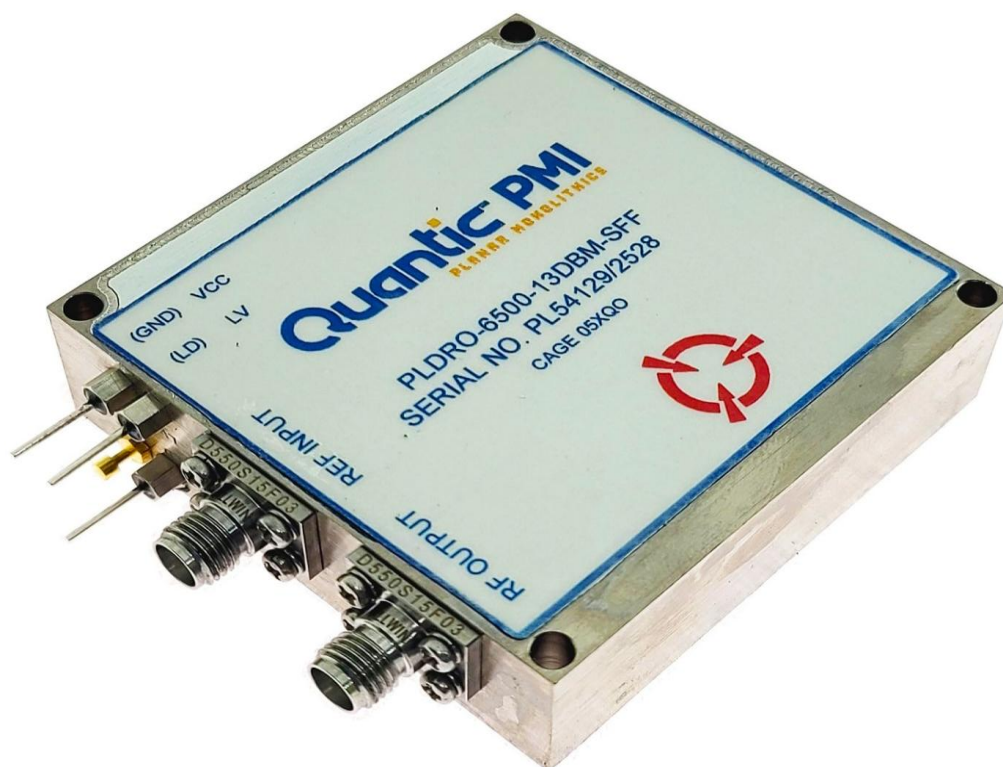


**TYPICAL CHARACTERISTICS
ON
PLDRO-6500-13DBM-SFF**

PMI MODEL NUMBER PLDRO-6500-13DBM-SFF IS A PHASE LOCKED OSCILLATOR THAT PROVIDES A 13 dBm MINIMUM OUTPUT AT 6500 MHz.



**REPORTED BY: V. PRATAP
TESTED BY: E. KRETZ
DATE: 8/19/2025**

TYPICAL CHARACTERISTICS ON PLDRO-6500-13DBM-SFF

PRODUCT FEATURE

DESCRIPTION:

PMI MODEL NUMBER PLDRO-6500-13DBM-SFF IS A PHASE LOCKED MICROWAVE OSCILLATOR THAT PROVIDES A 13 dBm MINIMUM OUTPUT AT 6500 MHz.

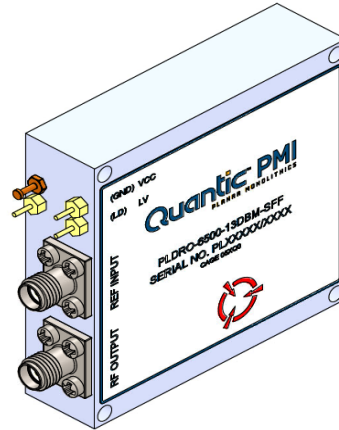
SPECIFICATIONS:

