PL10805/1310

Typical Characteristics
On
PEC3-40-30M26R5G-6R0-12-12-SFF Rev. B

PMI Model Number: PEC3-40-30M26R5G-6R0-12-12-SFF Rev. B is a 0.03 to 26.5 GHz low noise amplifier. This amplifier can be used as a SMA connectorized or a surface mount component.

August 19, 2014
Designed By: Kevin Mason
Tested By: Hugo Gonzales
Reported by: Hugo Gonzales

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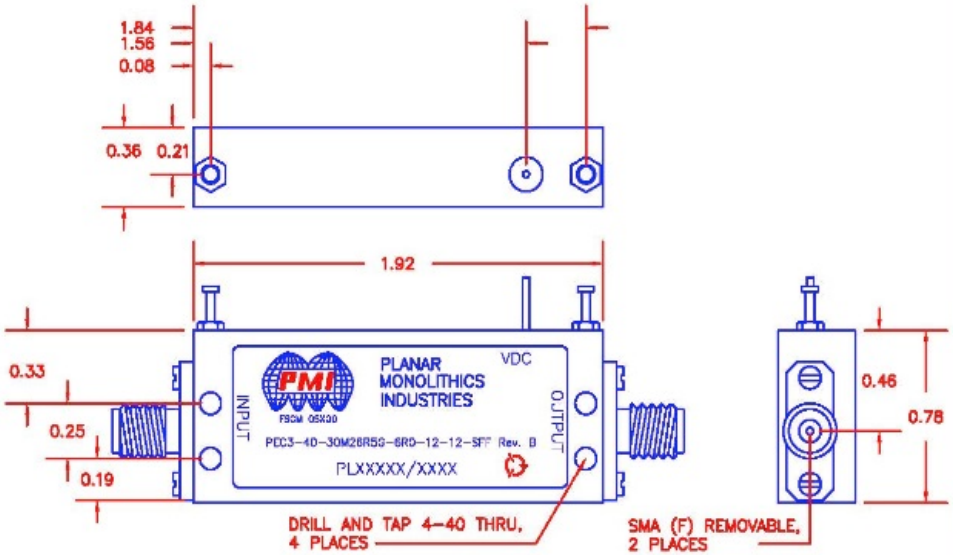
Description:

PMI Model Number: PEC3-40-30M26R5G-6R0-12-12-SFF Rev. B is a 0.03 to 26.5 GHz low noise amplifier. This amplifier can be used as a SMA connectorized or a surface mount component.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	08/22/13	
	A2	ECN # 14-0097	07/03/14	

Specifications:

Frequency Range:	0.03 to 26.5 GHz
Gain:	+35dB Min.
Gain Flatness:	±3.5dB Max
Noise Figure:	6.0dB Typ.
OP1dB:	+12dBm Min
VSWR Input/Output:	2.5:1 Max
DC Supply:	+12 to +15VDC @ 700mA Max
Connectors In/Out:	SMA Female
Finish:	Gold Plated



Features:

Internal Voltage Regulation
Unconditional Stability

Available Options:

Various Package types
Various Connector types
Temperature Compensation
Gain and Phase Matching
MIL-STD-883 Screening Available

Environmental Ratings:

Temperature:	-54°C to + 95°C (Operating) -65°C to +125°C (Storage)
Humidity:	MIL-STD-202F, METHOD 103B COND B.
Shock:	MIL-STD-202F, METHOD 213B COND B.
Altitude:	MIL-STD-202F, METHOD 105C COND B.
Temperature Cycle:	MIL-STD-202F, METHOD 107D COND A

Note: The above specifications are subject to change or revision.

