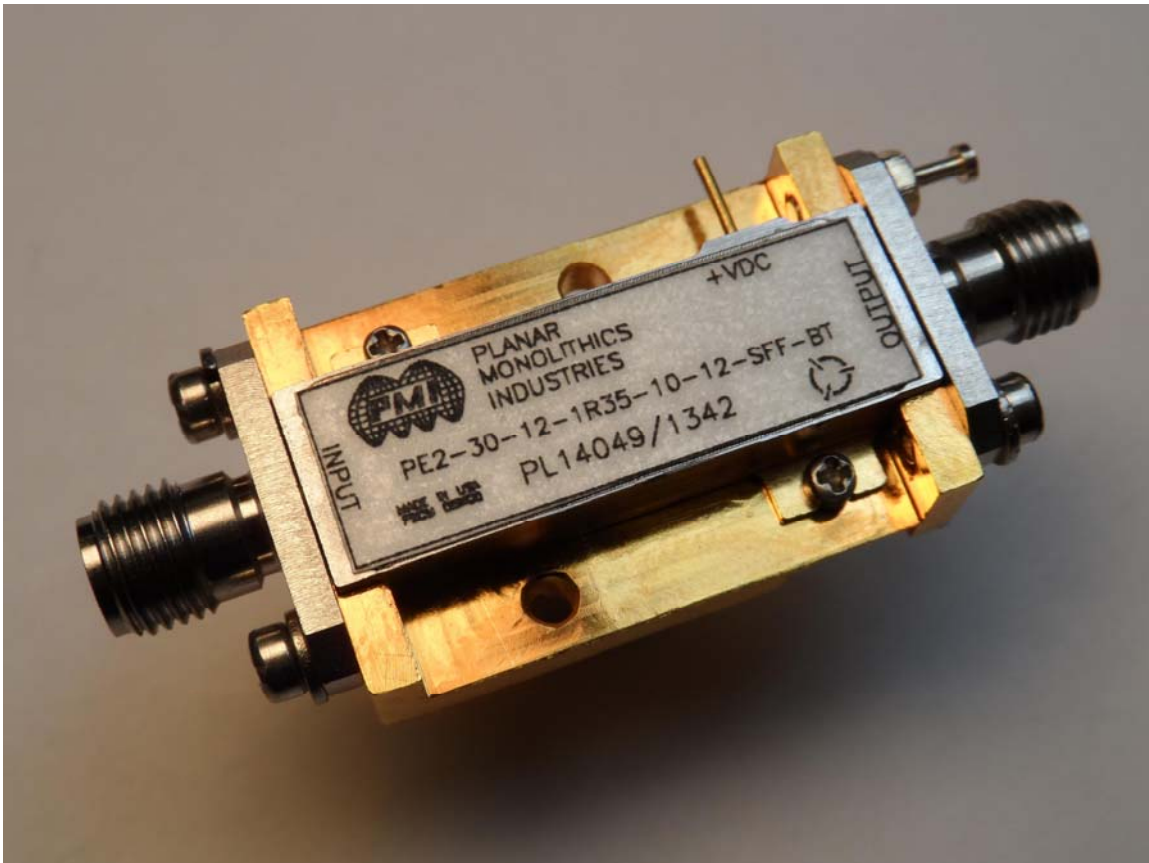




## Typical Characteristics On PE2-30-12-1R35-10-12-SFF-BT

PL14049/1342

PMI Model Number: PE2-30-12-1R35-10-12-SFF-BT is a 1 to 2 GHz low noise amplifier that provides 31dB of gain with a low noise figure of 1.35dB maximum. This model features an integrated Bias-T on the output. This amplifier is supplied in our standard PE2 housing that can be used as a SMA connectorized or a surface mount component.



