

## Dynamic Engineers Inc.

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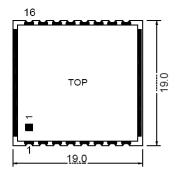
## **Features and Benefits**

Frequency Range: 1990-2050MHz Supply Voltage: 5.0V Current: 35mA Max. 3 wire serial Fractional PLL Output power: +2.0dBm Max. Phase noise: -109dBc/Hz@10KHz Operating temperature: -40°C--+85°C Size: 19.0x19.0x6mm Package type: SMD

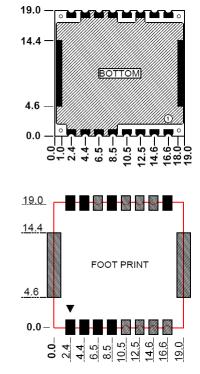
## **Typical Applications**

SATCOM radio link Point-to-Point radio Receiver MMDS Test Equipment WiMAX Radar

## **Mechanical Drawing & Pin Connections**







PLL1919BQ-LN1-1990MHz-2050MHz-A 1990-2050MHz SMD Phase Locked Loop (PLL) Synthesizer

#### Drawing No:

MD240074-1

#### Pin Connections:

Pin	Function		
1	CLK		
2	DATA		
3	LE		
4	Ref. IN		
5-8	GND		
9	VCC(VCO)		
10-12	GND		
13	RF Out		
14	GND		
15	Vcp(PLL)		
16	Lock Detect		
17&18	GND		

Unit in mm 1mm = 0.0394 inches

Dynamic Engineers reserves the right to make changes to the company datasheet(s) along with other information contained inside; such as data tables and graphs without notification to potential customers who may have earlier revisions in their possession.



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## **Specifications**

Parameter		Units	Min.	Typical	Max.
Operating Frequency Range		MHz	1990		2050
Output Power		dBm	-2.0	0.0	+2.0
Step Size		KHz		50	
Settling Time		msec		10	30
Output Impedance		Ω		50	
Phase Noise	@1kHz offset	dBc / Hz		-70	-65
Phase Noise	@10kHz offset	dBc / Hz		-109	-104
Phase Noise	@100kHz offset	dBc / Hz		-134	-129
Phase Noise	@1MHz offset	dBc / Hz		-153	-148
2nd Harmonic Suppression		dBc		-23	-20
Sideband Spurious Suppression		dBc			-65
Reference (input frequency)		MHz	5		100
Reference (input level)		dBm	-5		+5
VCO Power Supply (Vcc) Voltage		Vdc		5	
VCO Power Supply (Vcc) Current		mA		25	35
PLL Power Supply (Vcp) Voltage		Vdc		5	
PLL Power Supply (Vcp) Current		mA		5	10
Operating Temperature Range		С°	-40		+85