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.
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ISO 9001 CERTIFIED

APPROVALS	DATE
DRAWN AMS	08/22/13
CHECKED	
ISSUED	

TITLE: OUTLINE
PEC3-40-30M26R5G-6R0-12-12-SFF REV.B

SIZE	FSCM NO.	DWG NO.	REV.
A	05XQ0	27007249	A2

SCALE N:S SHEET 1 OF 1

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TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	30 MHz – 26.5 GHz	**30 MHz – 26.5 GHz**	
2	Gain:	+35dB Min	**43.40dB See Plot**	
3	Gain Flatness:	±3.5dB Max.	**± 2.46dB See Plot**	
4	Noise Figure:	6.0dB Typ.	**6.04dB See Plot**	
5	Pout @ 1dB Compression:	+12dBm Min.	**+12dBm**	
6	VSWR: (Input/Output)	2.5:1 (Max.)	**Input 2.34:1 Output 2.18:1 See Plot**	
7	DC Supply:	700mA @ +12 to +15VDC Max.	**663mA @ +12 to +15VDC Max.**	

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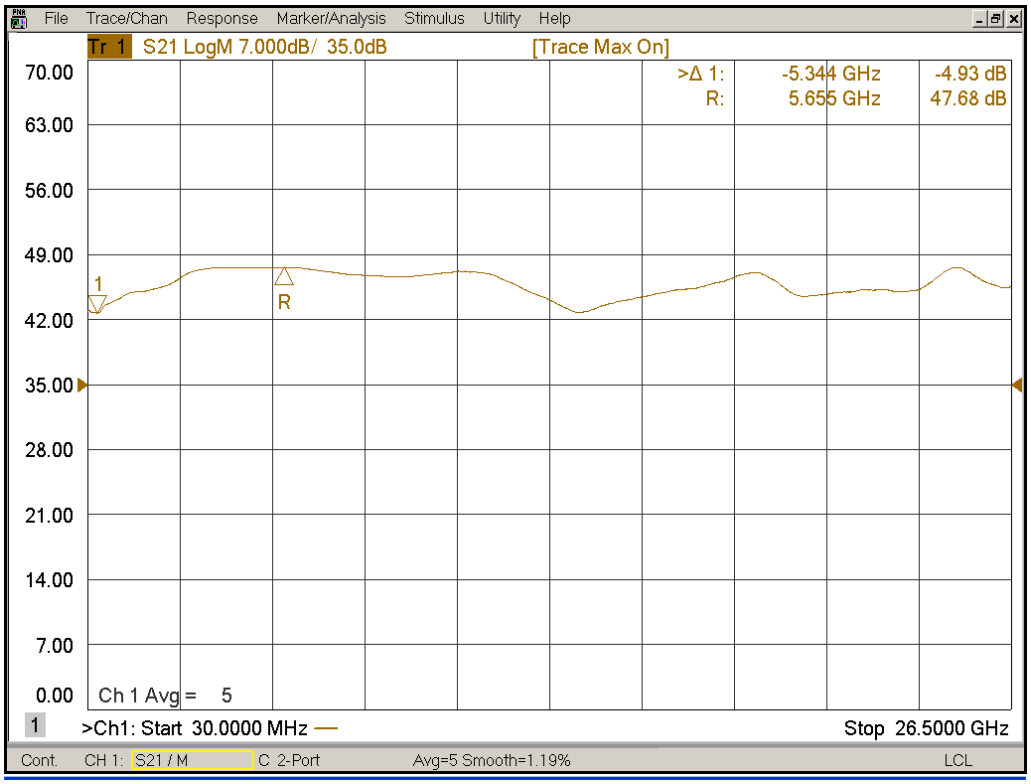
Gain Plot



