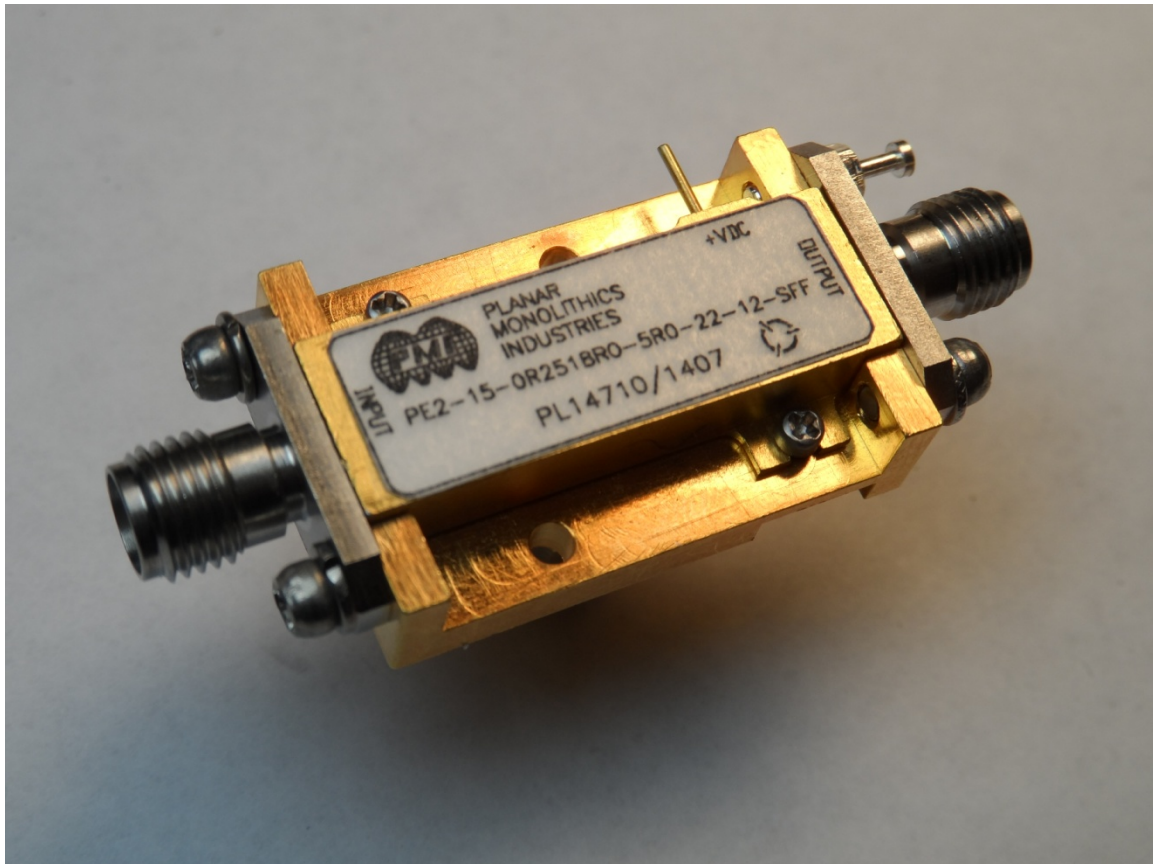




**Typical Characteristics
On
PE2-15-0R2518R0-5R0-22-12-SFF**

PL14710/1407

Lower Noise Amplifier designed for Military and Industrial applications. This amplifier is supplied in our standard PE2 housing that can be used as a SMA connectorized or a surface mount component. Other packages and connector types are available.



