

## Dynamic Engineers Inc.

Website: <u>www.DynamicEngineers.com</u> Email: <u>Inquiry@DynamicEngineers.com</u> PLL1212BQ-IT-2010MHz-2030MHz-A 2010-2030MHz SMD Phase Locked Loop (PLL) Synthesizer

#### **Features and Benefits**

Frequency Range: 2010-2030MHz

Supply Voltage: 5.0V Current: 30mA Max. 3 wire serial integer PLL Output power: +11.0dBm Max. Phase noise: -100dBc/Hz@10KHz Operating temperature: -40°C--+85°C

Size: 12.7x12.7x2.9mm Package type: SMD

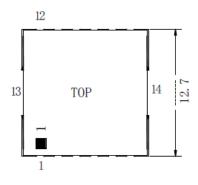
### **Typical Applications**

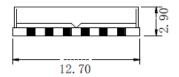
SATCOM radio link Point-to-Point radio Receiver MMDS Test Equipment WiMAX Radar

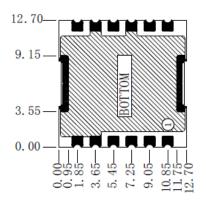
## **Mechanical Drawing & Pin Connections**

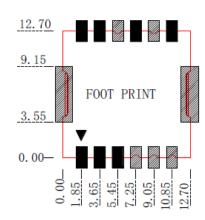
**Drawing No:** 

MD240075-1









Pin Connections:

Pin	Function			
1	CLK			
2	DATA			
3	LE			
<b>4-</b> 6	GND			
7	VCC(VCO)			
8	GND			
9	RF Out			
10	GND			
11	Lock Detect			
12	Vcp(PLL)			
13&14	GND			

Unit in mm 1mm = 0.0394 inches



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# **Specifications**

Parameter		Units	Min.	Typical	Max.
Operating Frequency Range		MHz	2010		2030
Output Power		dBm	+7.0	+9.0	+11.0
Step Size		KHz		50	
Settling Time		msec		10	30
Output Impedance		Ω		50	
Phase Noise	@1kHz offset	dBc / Hz		-72	-67
Phase Noise	@10kHz offset	dBc / Hz		-100	-95
Phase Noise	@100kHz offset	dBc / Hz		-121	-116
Phase Noise	@1MHz offset	dBc / Hz		-141	-136
2nd Harmonic Suppression		dBc		-38	-20
Sideband Spurious Suppression		dBc			-75
Reference (frequency)		MHz		13	
Reference (Freq. Stability)		ppm			2.5
VCO Power Supply (Vcc) Voltage		Vdc		5	
VCO Power Supply (Vcc) Current		mA		22	30
PLL Power Supply (Vcp) Voltage		Vdc		5	
PLL Power Supply (Vcp) Current		mA		5	10
Operating Temperature Range		°C	-40		+85