

Dynamic Engineers Inc.

Website: <u>www.DynamicEngineers.com</u> Email: <u>Inquiry@DynamicEngineers.com</u>

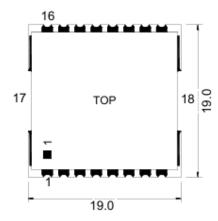
Features and Benefits

Frequency Range: 1780-1840MHz Supply Voltage: 5.0V Current: 25mA Max. 3 wire serial integer PLL Output power: +2.0dBm Max. Phase noise: -102dBc/Hz@10KHz Operating temperature: -40°C--+85°C Size: 19.0x19.0x5.8mm Package type: SMD

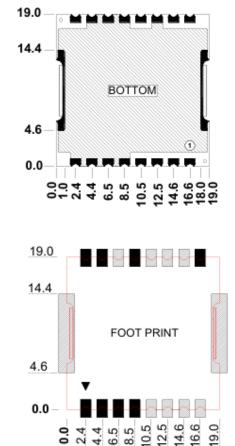
Typical Applications

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

Mechanical Drawing & Pin Connections







PLL1919BQ-SS-1780MHz-1840MHz-A 1780-1840MHz SMD Phase Locked Loop (PLL) Synthesizer

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 RF Out 13 14 GND Vcp(PLL) 15 16 Lock Detect 17&18 GND

Unit in mm 1mm = 0.0394 inches

Dynamic Engineers, Inc.

Rev. 1

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



Dynamic Engineers Inc.

Website: <u>www.DynamicEngineers.com</u> Email: <u>Inquiry@DynamicEngineers.com</u>

PLL1919BQ-SS-1780MHz-1840MHz-A 1780-1840MHz SMD Phase Locked Loop (PLL) Synthesizer

Specifications

Parameter		Units	Min.	Typical	Max.
Operating Frequency Range		MHz	1780		1840
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		-102	-97
Phase Noise	@100kHz offset	dBc / Hz		-124	-119
Phase Noise	@1MHz offset	dBc / Hz		-143	-138
2nd Harmonic Suppression		dBc		-23	-15
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		18	25
PLL Power Supply (Vcp) Voltage		Vdc		5	
PLL Power Supply (Vcp) Current		mA		5	10
Operating Temperature Range		C°	-40		+85