



**Typical Characteristics
On
DRO-16D3G-CD-1**

PMI MODEL NUMBER DRO-16D3G-CD-1 IS A DIELECTRICALLY STABILIZED GaAs FET OSCILLATOR WITH THE FOLLOWING SPECIFICATIONS.



January 3, 2014

Designed by: PMI Engineering

Tested By: Kevin Mansfield



Typical Characteristics On DRO-16D3G-CD-1

DESCRIPTION

PMI MODEL DRO-16D3G-CD-1 IS AN DIELECTRICALLY STABILIZED GdAs FET OSCILLATOR WITH THE FOLLOWING SPECIFICATIONS

SPECIFICATIONS

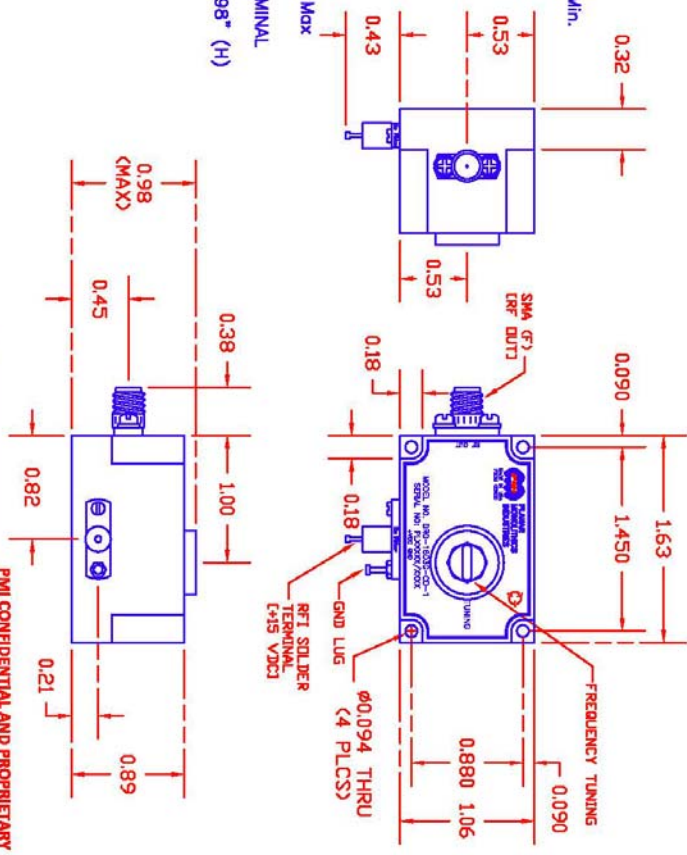
- CENTER FREQUENCY: 16.3 GHz
- MECHANICAL TUNING FREQUENCY: . . . ±25 MHz
- OUTPUT POWER: +16 dbm Max. / +11 dbm Min.
- SPURIOUS: -55 dbc Min.
- HARMONICS: -20 dbc Min.
- PHASE NOISE (+25°C @ 10KHz): . . . -70 dbc/Hz Min.
- FREQUENCY STABILITY: 16.3 MHz Max.
- PULLING: 0.1 MHz/V Max.
- DC SUPPLY: ±6 MHz Max @ VSWR +15VDC (±5%) @ 150 mA Max
- CONNECTORS: SMA (F) / RFI SOLDER TERMINAL
- SIZE: 1.06" (L) X 1.63" (W) X 0.98" (H)
- FINISH: PAINTED GRAY

ENVIRONMENTAL RATINGS

- TEMPERATURE: -20°C TO +71°C (OPERATING)
-62°C TO +85°C (STORAGE)
 - HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
 - SHOCK: MIL-STD-202F, METHOD 2138 COND. B
 - VIBRATION: MIL-STD-202F, METHOD 2040 COND. B
 - TEMPERATURE CYCLES: MIL-STD-202F, METHOD 107D COND. A
- NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE AND THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS			
REV#	DATE	DESCRIPTION	APPROVED
1	09/18/18	ORIGINAL RELEASE	