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Input Return Loss

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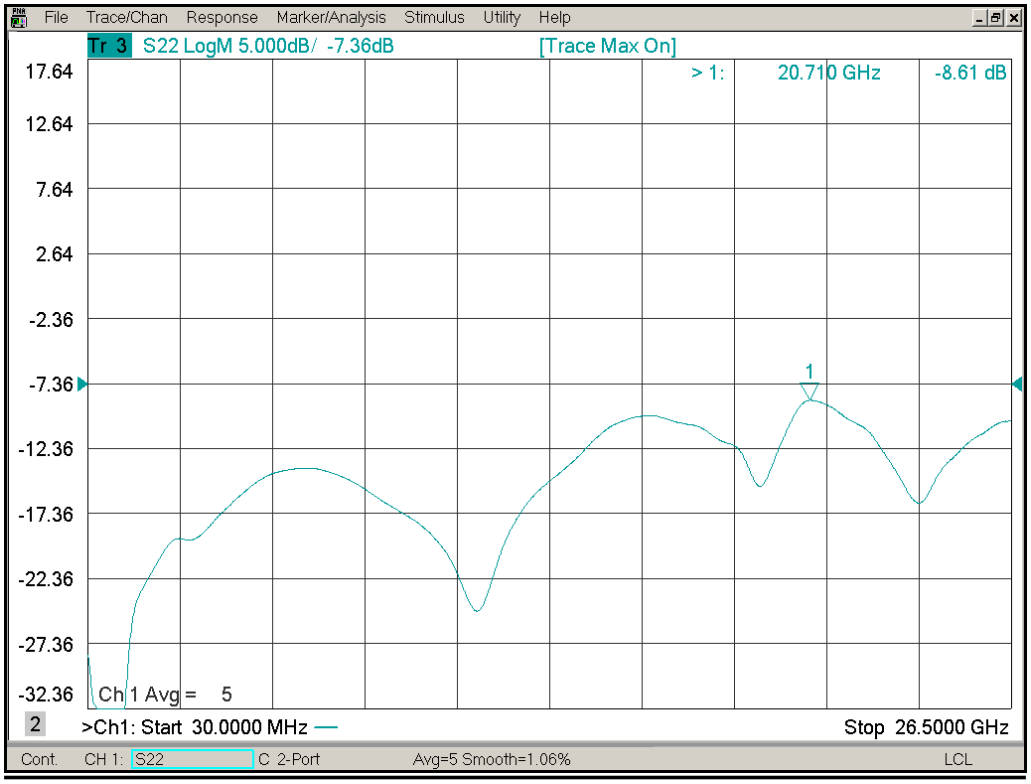
Output Return Loss