December 12, 2017
Designed By: Kevin Mason

Tested & Reported by:
Hugo Gonzales



Typical Characteristics
On
PE2-15-0R2518R0-5R0-22-12-SFF

PL14710/1407

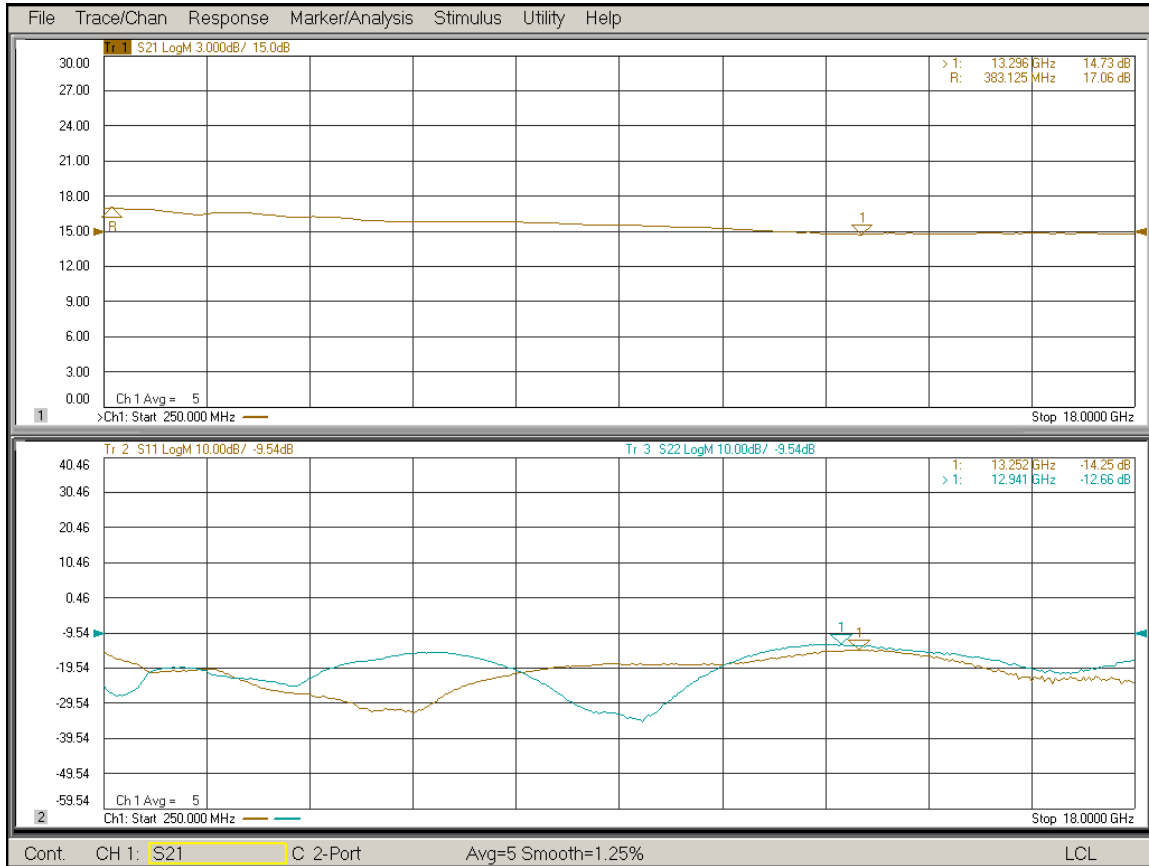
TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	0.25 to 18.0GHz	0.25 to 18.0GHz (See Plot)	
2	Gain:	+15dB Typ.	14.73dB Min. 17.06dB Max. (See Plot)	
3	Gain Flatness:	±1.5dB Max.	±1.16dB (See Plot)	
4	VSWR: (In/Out)	2.0:1 Max.	Input 1.49:1 Output 1.61:1 (See Plot)	
5	Noise Figure:	5.0dB Typ.	6.38dB @ 250 MHz (See Plot)	
6	OP1dB:	+20dBm Min. +22dBm Typ.	+20dBm	
7	DC Supply:	+12 to +15 VDC @225mA Typ.	267mA @ +12 to +15 VDC	



