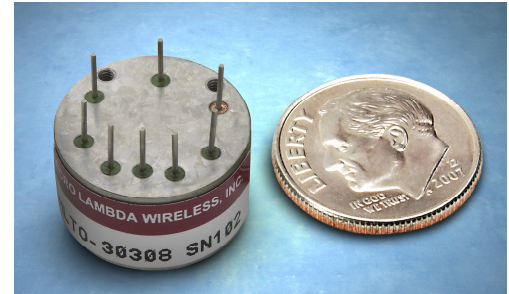


**FEATURES**

- 2-8 GHz Frequency Coverage
- FM/Phase-Lock Port
- TO-8 Package
- High Reliability

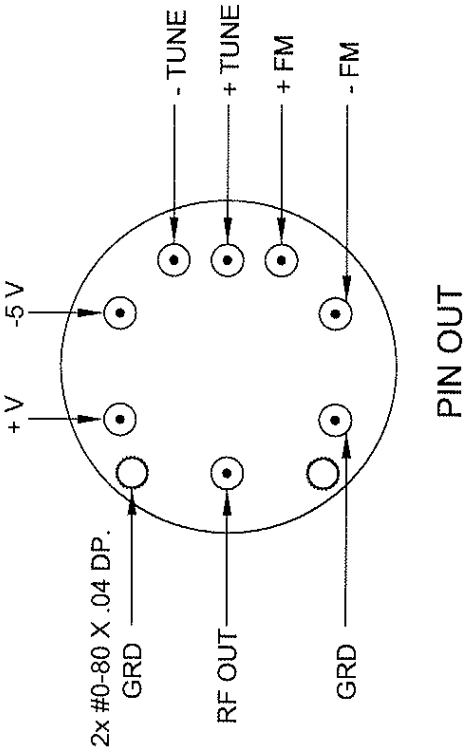
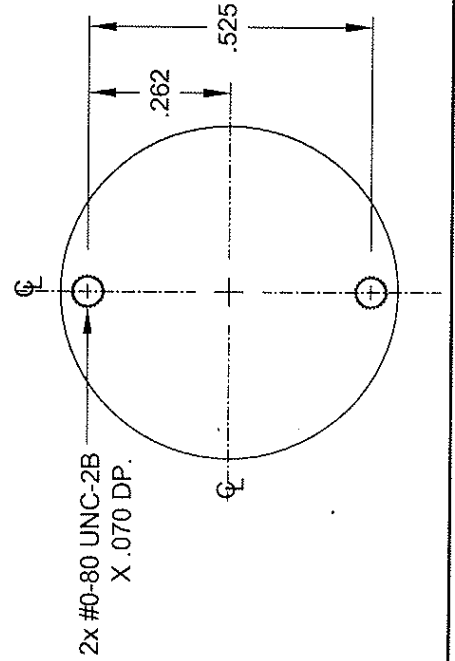
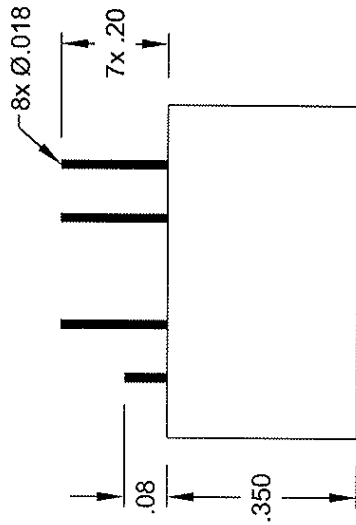
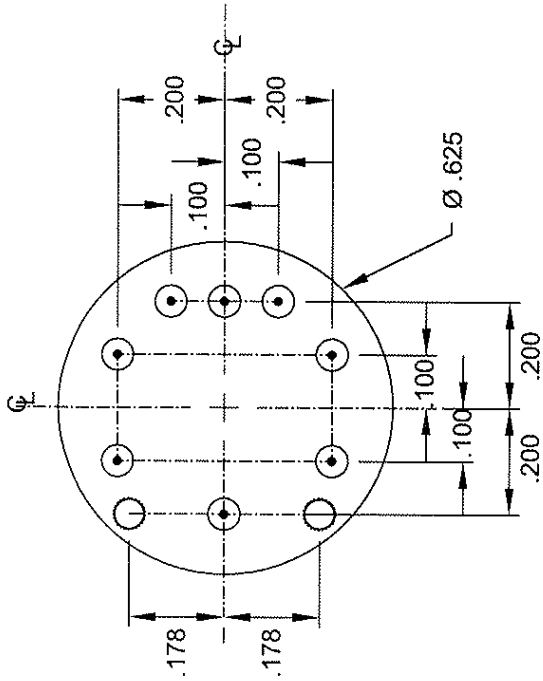