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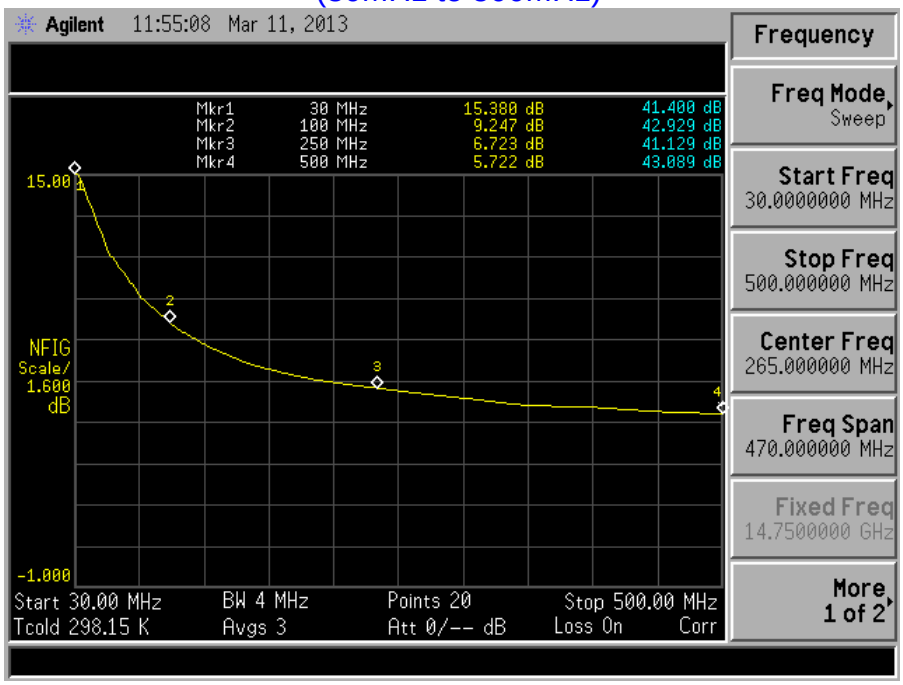
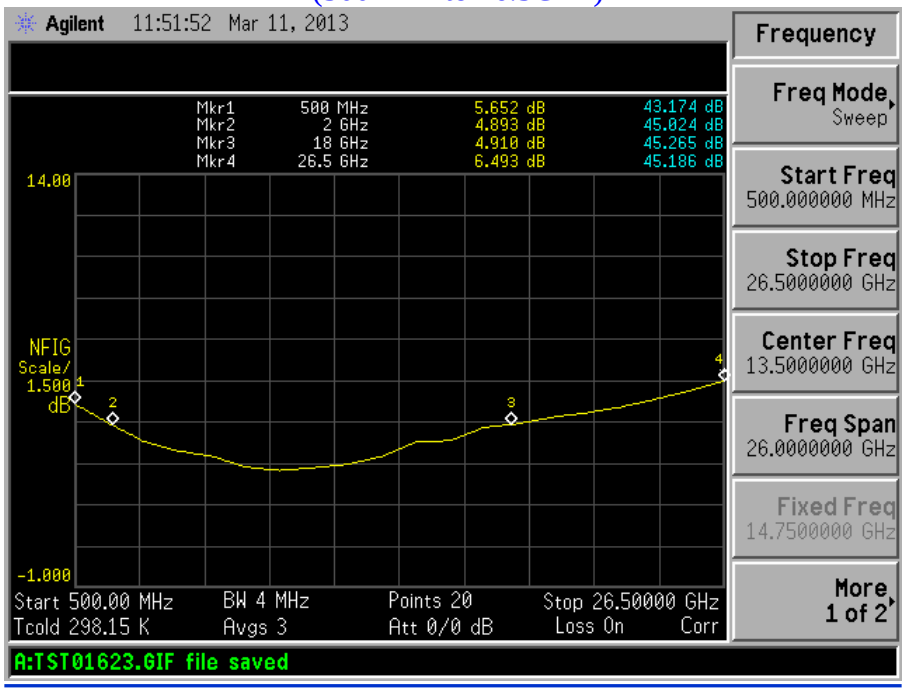
Noise Figure Plot
(30MHz to 500MHz)



Noise Figure Plot
(500MHz to 26.5GHz)



