

# PNP-2550-L22-G

### PLUG-N-PLAY NARROWBAND SYNTHESIZER

Package: L22, 12.7mm x 12.7mm x 4.57mm

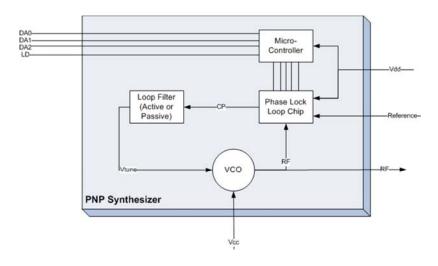


#### **Features**

- Internal Microcontroller
- Programmable START/STOP/Step Size
- SPI BUS Compatible
- Frequency: 2500MHz to 2600MHz
- Resonator: Microstrip
- PCB: Rogers
- Package Size: 12.7mm x 12.7mm x 4.57mm (0.5in x 0.5in x 0.18in)

# **Applications**

- Highly Integrated Radio Designs
- High-Performance Radios
- Mircrowave Radio IF Conversion
- Instrumentation
- Frequency Synthesizers



**Functional Block Diagram** 

## **Product Description**

RFMD offers complete Plug-N-Play Synthesizers (PNPs) for low noise frequency synthesizer applications consisting of a VCO, PLL, loop filter and Micro-controller interface. The PNP family of RF signal sources is the world's first family of truly configurable frequency synthesizer modules. These synthesizers can make quick adjustments with amazing accuracy, speed, and performance.

### **Ordering Information**

PNP-2550-L22-G Contact us at 1-480-756-6070

## **Optimum Technology Matching® Applied**

☐ GaAs HBT	☐ SiGe BiCMOS	☐ GaAs pHEMT	☐ GaN HEM
GaAs MESFET	☐ Si BiCMOS	□ Si CMOS	☐ BiFET HBT
☐ InGaP HBT	☐ SiGe HBT	<b>▼</b> Si BJT	☐ LDMOS

# PNP-2550-L22-G



## **Absolute Maximum Ratings**

Parameter	Rating	Unit
Operating Ambient Temperature	-40 to +85	°C
Storage Temperature	-55 to +125	°C



#### Caution! ESD sensitive device.

Exceeding any one or a combination of the Absolute Maximum Rating conditions may cause permanent damage to the device. Extended application of Absolute Maximum Rating conditions to the device may reduce device reliability. Specified typical performance or functional operation of the device under Absolute Maximum Rating conditions is not implied.

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RoHS (Restriction of Hazardous Substances): Compliant per EU Directive 2002/95/EC.

Parameter	Specification		11:4	O an disting	
	Min.	Тур.	Max.	Unit	Condition
Overall					
Frequency Range	2500		2600	MHz	
Step Size	25		10000	kHz	
Output Power	-2	0	2	dBm	
Output Phase Noise		-88	-83	dBc/Hz	1kHz
		-103	-98	dBc/Hz	10kHz
		-125	-120	dBc/Hz	100 kHz
		-145	-140	dBc/Hz	1000kHz
Spurious Product		-80	-70	dBc	10MHz step size
		-70	-60	dBc	250kHz step size
		-70	-55	dBc	62.5kHz step size
Reference Feedthrough		-70	-65	dBc	
Second Harmonic		-18	-12	dBc	
Reference Oscillator Signal	10	20	250	MHz	Frequency
	0		3.3	V <sub>P-P</sub>	Amplitude - DC coupled
Power Supply					
Operating Voltage	4.9	5	5.1	V	V1
	2.7	3	3.3	V	V2
Supply Current		35	40	mA	I1
		25	35	mA	12

#### Notes:

<sup>1)</sup> Reference Input Level: -5dBm minimum, +5dBm maximum, AC coupled.

<sup>2)</sup> Specification Test Conditions: V1 = 5V, V2 = 3V, REF = 20MHz.



# **Package Drawing & Pin Outs**

12.7mm x 12.7mm x 4.57mm (0.5in x 0.5in x 0.18in)