October 17, 2013  
Designed By: Kevin Mason

Tested & Reported by:  
Hugo Gonzales





**Typical Characteristics  
On  
PE2-30-12-1R35-10-12-SFF-BT**

PL14049/1342

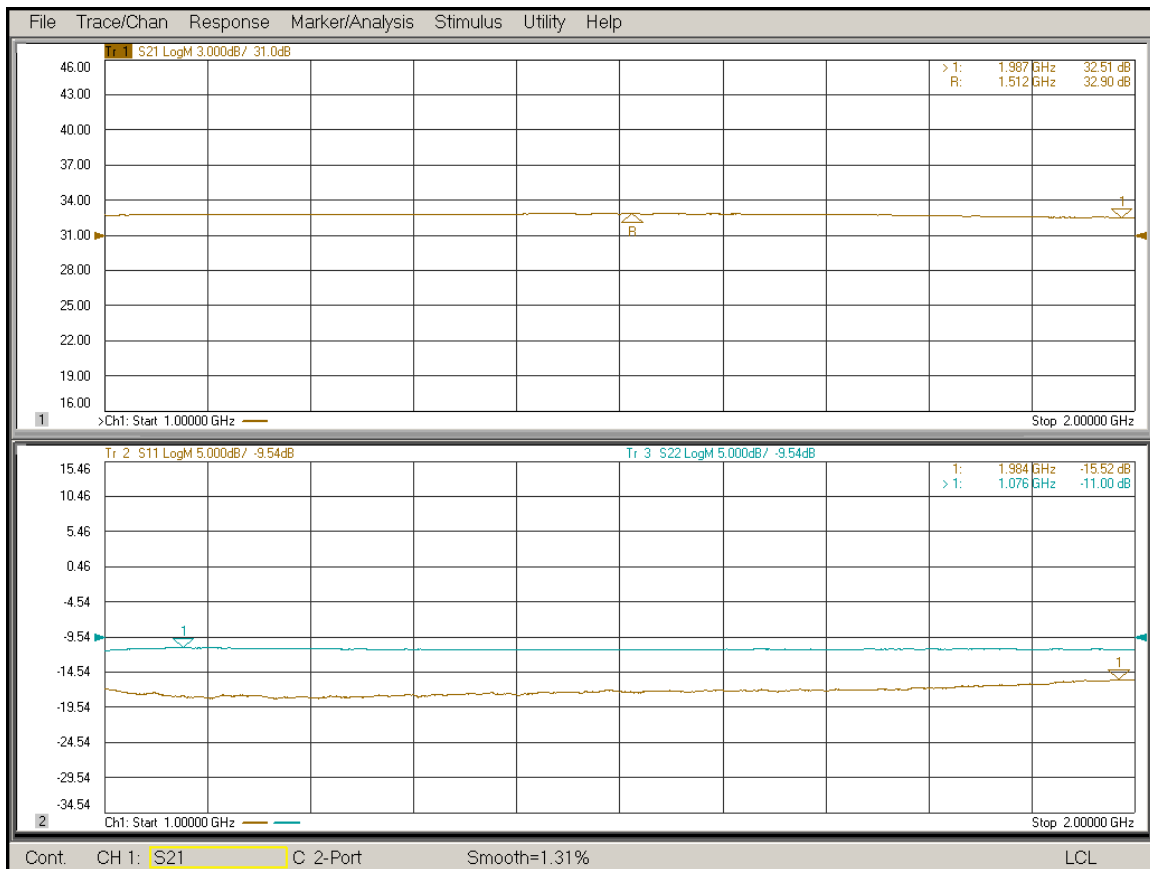
<b>TEST. ITEM NO</b>	<b>PARAMETERS</b>	<b>SPECIFIED VALUE</b>	<b>TEST RESULTS</b>	<b>QA QC</b>
1	Frequency Range:	1.0 to 2.0 GHz	<b>1.0 to 2.0 GHz See Plot</b>	
2	Gain:	31dB Typ.	<b>32.51dB See Plot</b>	
3	Gain Flatness:	±1.5dB Max	<b>0.19dB See Plot</b>	
4	Noise Figure:	1.35dB Max	<b>1.33dB @ 1GHz See Plot</b>	
5	OP1dB:	+10dBm Min	<b>&gt;10dBm</b>	
6	VSWR Input/Output	2.0:1 Max	<b>Input 1.41:1 Output 1.79:1 See Plot</b>	
7	DC Supply	+12 to +15VDC @ 140mA Max	<b>@ 134mA</b>	
8	Sealing:	Hermetic	<b>Pass</b>	