Typical Characteristics On PE2-15-0R2518R0-5R0-22-12-SFF

PL14710/1407

Gain & Return Loss Plot

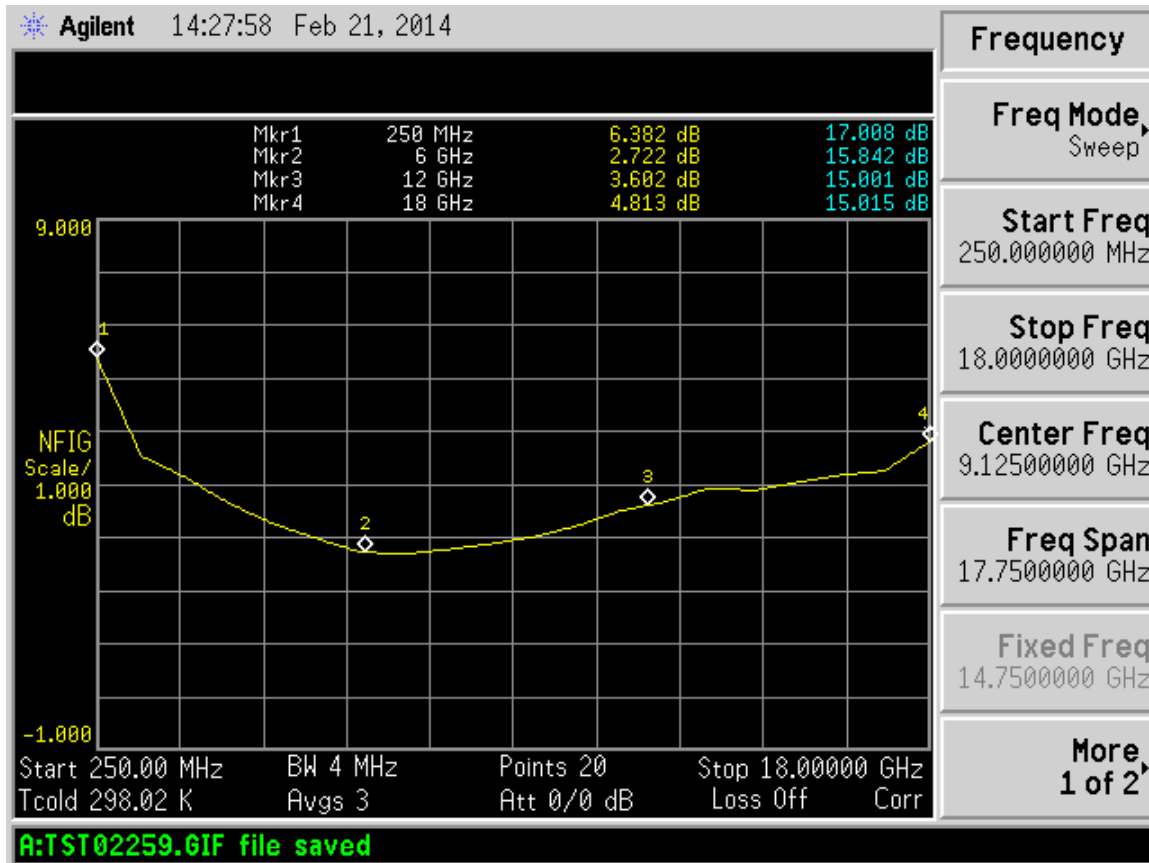




Typical Characteristics On PE2-15-0R2518R0-5R0-22-12-SFF

PL14710/1407

Noise Figure Plot (250MHz to 18GHz)

