

## Dynamic Engineers Inc.

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

## **Features and Benefits**

Frequency Range: 941.5-961.5MHz Supply Voltage: 5.0V Current: 30mA Max. 3 wire serial integer PLL Output power: +7.0dBm Max. Phase noise: -105dBc/Hz@10KHz Operating temperature: -40°C--+85°C Size: 12.7x12.7x2.9mm Package type: SMD

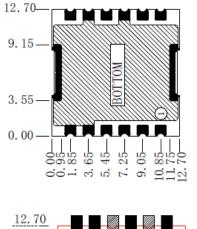
## **Typical Applications**

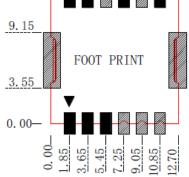
Base station Cable TV Satellite Communications UHF radio link

## **Mechanical Drawing & Pin Connections**

12 13 TOP 14 C: 1 1







PLL1212BQ-IT-941.5MHz-961.5MHz-A 941.5-961.5MHz SMD Phase Locked Loop (PLL) Synthesizer

#### Drawing No: N

MD240075-1

#### Pin Connections:

Pin	Function				
1	CLK				
2	DATA				
3	LE				
4-6	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

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.



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### PLL1212BQ-IT-941.5MHz-961.5MHz-A 941.5-961.5MHz SMD Phase Locked Loop (PLL) Synthesizer

## **Specifications**

Parameter		Units	Min.	Typical	Max.
Operating Frequency Range		MHz	941.5		961.5
Output Power		dBm	+3.0	+5.0	+7.0
Step Size		KHz		25	
Settling Time		msec		10	30
Output Impedance		Ω		50	
Phase Noise	@1kHz offset	dBc / Hz		-76	-71
Phase Noise	@10kHz offset	dBc / Hz		-105	-100
Phase Noise	@100kHz offset	dBc / Hz		-126	-121
Phase Noise	@1MHz offset	dBc / Hz		-146	-141
2nd Harmonic Suppression		dBc		-25	-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		24	30
PLL Power Supply (Vcp) Voltage		Vdc		5	
PLL Power Supply (Vcp) Current		mA		5	10
Operating Temperature Range		С°	-40		+85