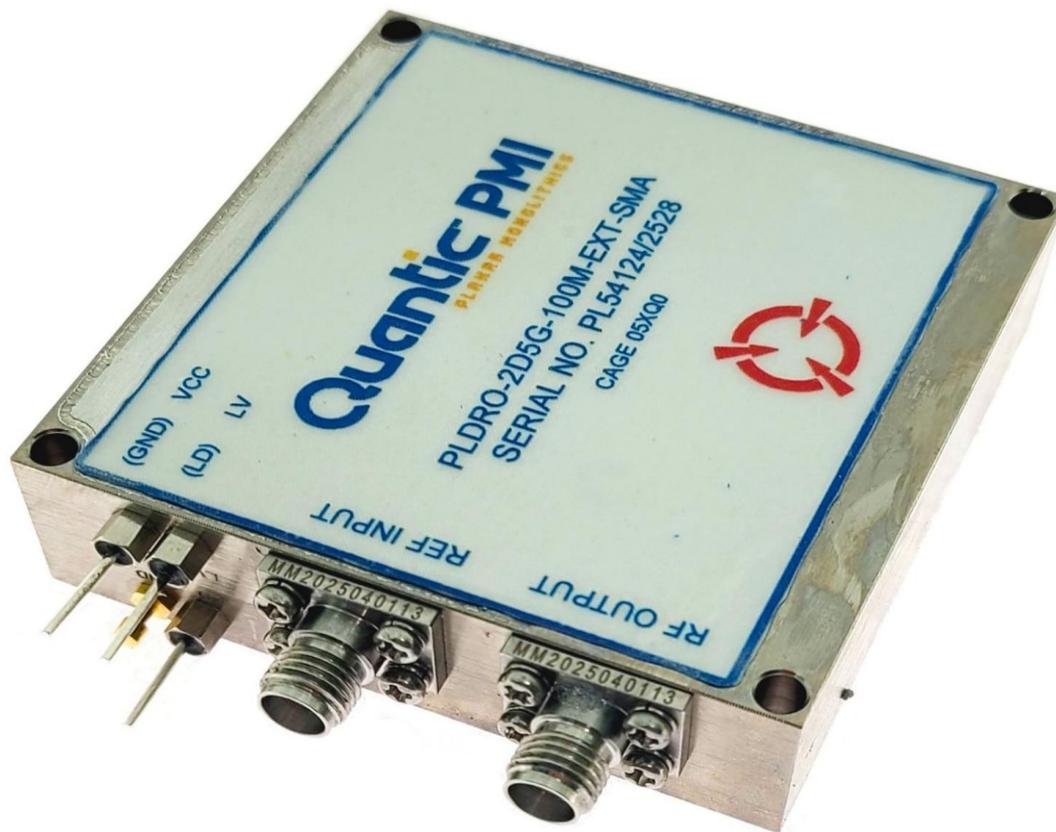


**TYPICAL CHARACTERISTICS
ON
PLDRO-2D5G-100M-EXT-SMA**

**PMI MODEL NUMBER PLDRO-2D5G-100M-EXT-SMA IS A PHASE LOCKED OSCILLATOR THAT PROVIDES
A 13 dBm MINIMUM OUTPUT AT 2500 MHz.**



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

TYPICAL CHARACTERISTICS ON PLDRO-2D5G-100M-EXT-SMA

PRODUCT FEATURE

DESCRIPTION:

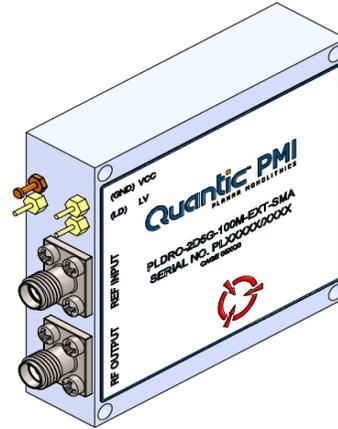
PMI MODEL NUMBER PLDRO-2D5G-100M-EXT-SMA IS A PHASE LOCKED MICROWAVE OSCILLATOR THAT PROVIDES A 13 dBm MINIMUM OUTPUT AT 2500 MHz.