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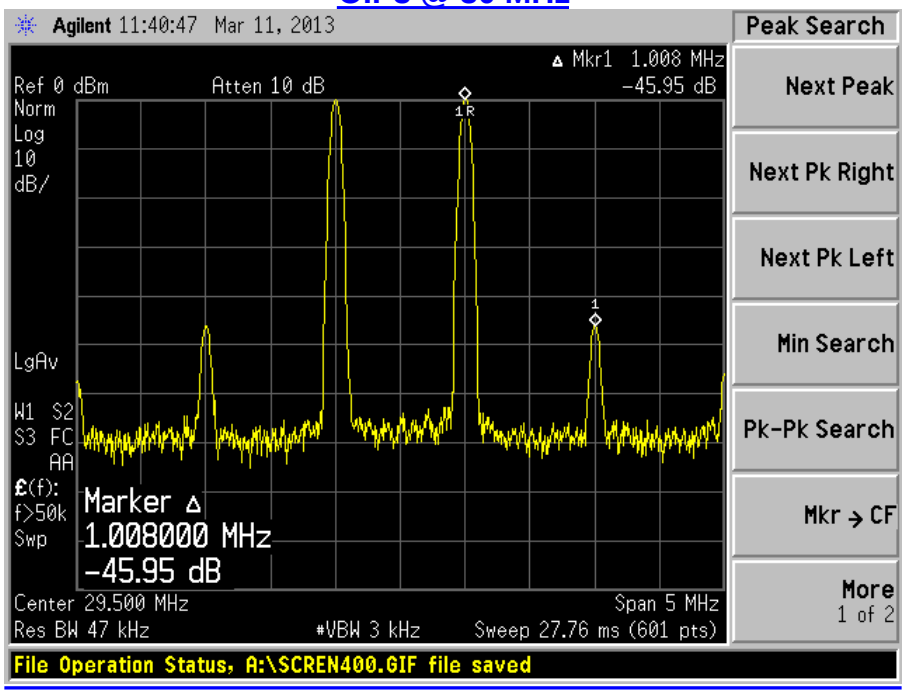
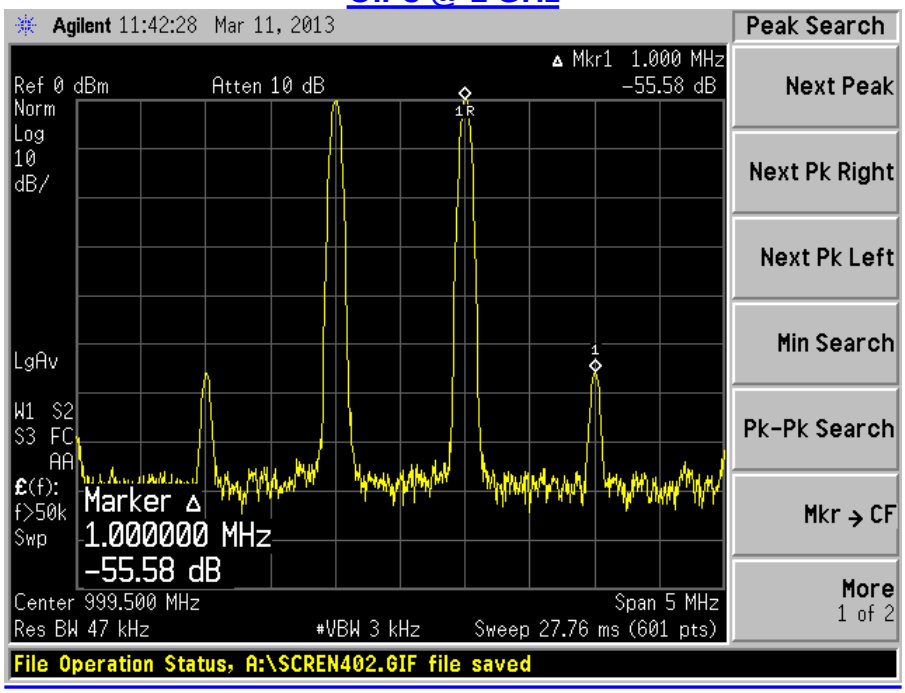
OIP3 @ 30 MHz



OIP3 = Pout + dBc/2
+22.97dBm = 0 + (45.95/2)

OIP3 @ 1 GHz



OIP3 = Pout + dBc/2
+27.79dBm = 0 + (55.58/2)

