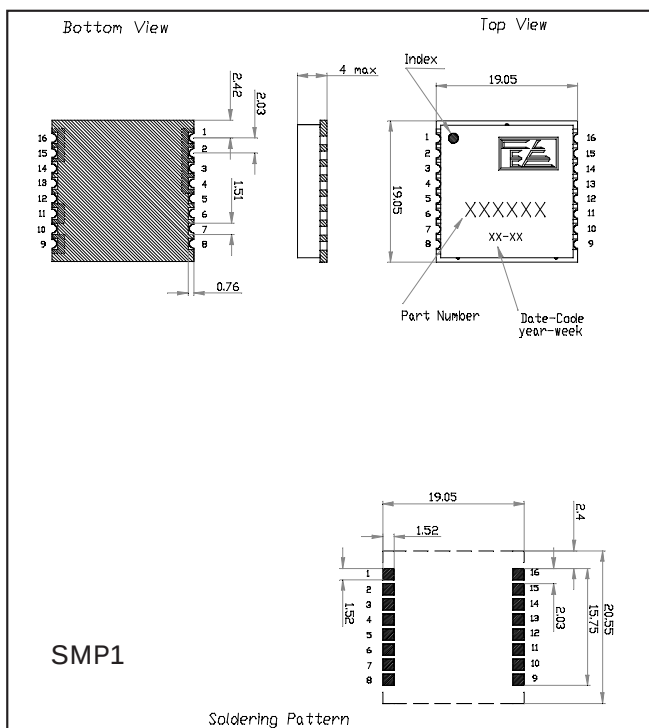
- Wireless Communications systems
- Base Stations
- CATV

Available PCB with software for testing

Pin Out for PLA

Pin	Application	Pin	Application
1	OSC in	9	Vcc (VCO)
2	Enable	11	RF Out
3	Data	15	Vcc (Chip)
4	Clock	16	Lock Detect

Case drawing



Electrical characteristics

- Frequency range: up to 2.5 GHz
- Step size: 30 kHz to 1 MHz
- Reference clock frequency: 40 MHz max.
- Output power (typical): 0 dBm
- Power change over temperature: ± 2 dB
- Phase noise at 10 kHz: -90 dBc/Hz min.
- Harmonics: -15 dBc min.
- Spurious: -65 dBc min.
- Supply voltage VCO: 5 V / 25 mA max.
- Supply voltage chip: 3 V / 15 mA max.
- Operating temperature: -35° C to +85° C



Model N°	Frequency range (MHz)	Step size (KHz)	Power output (dBm)	Phase noise @ 10 KHz (dBc/Hz)	2nd Harmonic (dBc)	Sidebands (dBc)
PLA190F	190	N/A	0	-115	-20	-70
PLA180	180 - 200	30	0	-115	-20	-70
PLA330	330 - 370	30	0	-110	-20	-70
PLA445	445 - 495	30	0	-107	-20	-70
PLA809	809 - 845	30	0	-109	-20	-70
PLA902	902 - 928	200	3	-105	-15	-70
PLA925	925 - 960	30	0	-108	-20	-70
PLA934	934 - 960	30	3	-105	-15	-70
PLA1075	1075 - 1115	30	0	-107	-20	-70
PLA1650	1600 - 1700	200	0	-93	-15	-65
PLA1800	1800 - 2000	200	0	-92	-15	-70
PLA1900	1900 - 2000	200	0	-92	-15	-70
PLA2400	2400 - 2500	1 M	0	-90	-15	-65

Evaluation board is available including board, connectors and the software to drive and test the PLL.

* Other frequencies or fixed frequency on request