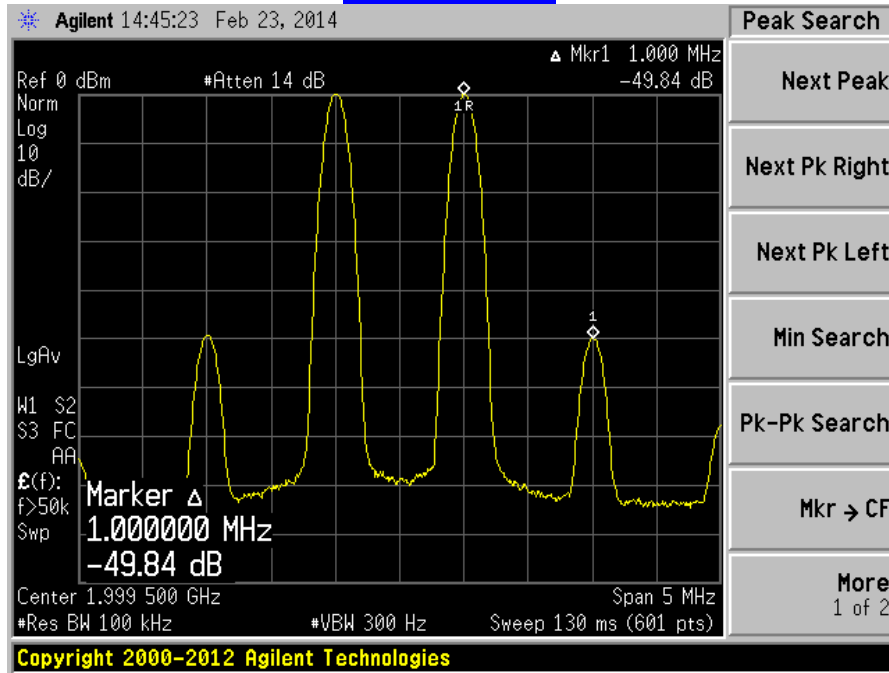




Typical Characteristics On PE2-15-0R2518R0-5R0-22-12-SFF

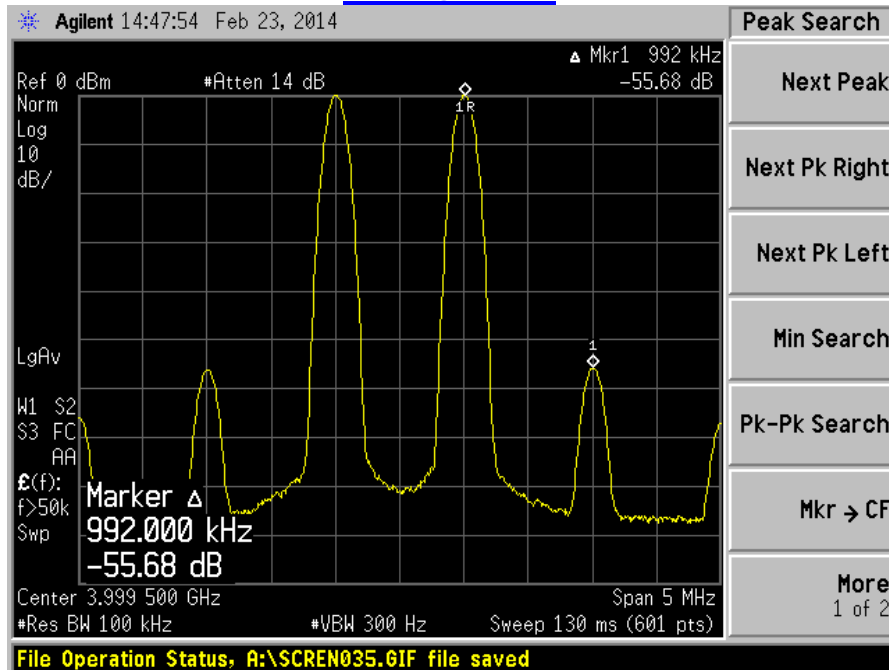
PL14710/1407

OIP3 @ 2 GHz



$$\begin{aligned} \text{OIP3} &= \text{Pout} + \text{dBc}/2 \\ &+ 24.92\text{dBm} = 0 + (49.84/2) \end{aligned}$$

