



MICRO LAMBDA WIRELESS, INC.

MLLP SERIES PERMANENT MAGNET YTO's LOW POWER CONSUMPTION

FEATURES

- 2-12 GHz Frequency Coverage
- Customer Selected Fixed Frequency
- FM/Phase-Lock Port
- Miniature Size
- +8 Vdc Supply
- No Heaters Required



DESCRIPTION

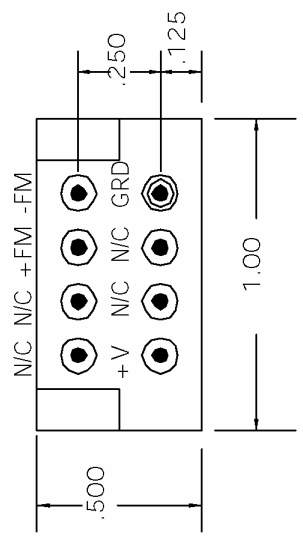
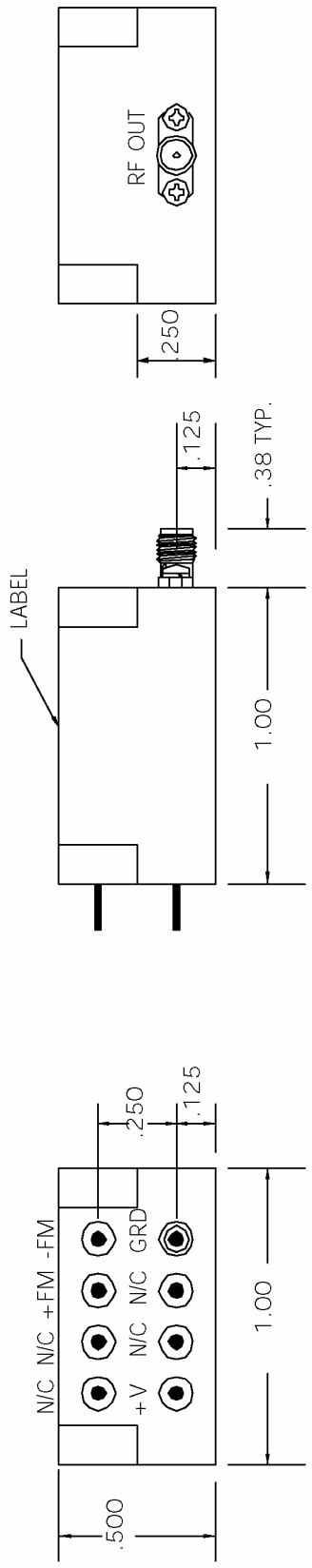
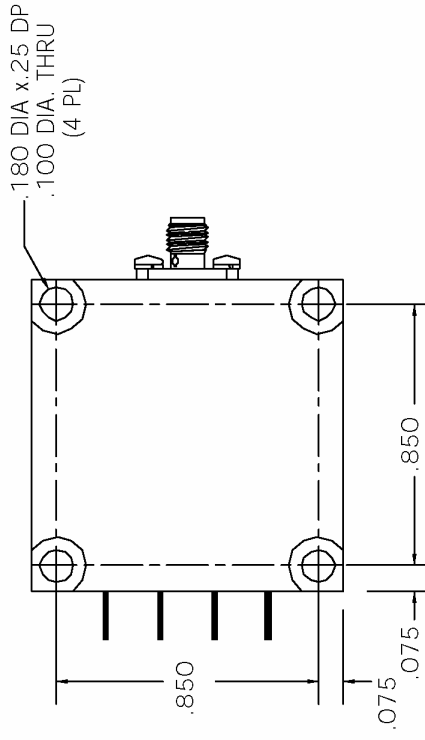
The MICRO LAMBDA **MLLP**-Series Permanent Magnet YIG-Tuned Oscillators cover the frequency range of 2-12 GHz and operate from a single +8 Volt supply. They are available at customer selected fixed frequencies and are fitted with a FM coil for phase locking. They operate over the -20° to + 70°C temperature range without the use of heaters. Units are compliant with ANSI/ETSI thermal, shock and vibration requirements.