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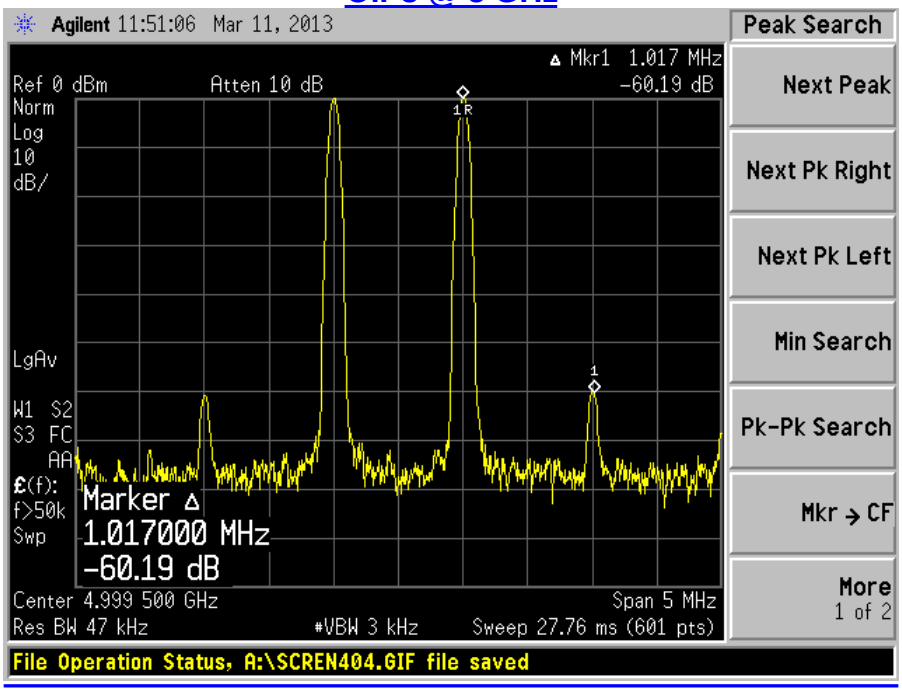
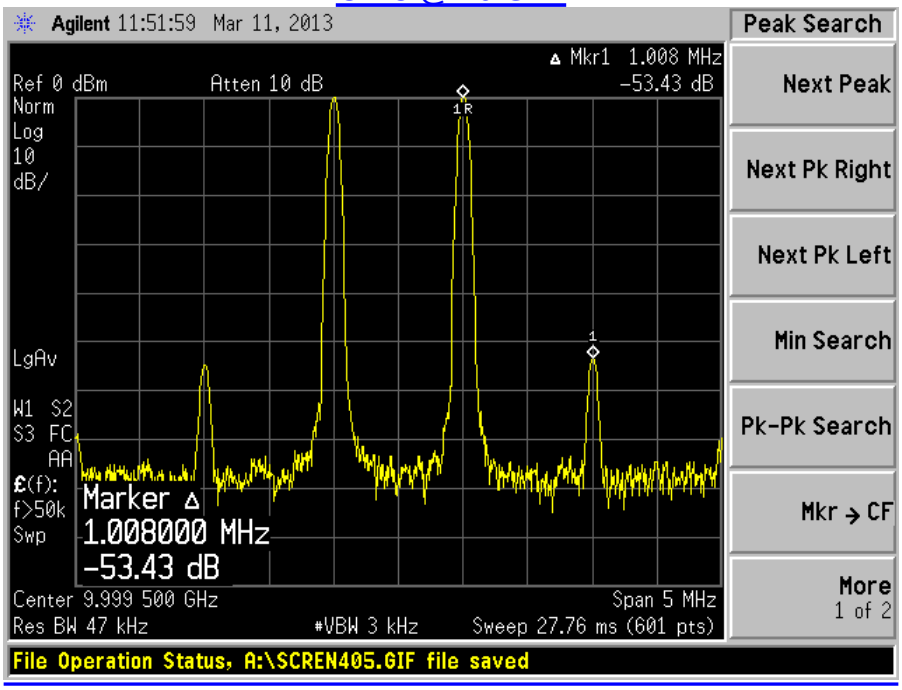
OIP3 @ 5 GHz



OIP3 = Pout + dBc/2
+30.09dBm = 0 + (60.19/2)

OIP3 @ 10 GHz



OIP3 = Pout + dBc/2
+26.71dBm = 0 + (53.43/2)