OIP3 @ 4 GHz



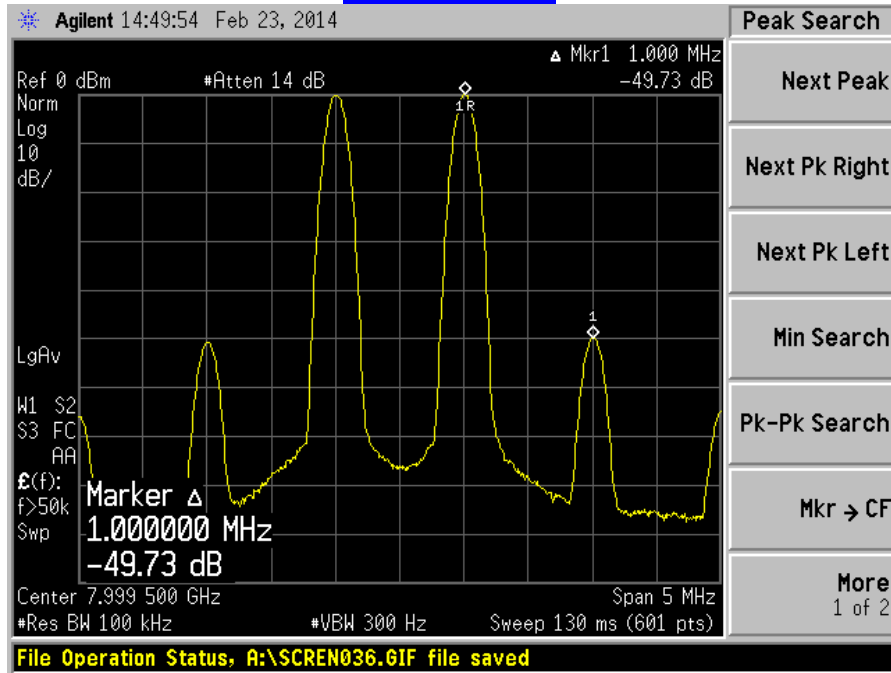
$$\begin{aligned} \text{OIP3} &= \text{Pout} + \text{dBc}/2 \\ &+ 27.84\text{dBm} = 0 + (55.68/2) \end{aligned}$$



Typical Characteristics On PE2-15-0R2518R0-5R0-22-12-SFF

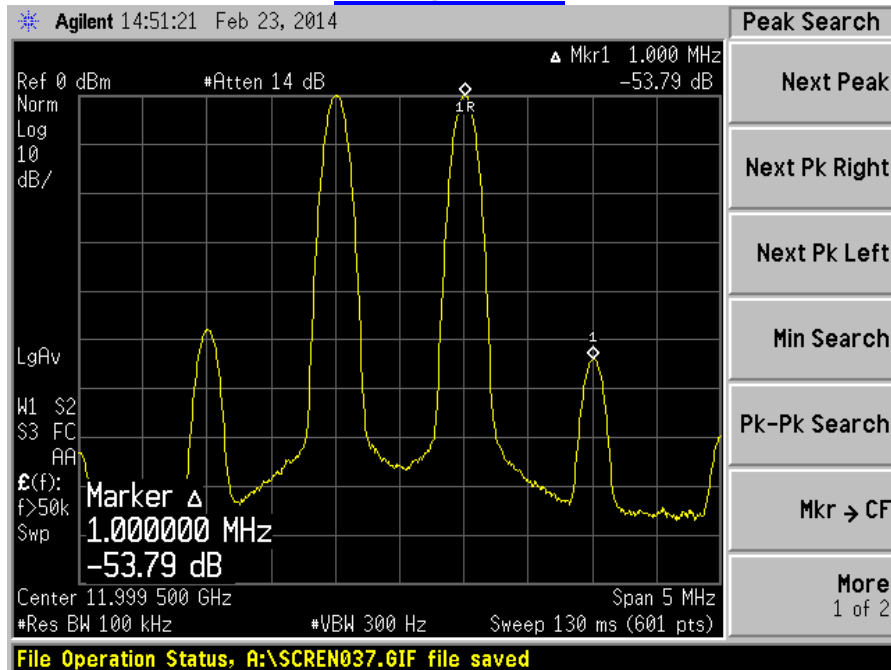
PL14710/1407

OIP3 @ 8 GHz



$$\begin{aligned} \text{OIP3} &= \text{Pout} + \text{dBc}/2 \\ &+ 24.86 \text{ dBm} = 0 + (49.73/2) \end{aligned}$$