SPECIFICATIONS:

- OUTPUT FREQUENCY:..... 2500 MHz
- REFERENCE FREQUENCY:..... 100 MHz (SINEWAVE)
- INPUT LEVEL:..... +3 TO +13 dBm
- OUTPUT LEVEL:..... +13 dBm MIN.
- SPURIOUS:..... -70 dBc MAX
- HARMONICS:..... -20 dBc MAX
- LOAD VSWR:..... 1:1.5 MAX
- PHASE NOISE:.....
 -100 dBc/Hz TYP. @ 100Hz
 -120 dBc/Hz MAX @ 1 kHz
 -126 dBc/Hz MAX @ 10 kHz
 -126 dBc/Hz MAX @ 100 kHz
 -140 dBc/Hz MAX @ 1 MHz
- REFERENCE PHASE NOISE:.....
 -135 dBc/Hz MAX @ 100 Hz
 -155 dBc/Hz MAX @ 1 kHz
 -160 dBc/Hz MAX @ 10 kHz
- FREQUENCY STABILITY:..... SAME AS REFERENCE
- SUPPLY VOLTAGE:..... +15V
- 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)
 -50°C TO +80°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



CONF	REV	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	8/19/2024	

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

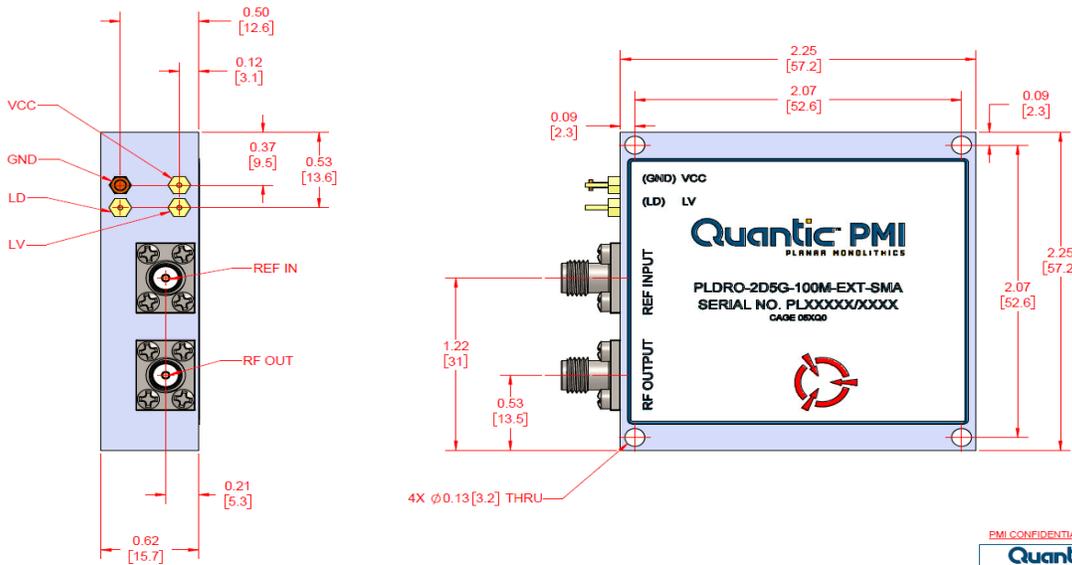
PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS	DATE	TITLE
DESIGN VP	8/19/2024	OUTLINE
REV	FRQ/NO	PLDRO-2D5G-100M-EXT-SMA
B	05XQD	27051780
SCALE: 2:1		SHEET 1 OF 2

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

PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS	DATE	TITLE
DESIGN VP	8/19/2024	OUTLINE
REV	FRQ/NO	PLDRO-2D5G-100M-EXT-SMA
B	05XQD	27051780
SCALE: 2:1		SHEET 2 OF 2

