

Dynamic Engineers Inc.

Website: www.DynamicEngineers.com Email: lnguiry@DynamicEngineers.com PLL1919BQ-SS-1870MHz-1940MHz-A 1870-1940MHz SMD Phase Locked Loop (PLL) Synthesizer

Features and Benefits

Frequency Range: 1870-1940MHz

Supply Voltage: 5.0V Current: 30mA Max. 3 wire serial integer PLL Output power: +9.0dBm Max. Phase noise: -100dBc/Hz@10KHz Operating temperature: -40°C--+85°C

Size: 19.0x19.0x5.8mm Package type: SMD

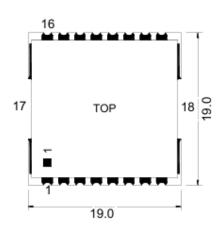
Typical Applications

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

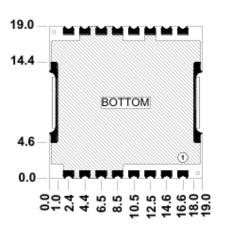
Mechanical Drawing & Pin Connections

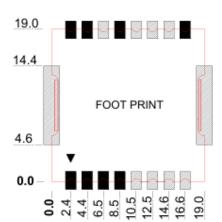
Drawing No:

MD240072-1









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	5 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	1870		1940
Output Power		dBm	+5.0	+7.0	+9.0
Step Size		KHz		50	
Settling Time		msec		10	30
Output Impedance		Ω		50	
Phase Noise	@1kHz offset	dBc / Hz		-67	-62
Phase Noise	@10kHz offset	dBc / Hz		-100	-95
Phase Noise	@100kHz offset	dBc / Hz		-125	-120
Phase Noise	@1MHz offset	dBc / Hz		-143	-138
2nd Harmonic Suppression		dBc		-35	-20
Sideband Spurious Suppression		dBc			-80
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		23	30
PLL Power Supply (Vcp) Voltage		Vdc		5	
PLL Power Supply (Vcp) Current		mA		5	10
Operating Temperature Range		°C	-40		+85