# Typical Characteristics On PE2-30-12-1R35-10-12-SFF-BT

PL14049/1342

## Gain & Return Loss Plot:

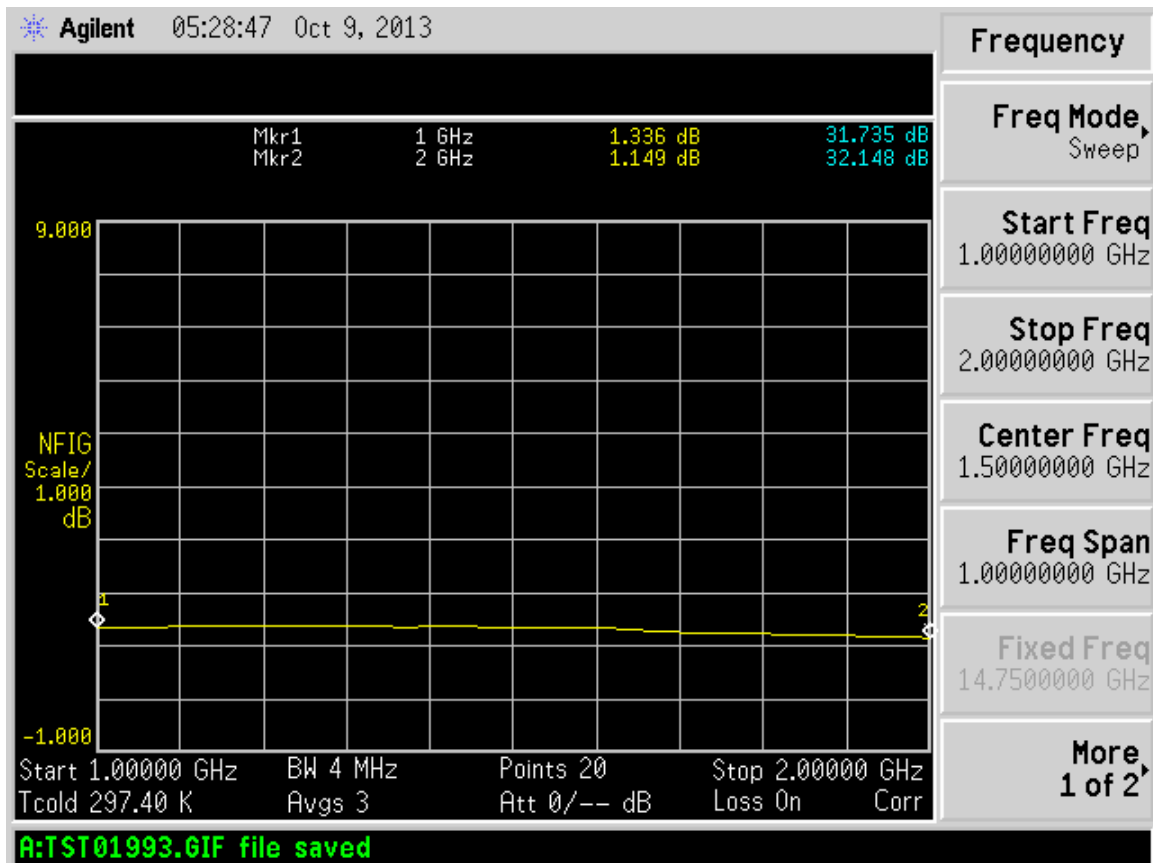




# Typical Characteristics On PE2-30-12-1R35-10-12-SFF-BT

PL14049/1342

## Noise Figure Plot:

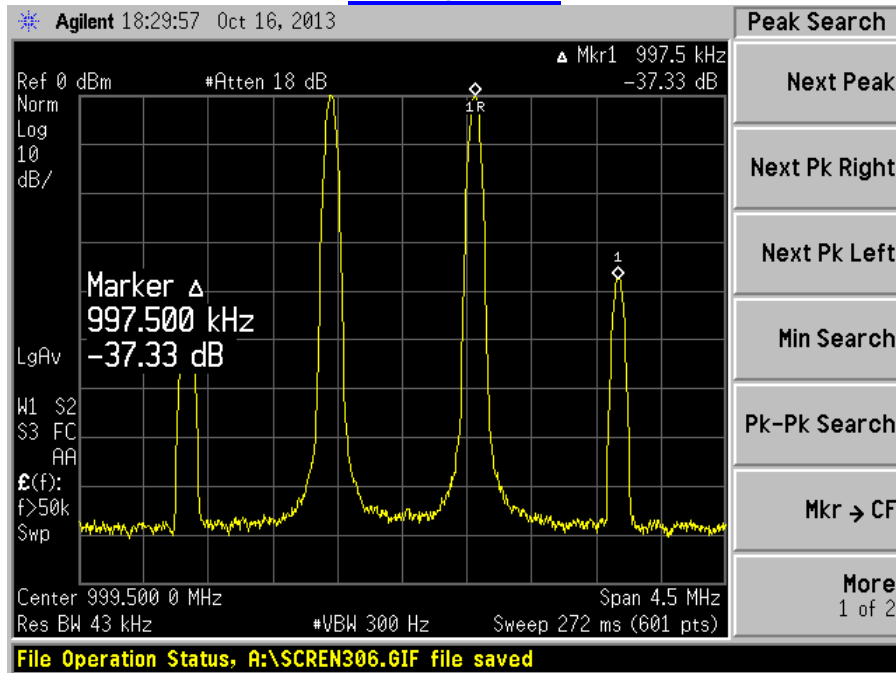