- OUTPUT FREQUENCY:..... 6500 MHz
- REFERENCE FREQUENCY:..... 100 MHz (SINEWAVE)
- INPUT LEVEL:..... 0 dBm $\pm$ 3 dBm
- OUTPUT LEVEL:..... + 13 dBm MIN.
- SPURIOUS:..... -75 dBc MAX
- HARMONICS:..... -20 dBc MAX
- LOAD VSWR:..... 1:1.5 MAX
- PHASE NOISE:..... -135 dBc/Hz MAX @ 1 MHz
- REFERENCE PHASE NOISE:..... -130 dBc/Hz MAX @ 100 Hz
- -155 dBc/Hz MAX @ 1 kHz
- -165 dBc/Hz MAX @ 10 kHz
- -165 dBc/Hz MAX @ 100 kHz
- FREQUENCY STABILITY:..... SAME AS REFERENCE
- SUPPLY VOLTAGE:..... +12V
- CURRENT:..... 300 mA MAX
- LOCK DETECTOR:..... TTL HIGH IN LOCK
- CONNECTOR:..... SMA FEMALE
- FINISH:..... NICKEL PLATED

ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -40°C TO +70°C (OPERATING)
- -55°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202, METHOD 103B COND. B
- SHOCK:..... MIL-STD-202, METHOD 213B COND. B
- ALTITUDE:..... MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 107D COND. A

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



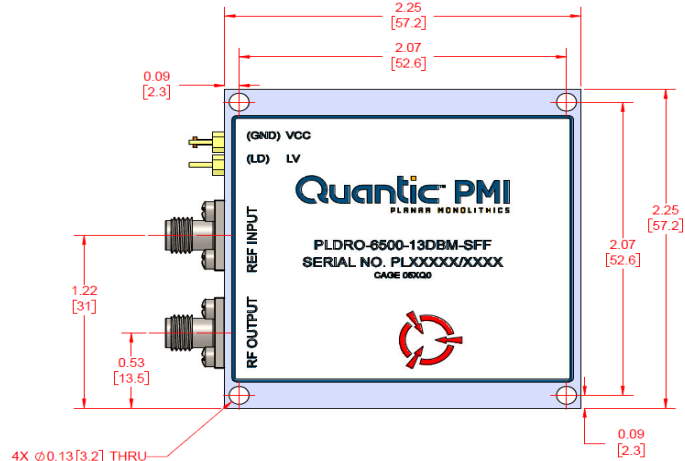
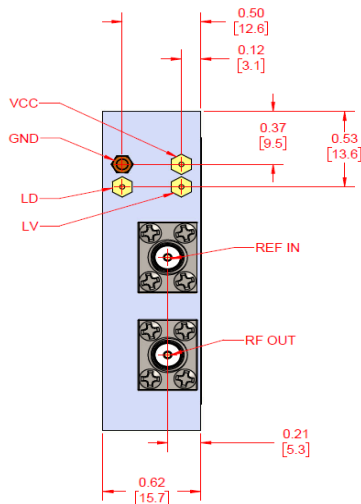
REV.	DESCRIPTION	DATE	APPROVED
A1	ORIGINAL RELEASE	8/10/2003	

APPROVALS		DATE	TITLE	
DESIGN	VP	8/10/2003	OUTLINE	
REVISION				
REV	YECW NC	REV	PLDRO-6500-13DBM-SFF	REV
B	05XQ00	27043440		A1
SCALE 2:1		SHEET 1 OF 2		