**DESCRIPTION**

The MICRO LAMBDA **MLTO**-Series Permanent Magnet YIG-Tuned Oscillators cover the frequency range of 2-8 GHz. They are available in customer selected tuning ranges and are fitted with a low power main coil, and FM coil for phase locking. All units operate from a +8 Volt and -5 Volt supply and operate over the 0° to + 65°C temperature range. Units do not require a heater.

**ELECTRICAL AND PERFORMANCE SPECIFICATIONS**

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

<b>Model No.</b>	<b>MLTO-30204</b>	<b>MLTO-30306</b>	<b>MLTO-30308</b>
Frequency Range, Min.	2-4 GHz	3-6 GHz	3-8 GHz
Free Run Frequency	3 GHz	4.5 GHz	5.5 GHz
Free Run Frequency Settability	+/- 200 MHz	+/- 200 MHz	+/- 200 MHz
Power Output, Min.	+10 dBm	+10 dBm	+10 dBm
Power Output Variation, Max.	3 dB	3 dB	3 dB
Freq. Drift over Temp., Max.	+/-10 MHz	+/-10 MHz	+/-10 MHz
Pulling Figure (12 dB RL), Typ.	2 MHz	2 MHz	2 MHz
Pushing Figure +8 Vdc, Typ.	2 MHz/V	2 MHz/V	2 MHz/V
Harmonics, Min.	-15 dBc	-15 dBc	-15 dBc
Spurious Output, Min.	-70 dBc	-70 dBc	-70 dBc
Phase Noise @ 10kHz Offset	-100 dBc/Hz	-100 dBc/Hz	-100 dBc/Hz
@ 100kHz Offset	-125 dBc/Hz	-125 dBc/Hz	-125 dBc/Hz
@ 100 kHz Offset, Typ	-128 dBc/Hz	-128 dBc/Hz	-128 dBc/Hz
<b>Main Coil</b>			
Sensitivity, Typ.	7.5 MHz/mA	7.5 MHz/mA	7.5 MHz/mA
Linearity, Typ.	+/-2 MHz	+/-2 MHz	+/-2 MHz
Hysteresis, Typ.	5 MHz	5 MHz	5 MHz
Impedance @ 1 kHz, Typ.	9 Ohm/20 mH	9 Ohm/20 mH	9 Ohm/20 mH
<b>FM Coil</b>			
Sensitivity, Typ.	300 kHz/ma	300 kHz/ma	300 kHz/ma
3 dB Bandwidth, Typ.	1 MHz	1 MHz	1 MHz
Deviation @ 400 kHz, Min.	+/- 50 MHz	+/- 50 MHz	+/- 50 MHz
Impedance @ 1 MHz, Typ.	.7 Ohm/1 uH	.7 Ohm/1 uH	.7 Ohm/2 uH
DC Power, Max. +8.0 Vdc +/- 0.5 V	60 mA	60 mA	60 mA
-5.0 Vdc +/- 0.25 v	15 mA	15 mA	15 mA
Case Style	91-003	91-003	91-003



**WEIGHT: .41 Oz (12g)**

REV	DESCRIPTION	DATE	APPROVED
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCE ARE: FRACTIONS    DECIMALS    ANGLES *                XX .010                * XXX ±.005		CONTRACT NO. APPROVALS DRAWN    N. NGUYEN CHECKED    [Signature] ISSUED      11/18/09	
MATERIAL FINISH		DATE 11/18/09	
MICRO LAMBDA WIRELESS, INC.			
<b>PC MOUNT OSCILLATOR</b> ( $\phi$ .625" X .350" HIGH )			
DO NOT SCALE DRAWING		CAGE NO. <b>0RN63</b>	DWG. NO. <b>91 - 003</b>
SCALE		SHEET	