

FEATURES

- 2-13 GHz Coverage
- Excellent Phase Noise
- FM/Phase Lock Port
- Excellent Linearity
- High Reliability


DESCRIPTION

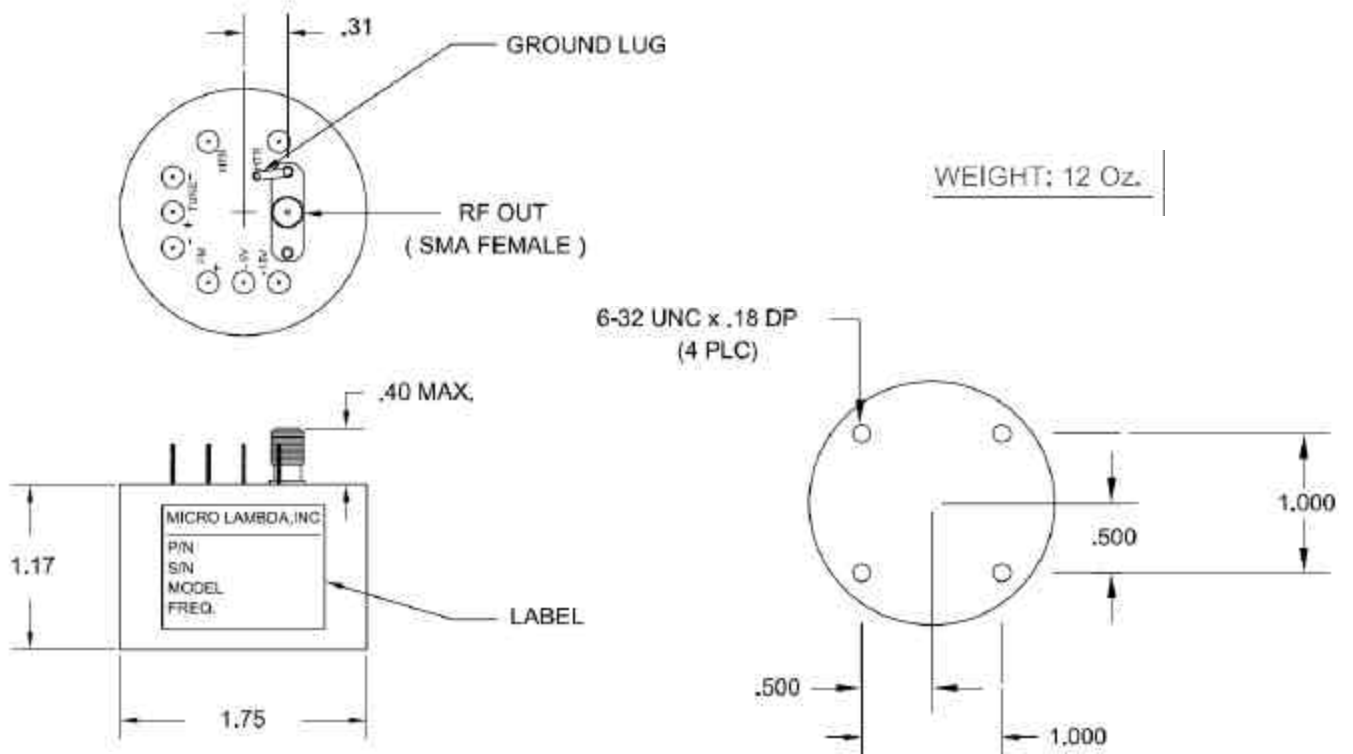
The Micro Lambda low noise YIG Tuned Oscillators cover the frequency bands of 2-13 GHz. These oscillators offer SUPERIOR PHASE NOISE performance of -125 dBc/Hz @ 100 kHz offset at 13 GHz, guaranteed! Typical numbers are -128 dBc/Hz. This performance is 10 dB better than other oscillators currently on the market. They make ideal local oscillators for synthesizers, receivers, sweep generators and other specialized test equipment.

ELECTRICAL AND PERFORMANCE SPECIFICATIONS

Guaranteed Specifications at 0° to +65° C Case Temperature

Model No.	MLOS-0208P	MLOS-0306P	MLXS-0613P
Frequency Range, Min.	2-8 GHz	3-6 GHz	6-13 GHz
Power Output, Min.	+14 dBm	+14 dBm	+13 dBm
Power Output Variation, Max.	+/- 6 dB	+/- 6 dB	+/- 6 dB
Frequency Drift over Temperature, Max.	15 MHz	10 MHz	20 MHz
Pulling Figure (12 dB RL), Typ.	1 MHz	1 MHz	1 MHz
Pushing Figure +15 Vdc Supply, Typ.	0.1 MHz/V	0.1 MHz/V	0.1 MHz/V
-5 Vdc Supply, Typ.	1 MHz	1 MHz/V	1 MHz/V
Magnetic Susceptibility @ 60 Hz, Typ.	50 kHz/gauss	50 kHz/gauss	50 kHz/gauss
2nd Harmonic, Min. @ 25°C	-12 dBc	-12 dBc	-10 dBc
3rd Harmonic, Min. @ 25°C	-12 dBc	-12 dBc	-12 dBc
Spurious Output, Min.	-60 dBc	-60 dBc	-60 dBc
Phase Noise @ 10kHz Offset	-105 dBc/Hz	-108 dBc/Hz	-105 dBc/Hz
@ 100kHz Offset	-125 dBc/Hz	-130 dBc/Hz	-125 dBc/Hz
Main Coil			
Sensitivity, Typ.	20 MHz/mA	20 MHz/mA	20 MHz/mA
3 dB Bandwidth, Typ.	5 kHz	5 kHz	5 kHz
Linearity, Typ.	+/- 0.1 %	+/- 0.1 %	+/- 0.1 %
Hysteresis, Typ.	6 MHz	3 MHz	8 MHz
Input Impedance @ 1 kHz, Typ.	10 Ohm /95 mH	10 Ohm /95 mH	6 Ohm /73 mH
FM Coil			
Sensitivity, Typ.	310 kHz/ma	310 kHz/ma	410 kHz/ma
3 dB Bandwidth, Typ.	400 kHz	400 kHz	400 kHz
Deviation @ 400 kHz Rate, Min.	40 MHz	40 MHz	40 MHz
@ 1 MHz Rate, Min.	20 MHz	20 MHz	20 MHz
Input Impedance @ 1 MHz, Typ.	1.0 Ohm / 10uH	1.0 Ohm / 10uH	1.0 Ohm / 10uH
DC Circuit Power, +15 Vdc Supply, Max.			
	100 mA	100 mA	200 mA
-5 Vdc Supply, Max.			
	50 mA	50 mA	50 mA
YIG Heater Power			
Input Voltage Range	+24 +/- 4 Vdc	+24 +/- 4 Vdc	+24 +/- 4 Vdc
Current Surge/Steady State, Max.	250 mA / 25 mA	250 mA / 25 mA	250 mA / 25 mA
Case Style	11-019	11-019	11-137

Outline Drawing: 11-019



Outline Drawing: 11-137