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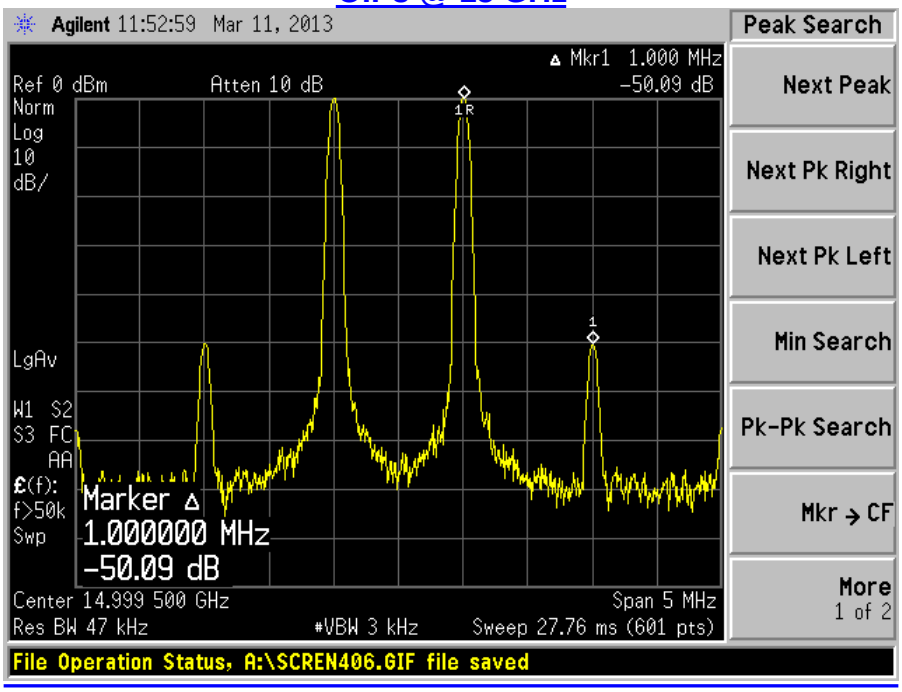
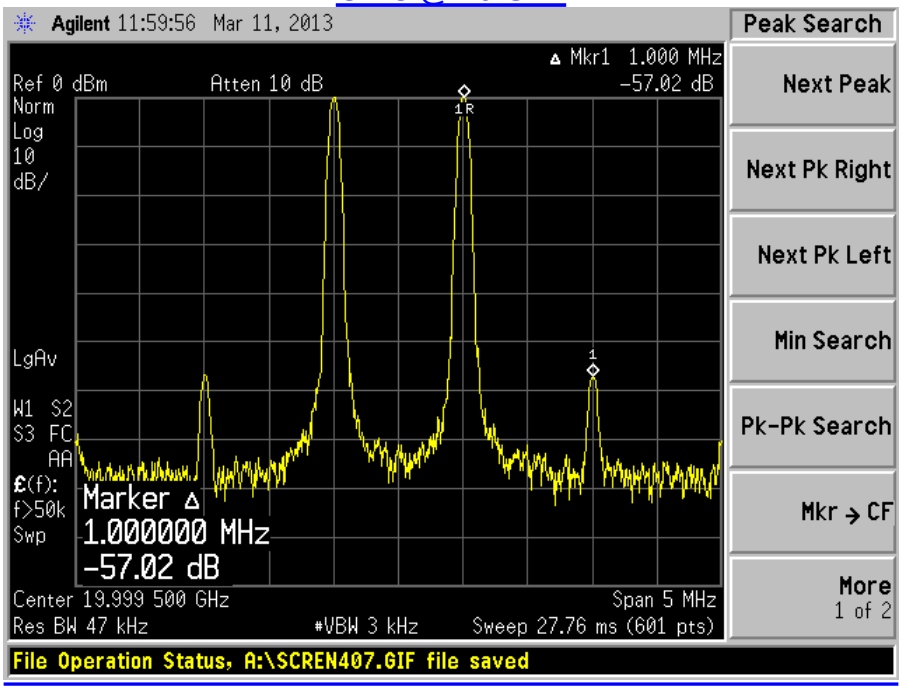
OIP3 @ 15 GHz



OIP3 = Pout + dBc/2
+25.04dBm = 0 + (50.09/2)

OIP3 @ 20 GHz



OIP3 = Pout + dBc/2
+28.51dBm = 0 + (57.02/2)