MECHANICAL OUTLINE



PLANAR MONOLITHICS INDUSTRIES, INC.
 7311-F GROVE ROAD
 FREDERICK, MARYLAND 21704 USA
 TEL: 301-662-5019 FAX: 301-662-1731
 WEBSITE: www.pmi-rf.com
 E-MAIL: sales@pmi-rf.com
 ISO 9001 CERTIFIED



DATE	APPROVED	DATE	APPROVED
09/14/18	ALM		

DRAWN		TITLE	
DESIGNED		PRODUCT FEATURE	
SCALE		DRO-16D3G-CD-1	
REV. NO.		REV. NO.	
A		05X00	
SHEET		SHEET	
1 OF 1		1 OF 1	



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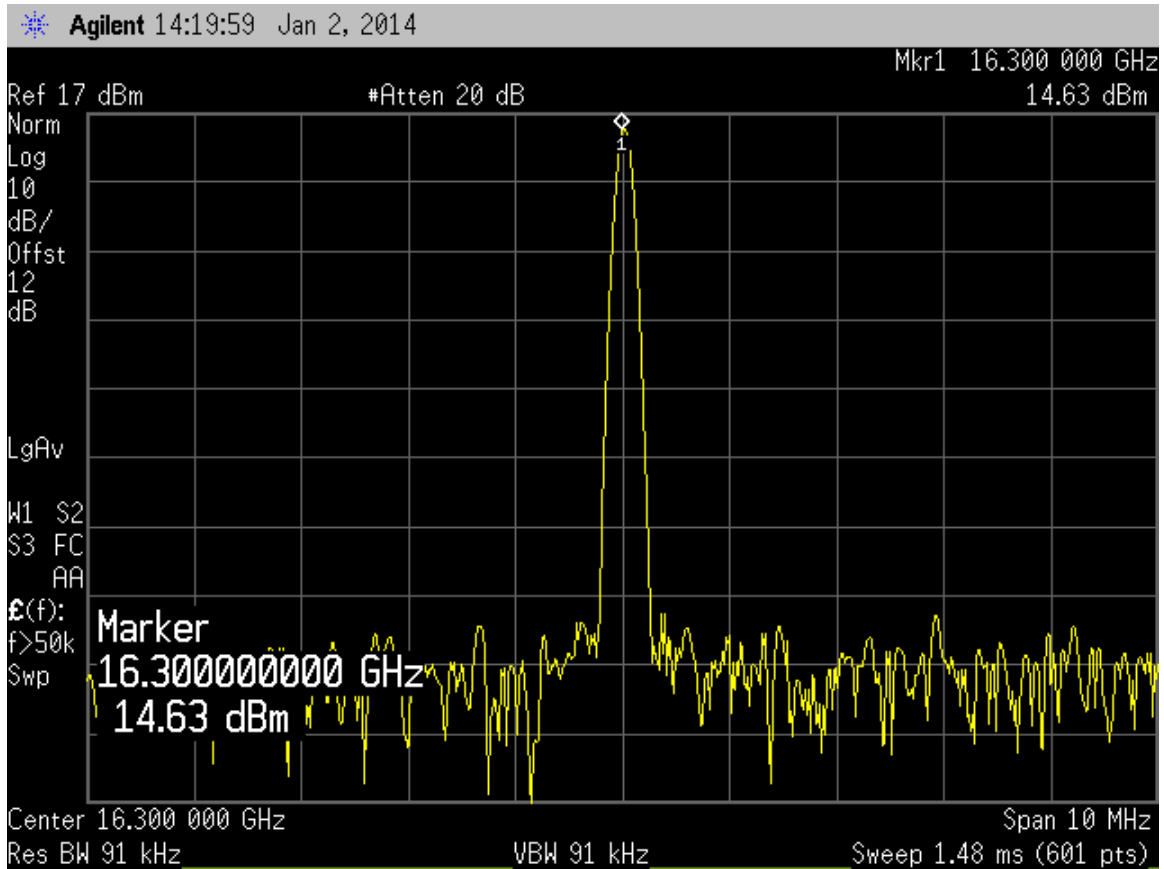
TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Center Frequency:	16.3 GHz	16.3 GHz See Plot	
2	Mechanical Tuning Frequency:	±25 MHz	±25 MHz	
3	Output Power:	+16 dBm Max. +11 dBm Min.	+14.6 dBm See Plot	
4	Spurious:	-55 dBc Min.	<-70 dBc	
5	Harmonics:	-20 dBc Min.	-41.8 dBc See Plot	
6	*Phase Noise:	-70 dBc/Hz Min.	-95.2 dBc/Hz See Plot	
7	Frequency Stability:	16.3 MHz Max.	±5 MHz	
8	Pushing:	0.1 MHz/V Max.	<0.1 MHz/V	
9	Pulling:	±6 MHz Max @ VSWR	±2 MHz	
10	DC Supply:	+15 VDC (±5%) @ 150 mA Max	110 mA @ +15 VDC	