# Typical Characteristics On PE2-30-12-1R35-10-12-SFF-BT

PL14049/1342

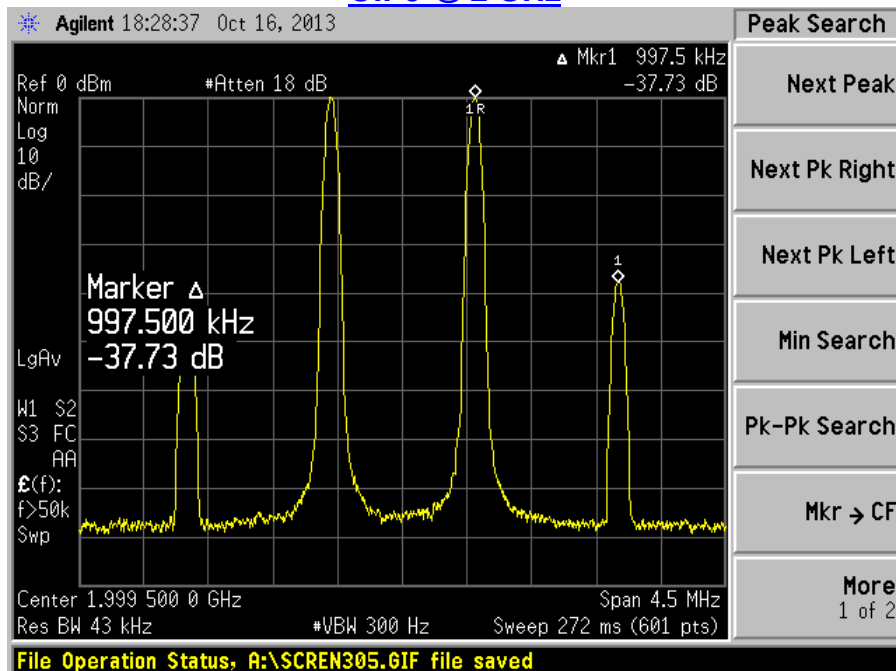
## OIP3 @ 1 GHz



$$\text{OIP3} = \text{Pout} + \text{dBc}/2$$

$$+18.66\text{dBm} = 0 + (37.33/2)$$

## OIP3 @ 2 GHz



$$\text{OIP3} = \text{Pout} + \text{dBc}/2$$

$$+18.86\text{dBm} = 0 + (37.73/2)$$