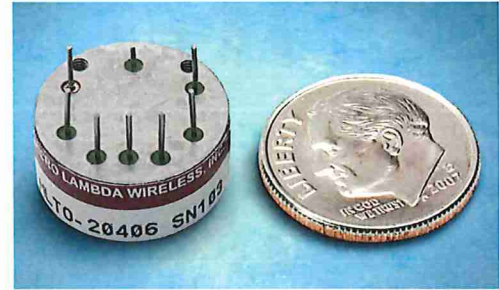




### FEATURES

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



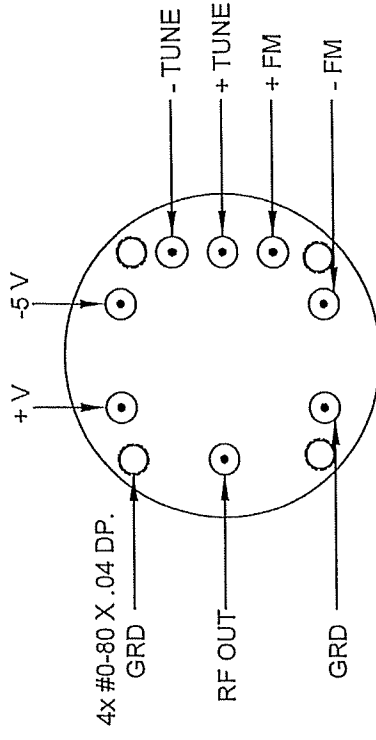
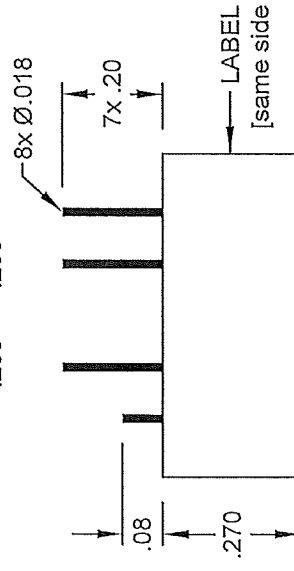
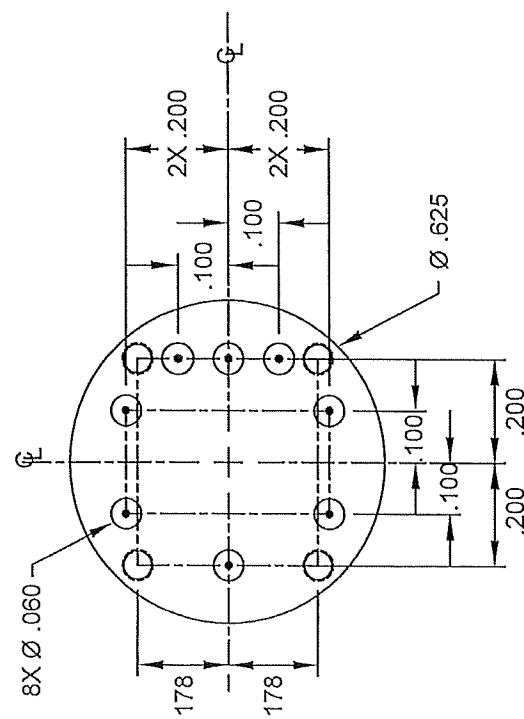
### DESCRIPTION

The MICRO LAMBDA **MLTO**-Series Permanent Magnet YIG-Tuned Oscillators cover any 2 GHz bandwidth over 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

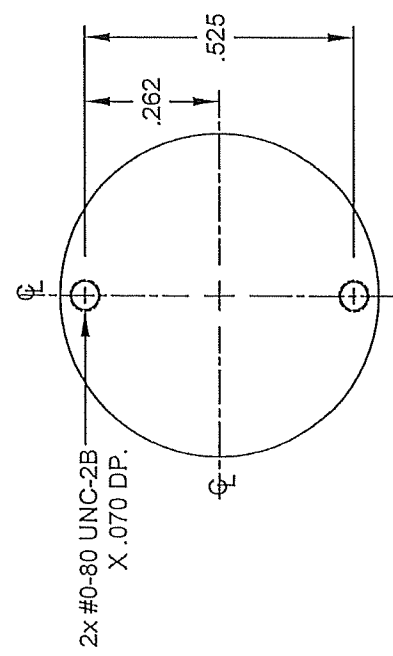
Guaranteed Specifications at 0° to +65° C Case Temperature

Model No.	MLTO-20204	MLTO-20406	MLTO-20608
Frequency Range, Min.	2-4 GHz	4-6 GHz	6-8 GHz
Free Run Frequency	3 GHz	5 GHz	7 GHz
Free Run Frequency Settability	+/- 300 MHz	+/- 300 MHz	+/- 300 MHz
Power Output, Min.	+10 dBm	+10 dBm	+9 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 Typ.	-100 dBc/Hz	-100 dBc/Hz	-100 dBc/Hz
@ 100kHz Offset Min.	-125 dBc/Hz	-125 dBc/Hz	-125 dBc/Hz
@ 100kHz Offset Typ.	-128 dBc/Hz	-128 dBc/Hz	-128 dBc/Hz
<b>Main Coil</b>			
Sensitivity, Typ.	6 MHz/mA	6 MHz/mA	6 MHz/mA
Linearity, Typ.	+/-4 MHz	+/-4 MHz	+/-4 MHz
Hysteresis, Typ.	3 MHz	3 MHz	3 MHz
Impedance @ 1 kHz, Typ.	11 Ohm/10 mH	11 Ohm/10 mH	11 Ohm/10 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	99-0091-023	99-0091-023	99-0091-023



PIN OUT

WEIGHT: .36 Oz ( 10g )



REV	DESCRIPTION	DATE	APPROVED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCE ARE:		CONTRACT NO.	
* FRACTIONS	DECIMALS	APPROVALS	DATE
* .xxx	* .010		12/15/22
* .xxx	* .005		
MATERIAL	DRAWN	CHECKED	ISSUED
	N. NGUYEN		
FINISH	CAGE NO.	DWG. NO.	REV.
	ORN63	99-0091-023	E
DO NOT SCALE DRAWING		SCALE	SHEET

MICRO LAMBDA WIRELESS, INC.  
**PC MOUNT OSCILLATOR**  
 (  $\phi$  .625" X .270" HIGH W/ 4 MTC. SCREWS )