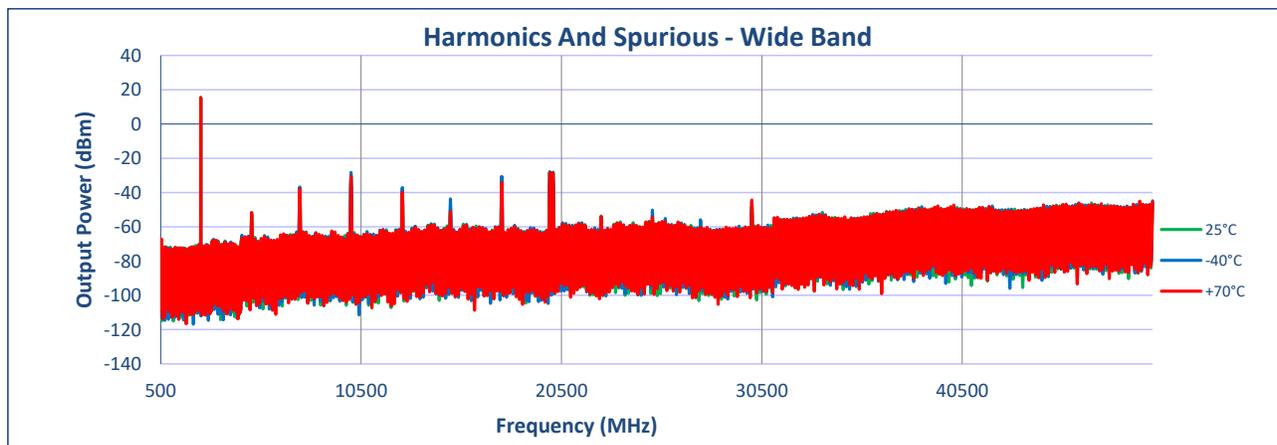
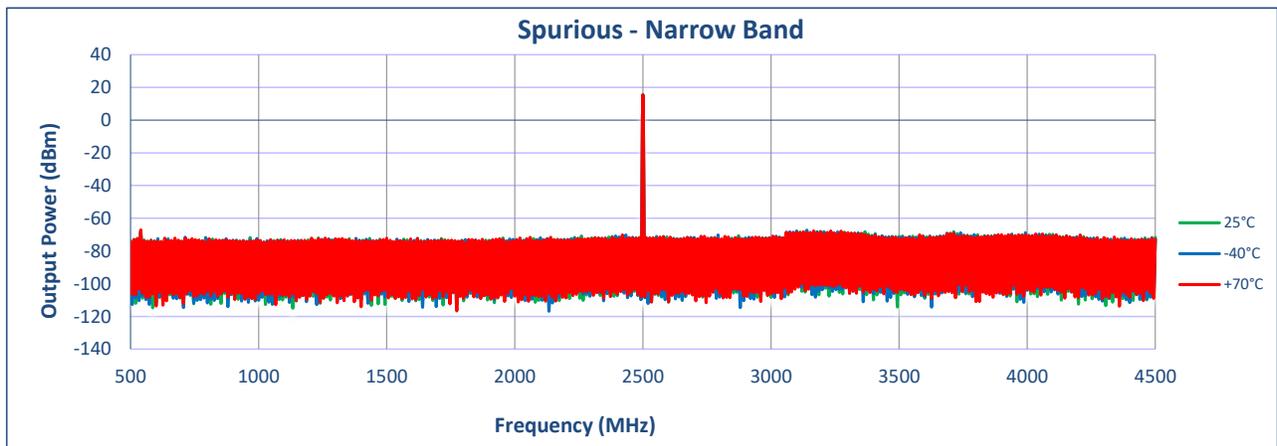
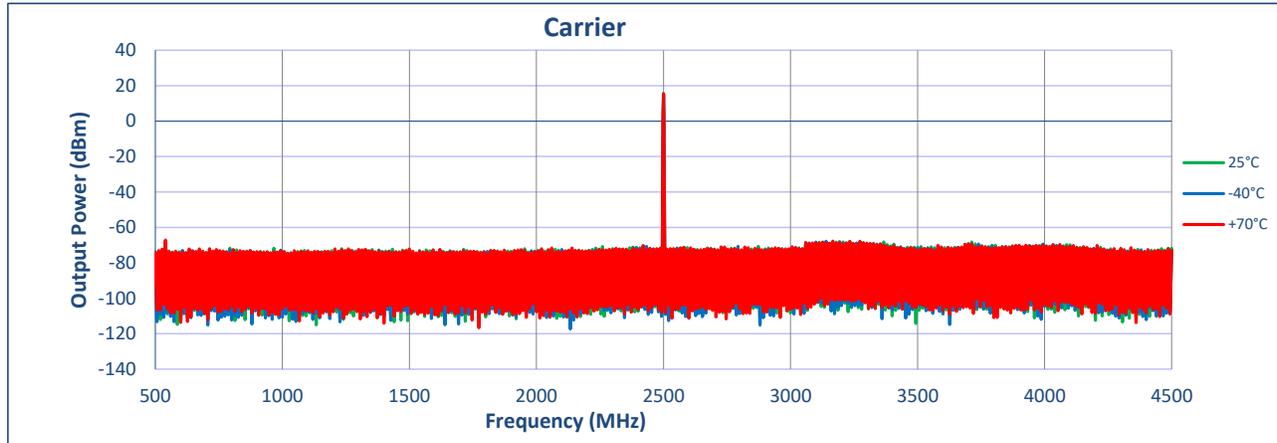