PMI CONFIDENTIAL AND PROPRIETARY

Quantic PMI
PLANAR MONOLITHICS

7309-A GROVE ROAD, FREDERICK, MD 21704 USA
TEL: (301) 662-5019 FAX: (301) 662-1731
WWW.QUANTICPMI.COM



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OUTLINE

PLDRO-6500-13DBM-SFF

REV YECW NC 27043440 A1

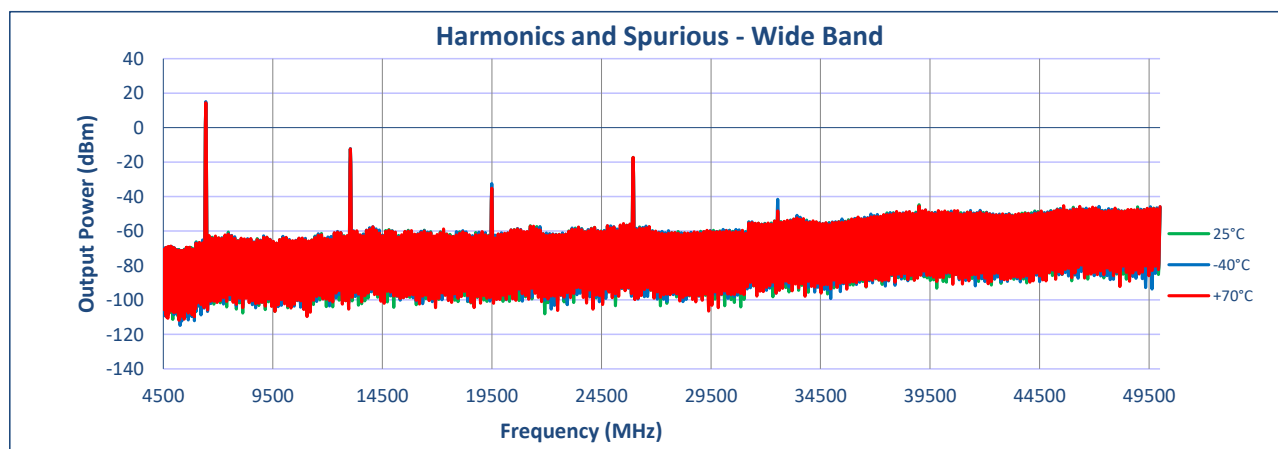
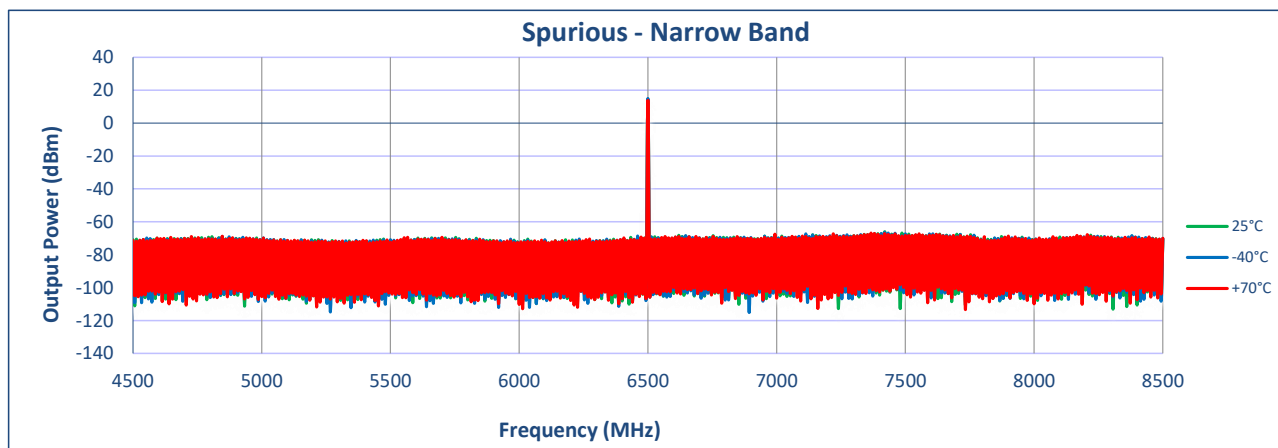
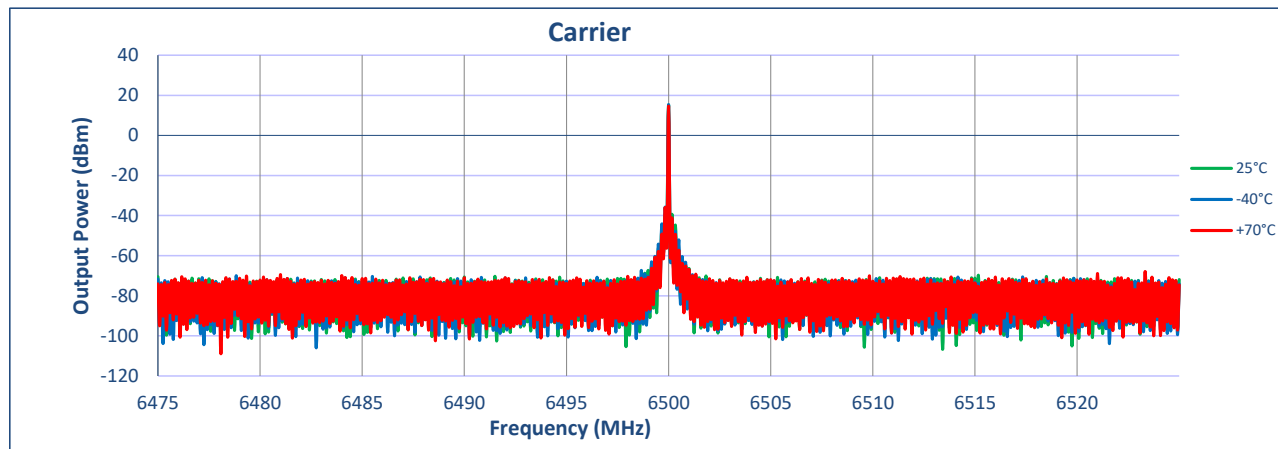
SCALE 2:1 SHEET 2 OF 2

