

## Dynamic Engineers Inc.

Website: <a href="www.DynamicEngineers.com">www.DynamicEngineers.com</a> Email: <a href="mailto:lnguiry@DynamicEngineers.com">lnguiry@DynamicEngineers.com</a> PLL1919BQ-LN1-1990MHz-2070MHz-A 1990-2070MHz SMD Phase Locked Loop (PLL) Synthesizer

#### **Features and Benefits**

Frequency Range: 1990-2070MHz

Supply Voltage: 5.0V Current: 40mA Max. 3 wire serial Fractional PLL Output power: +2.0dBm Max.

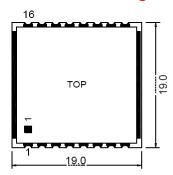
Phase noise: -107dBc/Hz@10KHz
Operating temperature: -40°C--+85°C

Size: 19.0x19.0x6mm Package type: SMD

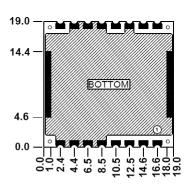
#### **Typical Applications**

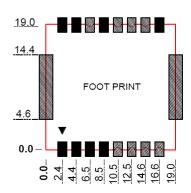
SATCOM radio link Point-to-Point radio Receiver MMDS Test Equipment WiMAX Radar

#### **Mechanical Drawing & Pin Connections**









**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



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### **Specifications**

Parameter		Units	Min.	Typical	Max.
Operating Frequency Range		MHz	1990		2070
Output Power		dBm	-2.0	0.0	+2.0
Step Size		KHz		10	
Settling Time		msec		10	30
Output Impedance		Ω		50	
Phase Noise	@1kHz offset	dBc / Hz		-74	-69
Phase Noise	@10kHz offset	dBc / Hz		-107	-102
Phase Noise	@100kHz offset	dBc / Hz		-129	-124
Phase Noise	@1MHz offset	dBc / Hz		-149	-144
2nd Harmonic Suppression		dBc		-42	-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		29	40
PLL Power Supply (Vcp) Voltage		Vdc		5	
PLL Power Supply (Vcp) Current		mA		5	10
Operating Temperature Range		°C	-40		+85