OIP3 @ 12 GHz



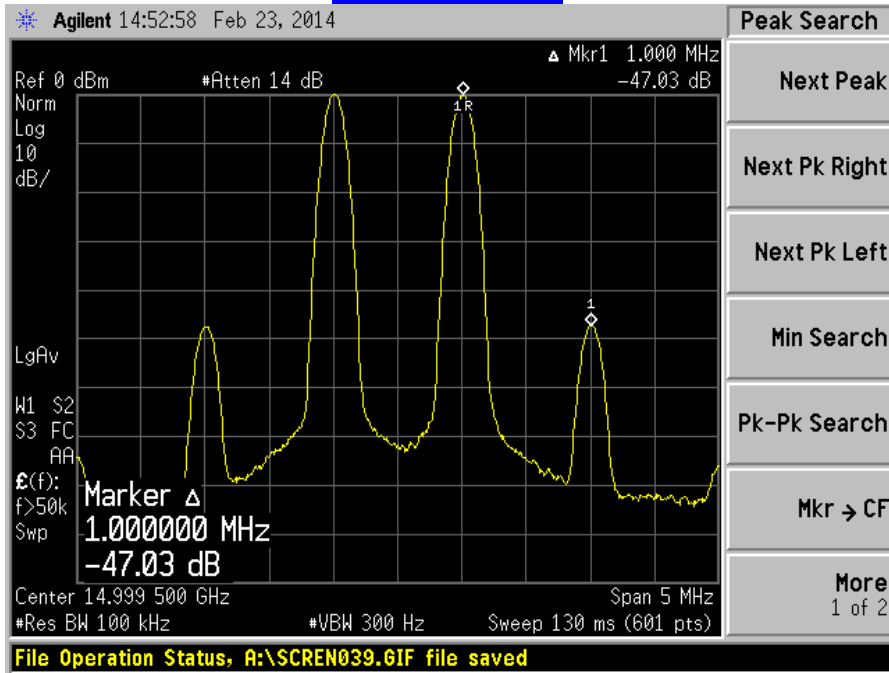
$$\begin{aligned} \text{OIP3} &= \text{Pout} + \text{dBc}/2 \\ &+ 26.89 \text{ dBm} = 0 + (53.79/2) \end{aligned}$$



Typical Characteristics On PE2-15-0R2518R0-5R0-22-12-SFF

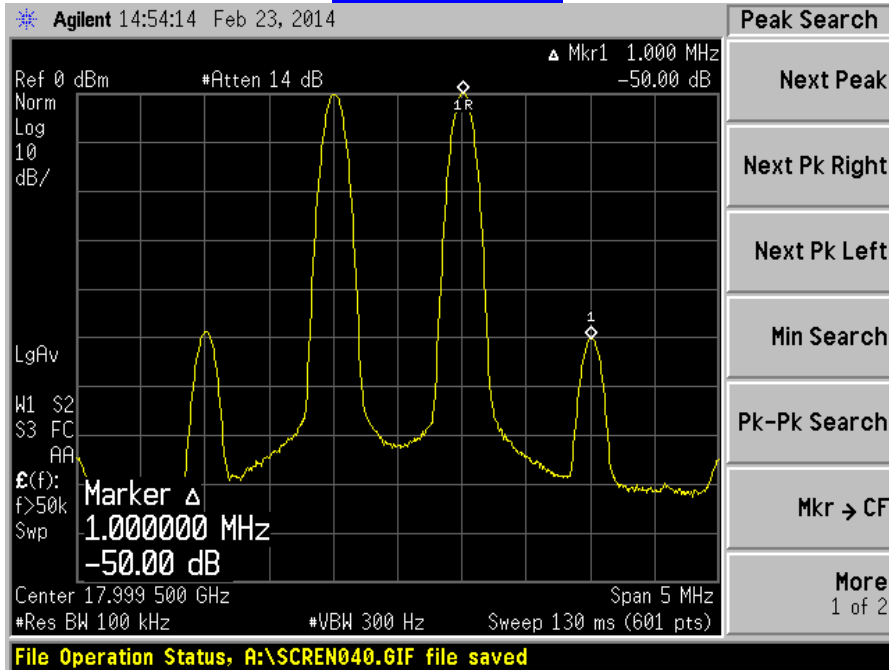
PL14710/1407

OIP3 @ 15 GHz



$$\begin{aligned} \text{OIP3} &= \text{Pout} + \text{dBc}/2 \\ +23.51\text{dBm} &= 0 + (47.03/2) \end{aligned}$$

OIP3 @ 18 GHz



$$\begin{aligned} \text{OIP3} &= \text{Pout} + \text{dBc}/2 \\ +25.00\text{dBm} &= 0 + (50.00/2) \end{aligned}$$