* 10kHz @ +25°C



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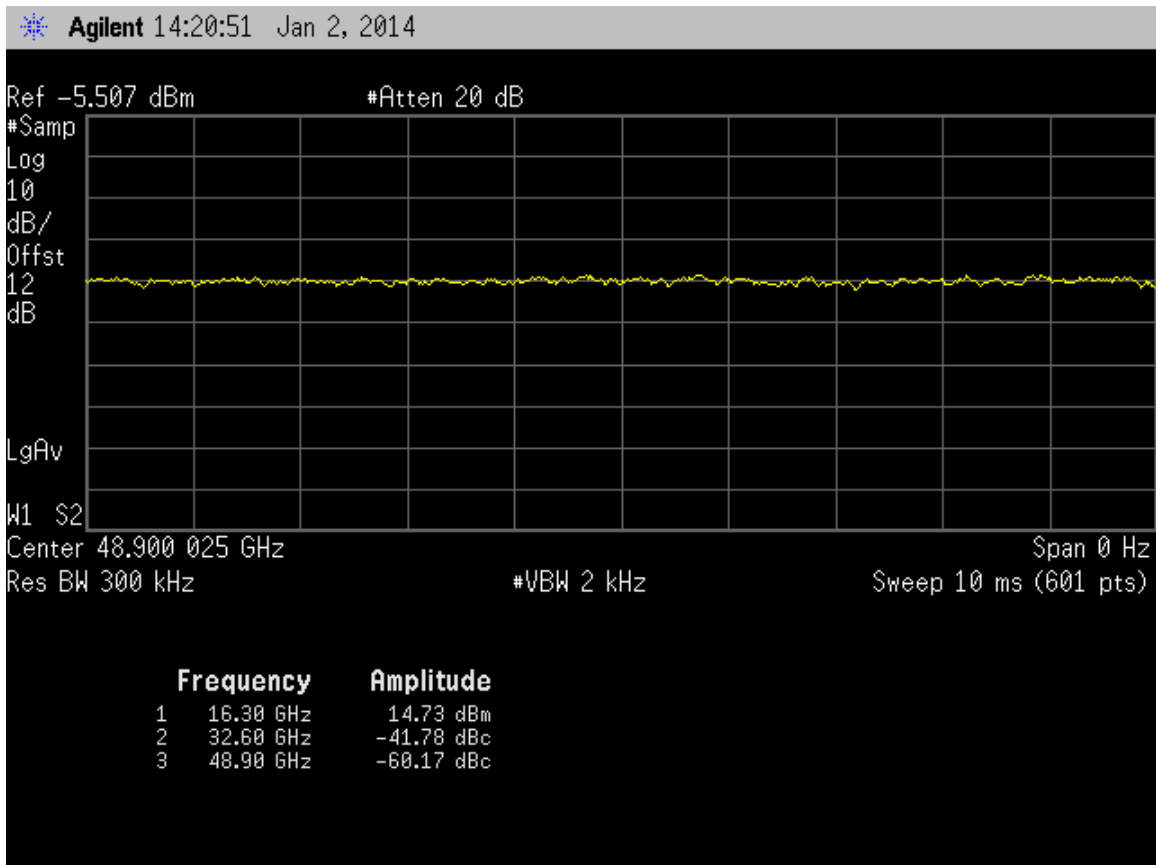
Carrier





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Harmonics





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Phase Noise