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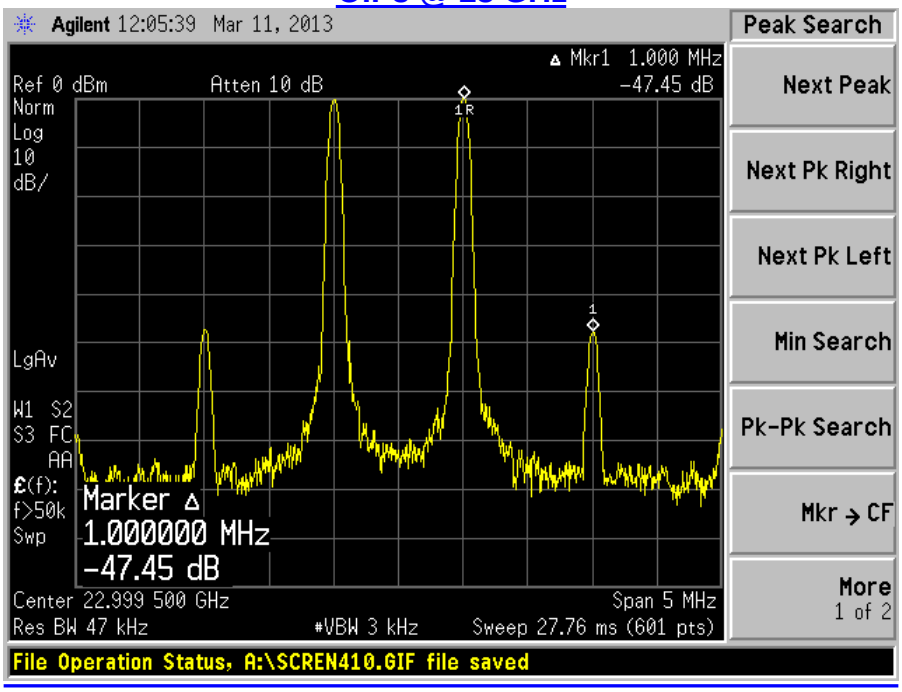
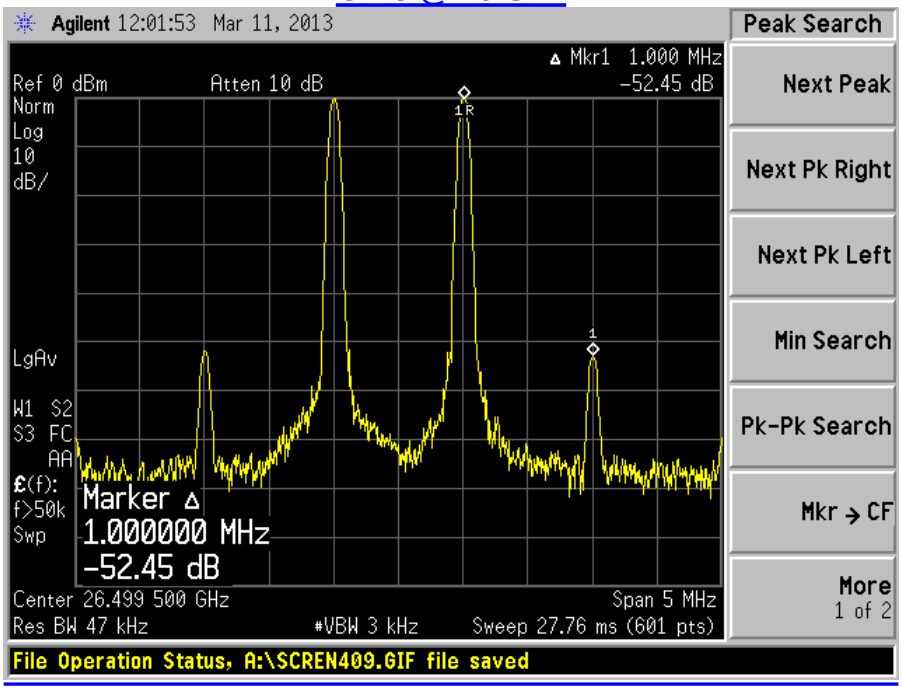
OIP3 @ 23 GHz



OIP3 = Pout + dBc/2
+23.72dBm = 0 + (47.45/2)

OIP3 @ 26 GHz



OIP3 = Pout + dBc/2
+26.22dBm = 0 + (52.45/2)

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