Units are available in a standard 1" x 1" x .5" configuration with a field replaceable RF connector and weigh one ounce.

ELECTRICAL AND PERFORMANCE SPECIFICATIONS

Guaranteed Specifications at -20° to +70° C Case Temperature

Model No.	MLLP-0200	MLLP-0400	MLLP-0600	MLLP-0800	MLLP-1000	MLLP-1200
Free Run Frequency	2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz
Free Run Frequency Accuracy	+/- 10 MHz	+/- 10 MHz	+/- 10 MHz	+/- 10 MHz	+/- 10 MHz	+/- 10 MHz
Power Output, Min.	+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm
Power Output Variation, Max.	+/- 1 dB	+/- 1 dB	+/- 1 dB	+/- 1 dB	+/- 1 dB	+/- 1 dB
Freq. Drift over Temp., Max.	+/- 15 MHz	+/- 15 MHz	+/- 15 MHz	+/- 15 MHz	+/- 15 MHz	+/- 15 MHz
Pulling Figure (12 dB RL), Typ.	1 MHz	1 MHz	1 MHz	1 MHz	1 MHz	1 MHz
Pushing Figure +8 Vdc, Typ.	0.1 MHz/V	0.1 MHz/V	0.1 MHz/V	0.1 MHz/V	0.1 MHz/V	0.1 MHz/V
2nd Harmonic, Min.	-12 dBc	-12 dBc	-12 dBc	-12 dBc	-12 dBc	-12 dBc
3rd Harmonic, Min.	-20 dBc	-20 dBc	-20 dBc	-20 dBc	-20 dBc	-20 dBc
Spurious Output, Min.	-70 dBc	-70 dBc	-70 dBc	-70 dBc	-70 dBc	-70 dBc
Phase Noise @ 10kHz Offset	-103 dBc/Hz	-100 dBc/Hz	-98 dBc/Hz	-98 dBc/Hz	-95 dBc/Hz	-95 dBc/Hz
@ 100kHz Offset	-125 dBc/Hz	-123 dBc/Hz	-120 dBc/Hz	-120 dBc/Hz	-120 dBc/Hz	-120 dBc/Hz
FM Coil						
Sensitivity, Typ.	310 kHz/ma	310 kHz/ma	310 kHz/ma	310 kHz/ma	310 kHz/ma	310 kHz/ma
3 dB Bandwidth, Typ.	400 kHz	400 kHz	400 kHz	400 kHz	400 kHz	400 kHz
Deviation @ 400 kHz, Min.	+/- 100 MHz	+/- 100 MHz	+/- 100 MHz	+/- 100 MHz	+/- 100 MHz	+/- 100 MHz
Impedance @ 1 MHz, Typ.	1 Ohm/2 uH	1 Ohm/2 uH	1 Ohm/2 uH	1 Ohm/2 uH	1 Ohm/2 uH	1 Ohm/2 uH
DC Power, Max. +8 Vdc	80 mA	80 mA	80 mA	80 mA	80 mA	80 mA
Case Style	61-093	61-093	61-093	61-093	61-093	61-093



REV	DESCRIPTION	DATE	APPROVED

WEIGHT: 1 Oz.

		MICRO LAMBDA WIRELESS, INC.	
P.M.O. (FM, NO HEATER)		P.M.O. (FM, NO HEATER)	
CONTRACT NO.	APPROVALS	DATE	REV.
DIMENSIONS SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCE ARE: FRACTIONS DECIMALS ANGLESXX .00 .00 .XX .00 .00	DRAWN: N. NGUYEN	DATE: 8/8/03	REV.
MATERIAL:	CHECKED:	ISSUED:	REV.
FINISH:	SCALE:	SHEET:	REV.
DO NOT SCALE DRAWING.	ORN63	61 - 093	REV.