



MICRO LAMBDA WIRELESS, INC.

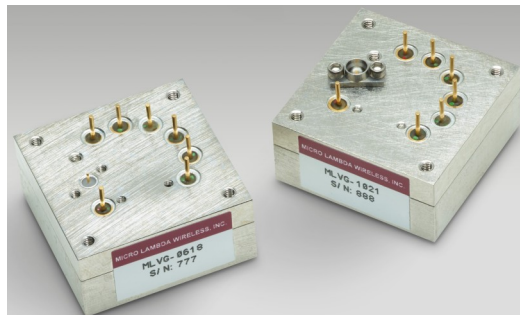
MLVG Series for 5G Applications Ultra Wide Tuning Range and Low Phase Noise YTO's

FEATURES

- 6-21 GHz Frequency Coverage
- 12 GHz Tuning Bandwidth
- FM/Phase-Lock Port
- Miniature Size
- High Reliability
- Low Power Consumption: No Heater Required

DESCRIPTION

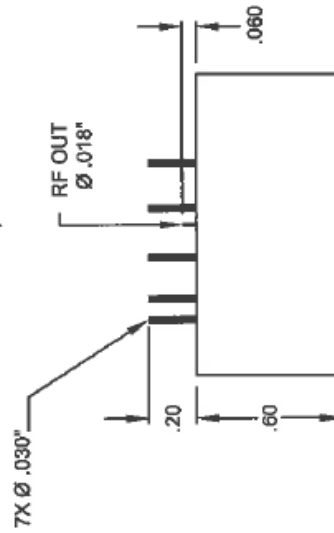
The MICRO LAMBDA MLVG-Series YIG-Tuned Oscillators are signal sources covering the frequency range of 6-21 GHz. They are available in any customer selected **12 GHz tuning bandwidth** (± 6 GHz). The units are available in a standard 1.25" x 1.25" x .60" configuration with a field replaceable SMP shroud or RF pin for PCB Mounting. No heater required for power consumption.



ELECTRICAL AND PERFORMANCE SPECIFICATIONS

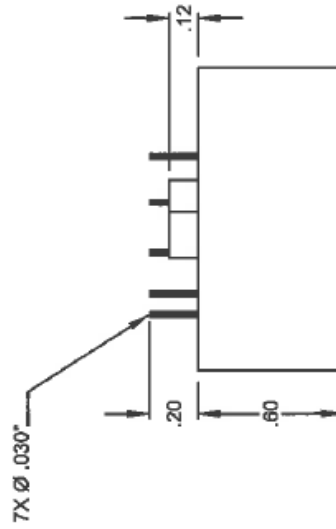
Guaranteed Specifications at 0° to +65° C Case Temperature

Model No.	MLVG-0618	MLVG-0820	MLVG-1021
Frequency Range, Min.	6-18 GHz	8-20 GHz	10-21 GHz
Power Output, Min.	+14 dBm	+14 dBm	+14 dBm
Power Output Variation, Max.	+/- 3 dB	+/- 3 dB	+/- 3 dB
Frequency Drift over Temperature, Max.	+/-20 MHz	+/-20 MHz	+/-20 MHz
Pulling Figure (12 dB RL), Typ.	1 MHz	1 MHz	1 MHz
Pushing Figure +8 Vdc Supply, Typ.	0.1 MHz/V	0.1 MHz/V	0.1 MHz/V
Pushing Figure -5 Vdc Supply, Typ.	1 MHz/V	1 MHz/V	1 MHz/V
2nd Harmonic, Min.	-12 dBc	-12 dBc	-12 dBc
3rd Harmonic, Min.	-20 dBc	-20 dBc	-20 dBc
Spurious Output, Min.	-70 dBc	-70 dBc	-70 dBc
Phase Noise @ 10kHz Offset Max.	-100 dBc/Hz	-100 dBc/Hz	-100 dBc/Hz
@ 100kHz Offset Max.	-125 dBc/Hz	-123 dBc/Hz	-123 dBc/Hz
Main Coil			
Sensitivity, Typ.	18 MHz/mA	18 MHz/mA	18 MHz/mA
Linearity, Typ.	+/-10 MHz	+/-10 MHz	+/-10 MHz
Hysteresis, Typ.	15 MHz	15 MHz	15 MHz
Input Impedance @ 1 kHz, Typ.	7 Ohm / 20 mH	7 Ohm / 20 mH	7 Ohm / 20 mH
FM Coil			
Sensitivity, Typ.	340 kHz/ma	340 kHz/ma	340 kHz/ma
3 dB Bandwidth, Typ.	1000 kHz	1000 kHz	1000 kHz
Deviation @ 400 kHz Rate, Min.	+/- 50 MHz	+/- 50 MHz	+/- 50 MHz
Input Impedance @ 1 MHz, Typ.	1.0 Ohm / 2.0 uH	1.0 Ohm / 2.0 uH	1.0 Ohm / 2.0 uH
DC Circuit Power, +8 Vdc +/- 5%	250 mA	250 mA	250 mA
-5 Vdc +/- 5%	20 mA	20 mA	20 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	99-0061-112 99-0061-113	99-0061-112 99-0061-113	99-0061-112 99-0061-113



REV	DESCRIPTION	DATE	APPROVED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE :		CONTRACT NO.		DATE		MICRO LAMBDA WIRELESS, INC.	
FRACTIONS	DECIMALS	ANGLES					
± .005	± .010						
± .005	± .005						
MATERIAL			APPROVALS		PMO 1.25"		
			DRAWN N. NGUYEN				
			CHECKED <i>[Signature]</i>				
			ISSUED		10/28/17		
FINISH					10/26/17		
DONOT SCALE DRAWING					SCALE		
					SHEET		
					CAGE NO. 0RN63		
					DWG. NO. 99-0061 -112		
					REV. A		



WEIGHT: 3.5 Oz (99.2g) MAX.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO.		DATE		MICRO LAMBDA WIRELESS, INC.	
FRACTIONS	DECIMALS	ANGLES	APPROVALS		10/26/17	PMO 1.25" W/SMP MALE CONNECTOR	
• .001	• .010	• .001	DRAWN N. NGUYEN		10/26/17		
• .005	• .030	• .005	CHECKED <i>[Signature]</i>		<i>10/26/17</i>		
MATERIAL			ISSUED			SIZE	
FINISH						CAGE No. 08N63	
DO NOT SCALE DRAWING						DWG. NO. 99-0061 -113	
						REV. A	
						SCALE	
						SHEET	