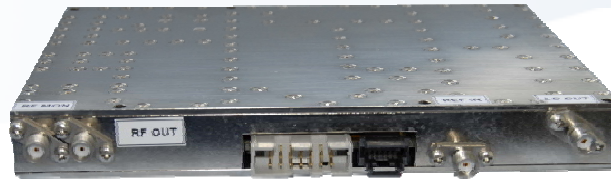


LNMFS Frequency Synthesizer

S-1088



FREQUENCY RANGE:
6.4-6.9 GHz

FEATURES

- Very Low Phase Noise, 20 dB better than IESS-308
- Low Spurious:<-85 dBc
- 1 KHz and 125 KHz Standard Steps Size Options
- Includes Fixed Frequency L-Band Output
- Serial Control Simplifies Interfacing
- Compact Modular Construction: 7.7" X 5.5" X 0.73"
- Low DC Power Consumption, less than 8 watts
- Wide Operating Temperature Range
- Meets ESTI 300019-1-4 Shock and Vibration Requirements

APPLICATIONS

- LO for Fixed and Mobile SATCOM Converters
- LO for Digital Radio, up to 512 QAM
- Instrumentation
- OEM Products

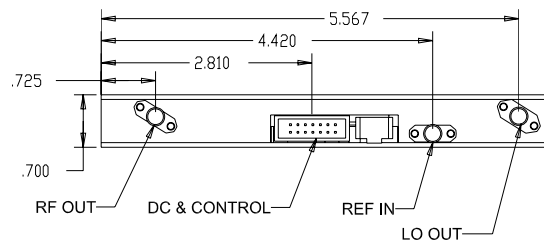
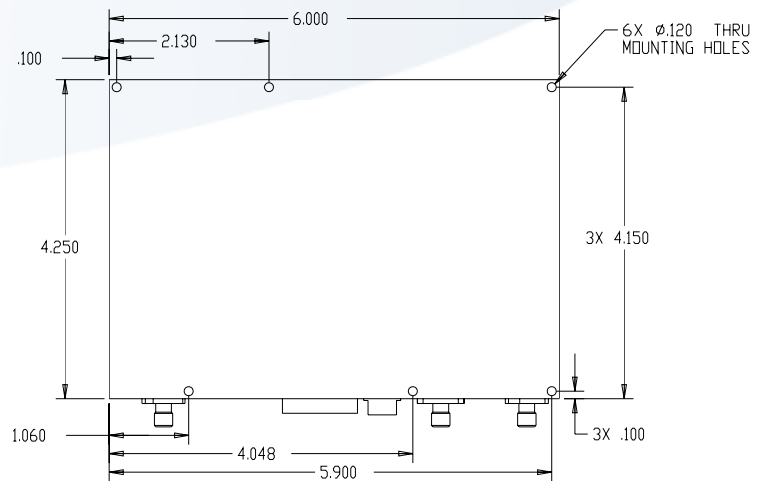
GENERAL DESCRIPTION

The LNMFS family of modular sub-octave coverage frequency synthesizers achieves exceptionally low phase noise in a rugged, compact package. Within the LNMFS, basic PLL indirect synthesizer architecture is enhanced using DDS and FPGA technology. This allows small step size and low spurious output levels to be achieved with moderate switching speed. The serial interface simplifies designing the synthesizer for any system application.

SPECIFICATIONS

Output Frequency	6.4 – 6.9 GHz	
Frequency Bandwidth	0.50 GHz	
Step Size	1 KHz	
Switching Speed	< 50 mS	
Power Output	12 to 15 dBm	
In Band Spurious	< -65 dBc	
Out of Band Spurious	< -65 dBc	
Harmonics	< -15 dBc	
Phase Noise	1 KHz	< -95 dBc/Hz
	10 KHz	< -102 dBc/Hz
	100 KHz	< -104 dBc/Hz
	1 MHz	< -127 dBc/Hz
Fixed L-Band Output		
Frequency	N/A	
Power Output	N/A	
Spurious	N/A	
Harmonics	N/A	
External Reference Input		
Frequency	10 MHz	
Input Level	0 to +13 dBm	
Power Consumption		
DC Supply	+15 V	300 mA
	+6 V	1250 mA
Operating Temp. Range	-25°C to +65°C	

OUTLINE DRAWING



NOTES:
 CONNECTORS:
 RF OUT, LO OUT & REF IN: SMA
 TYPE JACK (FEMALE).
 DC & CONTROL: IDC TYPE, 14 PIN

PIN	FUNCTION
1	NC
2	GND
3	+5.25 to +5.50V
4	GND
5	+12 to +18V
6	GND
7	LOCK
8	GND
9	DATA
10	GND
11	CLOCK
12	GND
13	ENABLE
14	GND

FOR ADDITIONAL INFORMATION CONTACT
sales@elcom-tech.com

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