**TYPICAL CHARACTERISTICS
ON
PLDRO-6500-13DBM-SFF**

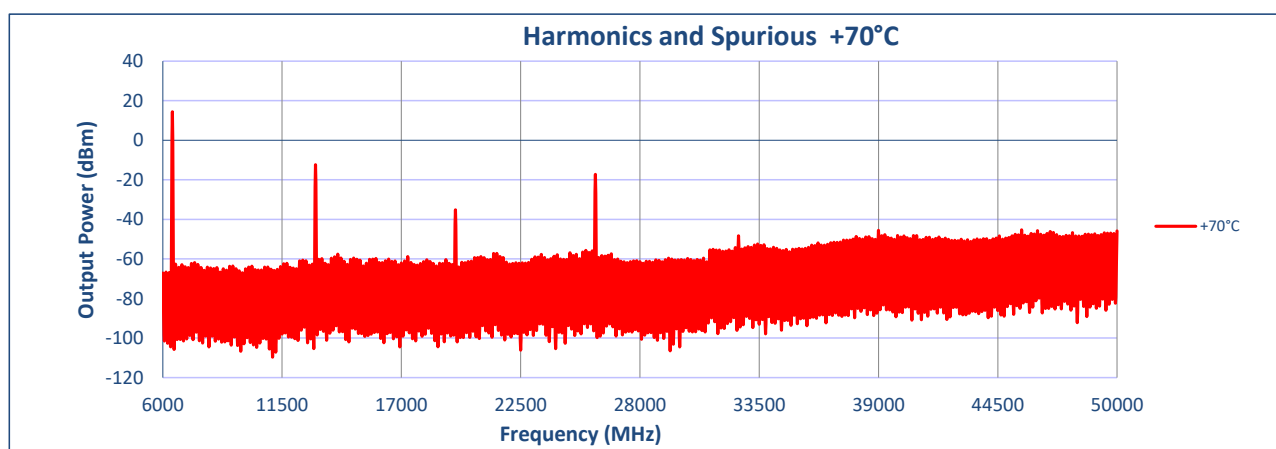
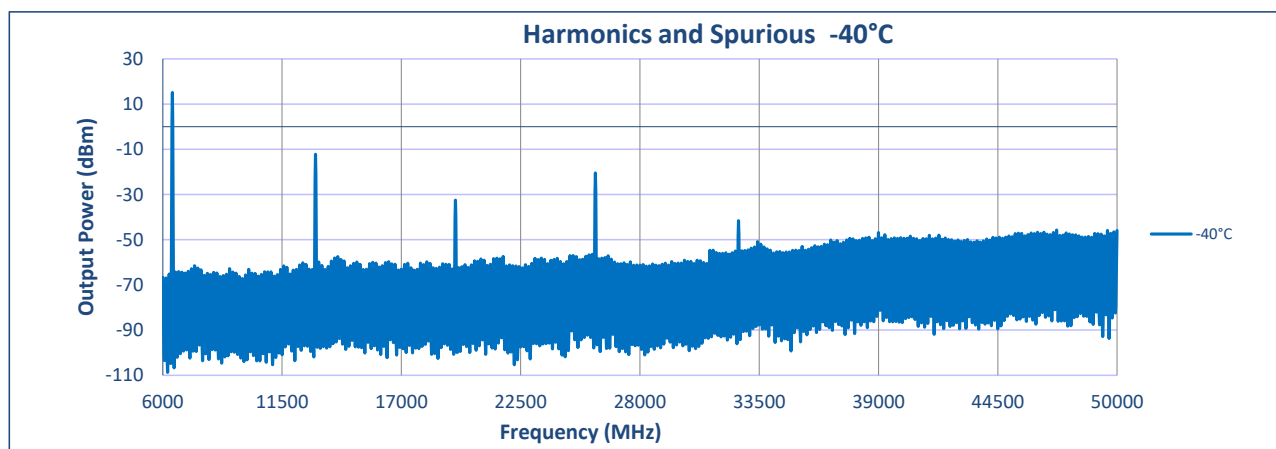
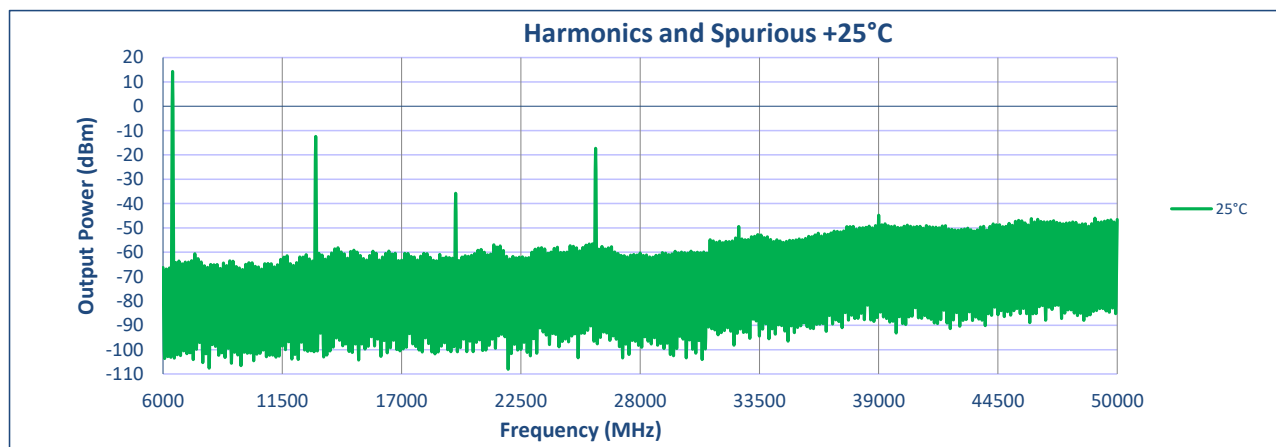
TECHNICAL SPECIFICATIONS

TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			-40°C	+25°C	+70°C
1	Output Frequency	6500 MHz	6500 MHz	6500 MHz	6500 MHz
2	Output Level	+13 dBm MIN.	16 dBm	15.2 dBm	14.6 dBm
3	Spurious	-75 dBc MAX.	-82.5 dBc (See Graph)	-81.2 dBc (See Graph)	-81.4 dBc (See Graph)
4	Harmonics	-20 dBc MAX.	-28.2 dBc (See Graph)	-27.6 dBc (See Graph)	-27 dBc (See Graph)
5	Phase Noise (REF Input 8 dBm MAX. @ 25°C)	-135 dBc/Hz @ 1 MHz	-142.1 dBc/Hz @ 1 MHz		
6	DC Supply Voltage	+12V ± 10% @ 300 mA MAX.	+12V @ 230 mA		
7	Lock Detector	TTL HIGH In Lock	TTL HIGH In Lock		

TYPICAL CHARACTERISTICS ON PLDRO-6500-13DBM-SFF



**TYPICAL CHARACTERISTICS
ON
PLDRO-6500-13DBM-SFF**



TYPICAL CHARACTERISTICS
ON
PLDRO-6500-13DBM-SFF

Phase Noise Curve

