MID-ATLANTIC RF SYSTEMS, INC.
Mid-Atlantic RF Systems, Inc. is a Woman-Owned Business

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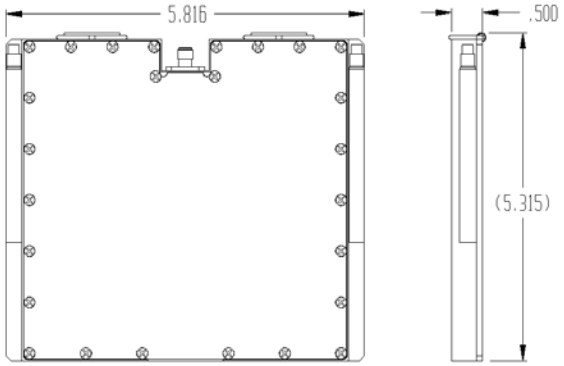
SYN-LR02 Spur-Free Synthesizer

Features:

- ***Spurless*** *Signal*
- *High Speed at Low Cost*
- *Small Package*
- *Custom Software Available*

Outline Drawing



All dimensions in inches

Overview

A novel Frequency Hopping Synthesizer was developed for an L-Band 500MHz Bandwidth Frequency Hopping Radio. The synthesizer design meets low phase noise, fast switching time, high isolation and a small mechanical package. In addition, no reference spurs are present over the entire band.

This unit supports our MOD-LM01 and DEM-LM01 units in our HCLOS RFFE. For more information, please contact us.

Electrical Specifications:

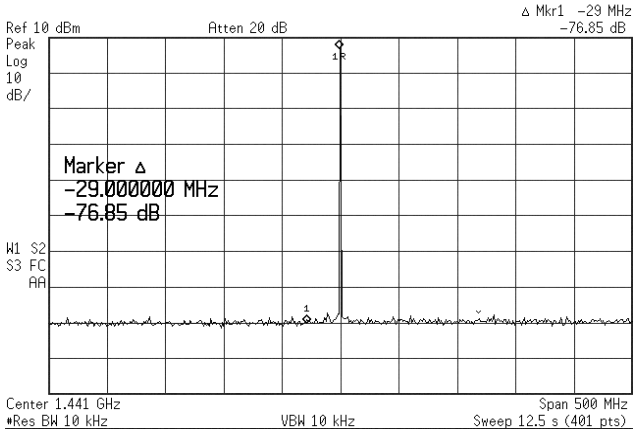
Frequency Range:	1160 to 1726 MHz	
Channel Spacing:	Programmable	
Frequency Stability:	+/- 0.5 ppm	
Output Signal Power Level:	+10 dBm +/- 1dB	
Lock Time of Single PLL:	650 usec. max for +/- 1 kHz of final frequency.	
Switch Time Between Two PLLs:	10µs max.	
2nd Harmonic:	>15 dBc	
Isolation Between Two PLLs:	75 dB	
Synthesizer SSB Phase Noise:	Offset (KHz)	dBc/Hz
	1	-60
	10	-75
	100	-105
	1000	-135

Mechanical Specifications:

Dimensions:	5.866” x 2.913” x 0.748”
Connectors:	SMA(f)

Environmental Specifications:

OperatingTemperature:	-30˚C to +50˚C
Storage Temperature:	-55˚C to +85˚C



Frequency Spectrum Plot
No Spurs Observed