MICRO LAMBDA WIRELESS, INC.

YIG-TUNED
MULTIPLIER ASSEMBLY
MLMA-1818

FEATURES

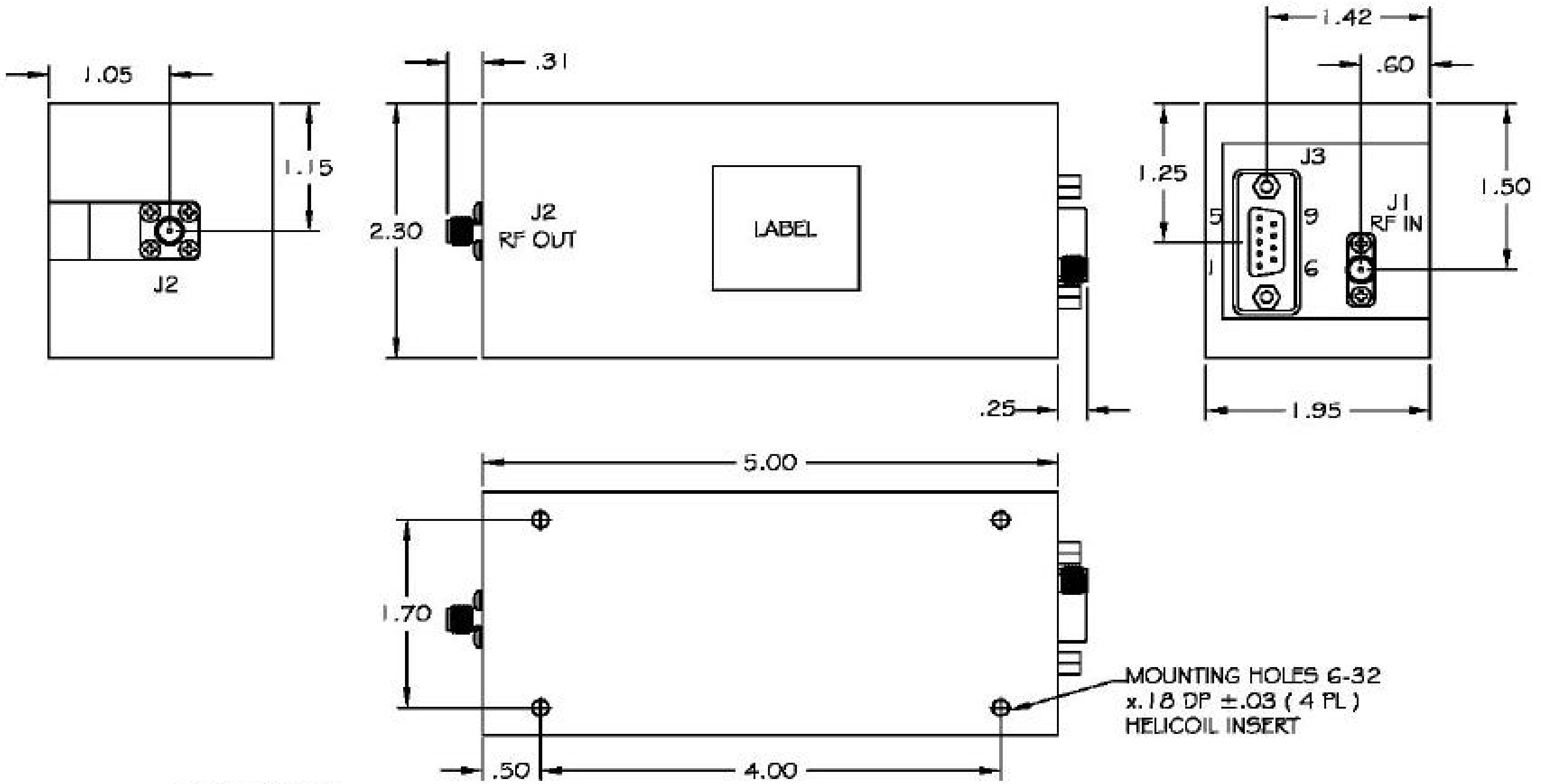
- 4 Stage YIG Filter
- 1 Watt Input Amplifier
- 0-10V Analog Driver
- MIL-STD Approved

DESCRIPTION

The MLMA-1818 multiplier assembly incorporates a multiplier circuit, 4 stage YIG filter, analog driver and 1 Watt input amplifier. Combining these multiple functions into one assembly insures maximum performance out of the assembly. Input frequency of 200 MHz is utilized to generate 200 MHz combs across the full 1.8-18 GHz frequency range.

PERFORMANCE SPECIFICATIONS

Output Frequency	1.8-18.0 GHz
Input Frequency	200 MHz
Input Power	+5 ± 3 dBm
Input VSWR	2.0:1 Max.
Output Power	-30 dBm Min.
Adjacent Harmonic Rejection	40 dB Min.
200 MHz Feedthrough	-60 dBm Max.
Hysteresis	25 MHz Max.
Operating Temperature Range	-55°C to +85°C
Control Voltage	0 Volts @ 1.8 GHz
	10 Volts @ 18 GHz
Sweep Time (Full Band)	20 mSec Max.
Driver DC Input Power	+15 Vdc 1.2A Max.
	-15 Vdc 1.0A Max.
Heater Input Power	+28 Vdc 400 mA Max.
Ground	Chassis
Input Impedance	>10 k-ohms
Common Mode Rejection	>40 dB
Connectors	
Input Frequency	SMA Female
Output Frequency	SMA Female
Control	DB-9P Cinch
Environmental Conditions	
Altitude	30k ft.
Humidity	MIL-STD-202 Method 103 Cond B
Vibration	MIL-STD-202 Method 103 Cond A
Case Style	31-011



CONNECTIONS

CONN.	TYPE	PIN	FUNCTIONS
J1	SMA FEMALE	1	RF IN
J2	SMA FEMALE	1	RF OUT
J3	DB9 MALE	1	+ CONTROL
J3	DB9 MALE	2	CONTROL RETURN (GND)
J3	DB9 MALE	3	N/C
J3	DB9 MALE	4	N/C
J3	DB9 MALE	5	+15 VDC
J3	DB9 MALE	6	-15 VDC
J3	DB9 MALE	7	+28 VDC
J3	DB9 MALE	8	28 VDC RETURN
J3	DB9 MALE	9	GROUND

WEIGHT: 23 Oz. max

REV	DESCRIPTION	DATE	APPROVED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCE ARE: FRACTIONS ± DECIMALS .xx ±.010 .xxx ±.005 ANGLES ±	CONTRACT NO.	MICRO LAMBDA, INC.
MATERIAL 6061 AL	APPROVALS / DATE; DRAWN N.NGUYEN 3/04/00; CHK.	YIG MULTIPLIER ASSEMBLY
FINISH NICKEL PLATE	MANUF.; Q.A.	SIZE; CAGE No. ORN63; DWG. NO. 31 - 011; REV.
DO NOT SCALE DRAWING		SCALE; SHEET