**TYPICAL CHARACTERISTICS
ON
PLDRO-2D5G-100M-EXT-SMA**

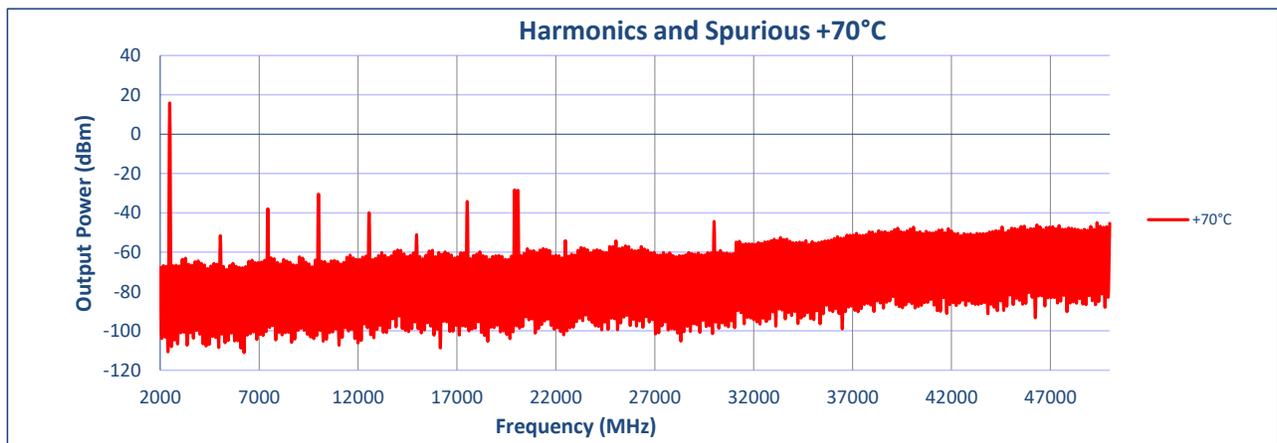
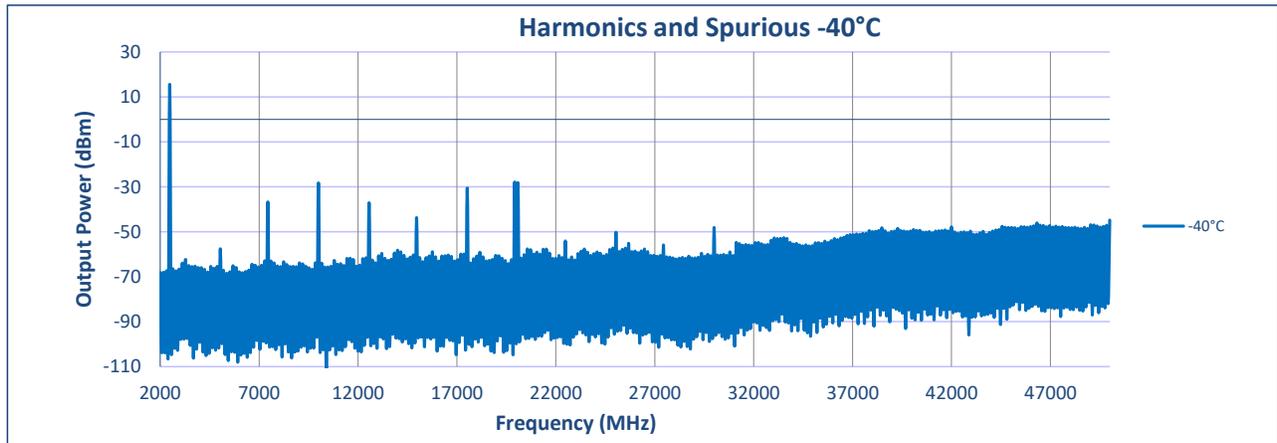
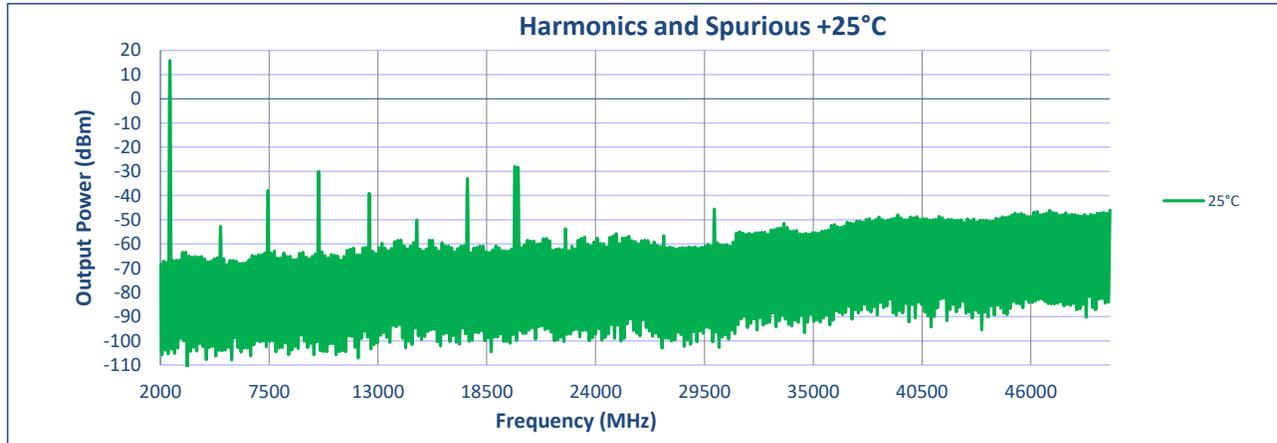
TECHNICAL SPECIFICATIONS

TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			-40°C	+25°C	+70°C
1	Output Frequency	2500 MHz	2500 MHz	2500 MHz	2500 MHz
2	Output Level	+13 dBm MIN.	15.3 dBm	15.5 dBm	15.5 dBm
3	Spurious	-70 dBc MAX.	-82.5 dBc (See Graph)	-83.4 dBc (See Graph)	-82.6 dBc (See Graph)
4	Harmonics	-20 dBc MAX.	-43.1 dBc (See Graph)	-43.5 dBc (See Graph)	-43.7 dBc (See Graph)
5	Phase Noise	-100 dBc/Hz TYP. @ 100Hz -120 dBc/Hz MAX. @ 1 kHz -126 dBc/Hz MAX. @ 10 kHz -126 dBc/Hz MAX. @ 100 kHz -140 dBc/Hz MAX. @ 1 MHz	-108.62 dBc/Hz @ 100Hz -126.20 dBc/Hz @ 1 kHz -131.94 dBc/Hz @ 10 kHz -133.79 dBc/Hz @ 100 kHz -145.58 dBc/Hz @ 1 MHz		
6	DC Supply Voltage	+15V @ 300 mA MAX.	+15V @ 224 mA		
7	Lock Detector	TTL HIGH In Lock	TTL HIGH In Lock		

TYPICAL CHARACTERISTICS
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**TYPICAL CHARACTERISTICS
 ON
 PLDRO-2D5G-100M-EXT-SMA**

Phase Noise Curve

