

## DESCRIPTION

PMI MODEL NO. PLDRO-24G-14DBM-292FF IS A PHASE LOCKED MICROWAVE OSCILLATOR THAT PROVIDES A 14 dBm POWER OUTPUT AT 24.0 GHz.

## SPECIFICATIONS

- OUTPUT FREQUENCY: ----- 24.0 GHz
- FREQUENCY STABILITY: -----  $\pm 2.5$  PPM
- LOAD VSWR: ----- 1.5:1 MAX
- POWER OUTPUT: ----- +14 dBm
- POWER VARIATION OVER TEMP: -----  $\pm 1.5$  dB MAX
- WARM UP TIME: ----- 2.5 MINUTES MAX @ +25°C
- SPURIOUS: ----- -70 dBc MIN IN BAND
- PHASE NOISE (SSB): ----- -66 dBc/Hz MIN @ 100 Hz  
-96 dBc/Hz MIN @ 1 kHz  
-98 dBc/Hz MIN @ 10 kHz  
-98 dBc/Hz MIN @ 100 kHz  
-125 dBc/Hz MIN @ 1000 kHz
- HARMONICS: ----- -20 dBc
- SUB HARMONICS: ----- -50 dBc
- DC POWER: ----- +15 V, 550 mA MAX  
1.0 AMP MAX SURGE
- PHASE LOCK ALARM: ----- LS-TTL LOGIC "1" OR "0"  
LOCK = LOGIC "1"  
UNLOCK = LOGIC "0"
- SIZE: ----- 2.25" x 2.25" x 0.62"
- WEIGHT: ----- 8 oz MAX
- RF CONNECTOR: ----- 2.92 mm FEMALE
- POWER AND PHASE LOCK CONNECTOR: -- RFI SOLDER PINS
- FINISH: ----- GOLD PLATED OVER NICKEL

## 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: ----- MIL-S-901D, NO BREAKAGE (SURVIVAL)
- SHOCK DURATION: ----- 360 g, 1.6 ms, FULL SIZE
- MEDIUM DURATION: ----- 150 g, 6 ms, HALF SIZE
- LONG DURATION: ----- 130 g, PEAK TO PEAK, 17 ms, FULL SIZE  
30 g, PEAK TO PEAK, 40 ms, FULL SIZE

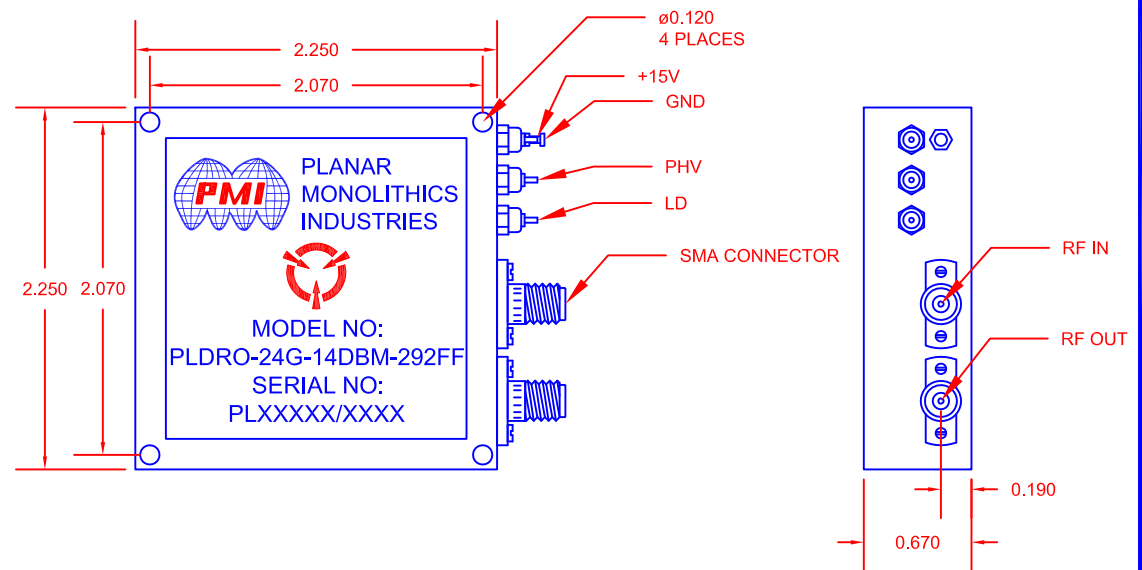
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

**PMI CONFIDENTIAL AND PROPRIETARY**

ALL DIMENSIONS  
ARE IN INCHES [mm]  
TOLERANCES:  
X,XX  $\pm 0.020$   
X,XXX  $\pm 0.010$

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	1/18/2019	

## MECHANICAL OUTLINE



**PLANAR MONOLITHICS INDUSTRIES, INC.**  
7311-F GROVE ROAD  
FREDERICK, MARYLAND 21704 USA  
TEL: (301)-662-5019, FAX: (301)-662-1731  
WEB: [www.pmi-rf.com](http://www.pmi-rf.com), EMAIL: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)  
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE				REV.
DRAWN <i>EW</i>		1/18/19	PRODUCT FEATURE PLDRO-24G-14DBM-292FF				-
REDRAWN			SIZE	FSCM NO.	DWG NO.	PRELIMINARY	
ISSUED			A	05XQ0			
			SCALE	N:S	SHEET		1 OF 1