

DESCRIPTION

PMI MODEL PLDRO-44G-14DBM-24F IS A PHASE LOCKED MICROWAVE OSCILLATOR THAT PROVIDES A 14 dBm MINIMUM OUTPUT AT 44.0 GHz AND IS PHASE LOCKED TO AN INTERNAL REFERENCE SIGNAL.

SPECIFICATIONS

- OUTPUT FREQUENCY (f_o): 44.0 GHz
- FREQUENCY STABILITY: ± 2.5 PPM
- LOAD VSWR: 1.5:1 MAX
- OUTPUT POWER: +14 dBm
- POWER VARIATION OVER TEMPERATURE: ± 1.5 dB MAX
- WARMUP TIME: 2.5 MINUTES MAX @ 25°C
- SPURIOUS: -70 dBc MIN IN BAND
- PHASE NOISE (SSB): -61 dBc/Hz MIN at 100 Hz
-92 dBc/Hz MIN at 1 kHz
-103 dBc/Hz MIN at 10 kHz
-106 dBc/Hz MIN at 100 kHz
-121 dBc/Hz MIN at 1000 kHz
- HARMONICS: -20 dBc
- SUB HARMONICS: -50 dBc
- DC POWER: +15V, 550 mA MAX
1.0 AMP MAX SURGE
- PHASE LOCK ALARM: LS-TTL LOGIC "1" OR "0"
LOCK = LOGIC "1"
UN-LOCK = LOGIC "0"
- SIZE: 2.25" X 2.25" X 0.62"
- WEIGHT: 8 OUNCES MAX
- RF CONNECTOR: 2.4 mm FEMALE
- POWER AND PHASE LOCK CONNECTOR: RFI SOLDER PINS
- FINISH: GOLD PLATED OVER NICKEL, YELLOW IRIDITE CHEMICAL FILM ON MOUNTING SURFACE
- TUNER: FLUSH PROFILE

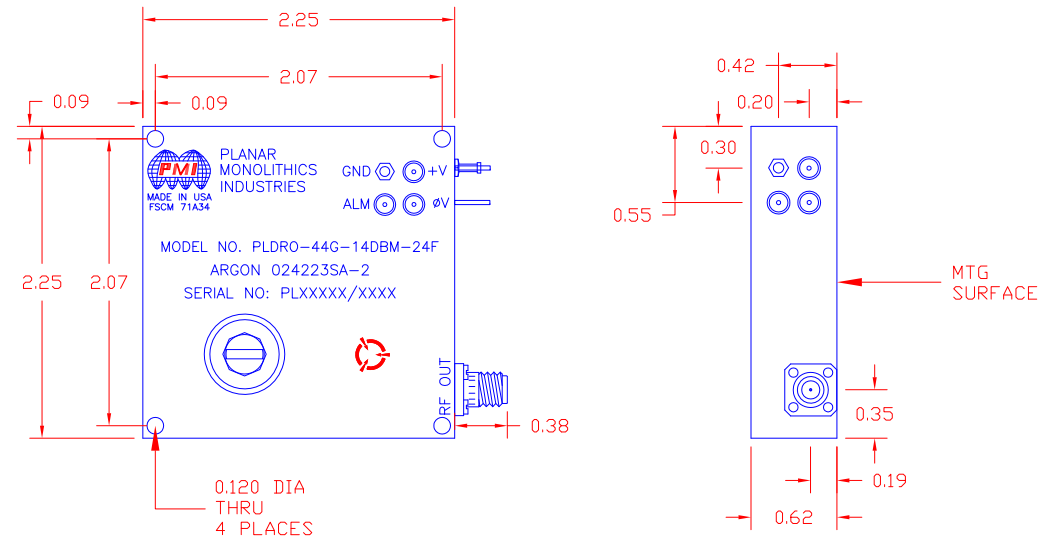
ENVIRONMENTAL RATINGS

- TEMPERATURE: -45°C TO +85°C (OPERATING)
-55°C TO +85°C (STORAGE)
- PRESSURE: OPERATE IN DRY NITROGEN @ 100 kPA OR ATMOSPHERIC AIR
- VIBRATION: MIL-STD-167-1, MAST MOUNTED, FREQUENCIES TO 25 Hz
- SHOCK (SURVIVAL): MIL-S-901D, NO BREAKAGE
- SHORT DURATION: 360 g, 1.6 ms, FULL SINE
- MEDIUM DURATION: 150 g, 6 ms, HALF SINE
- LONG DURATION: 130 g, PEAK TO PEAK, 17 ms, FULL SINE
30 g, PEAK TO PEAK, 40 ms, FULL SINE

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	10/27/15	JFX

MECHANICAL OUTLINE



ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.005

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

4921 ROBERT J MATHEWS PKWY, STE 1
EL DORADO HILLS, CALIFORNIA, 95762
TEL: 916-542-1401 FAX: 916-265-2597
WEBSITE: www.pmi-rf.com
E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>JF</i>		10/27/14	PRODUCT FEATURE PLDRO-44G-14DBM-24F			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	71A34	PRELIMINARY	-
			SCALE	N:S		SHEET 1 OF 1