

### DESCRIPTION

AMCOM's AM000314LN-P1 is a broadband Low Noise Amplifier module. It is designed for general purpose applications. It operates from 10 MHz to 250 MHz with Noise Figure of 1.4 dB and small signal gain of 17 dB. The module operates using a +5V/160mA supply and uses SMA connectors for input and output. This amplifier module is compact at 1.25" (L) x 1.25" (W) x 0.563" (H).



### FEATURES

- Frequency Range: 10-250MHz
- Gain: 17dB
- P<sub>1dB</sub>: +21dBm
- IP3: +39dBm
- Noise Figure: 1.4dB
- DC Power: 5V/160mA
- SMA Connector

### APPLICATIONS

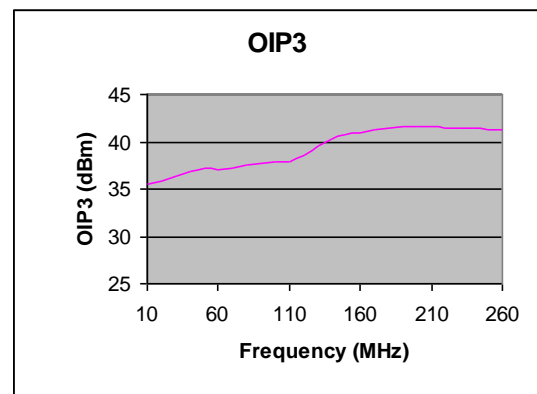
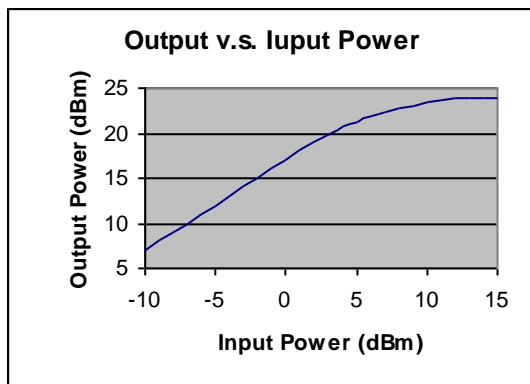
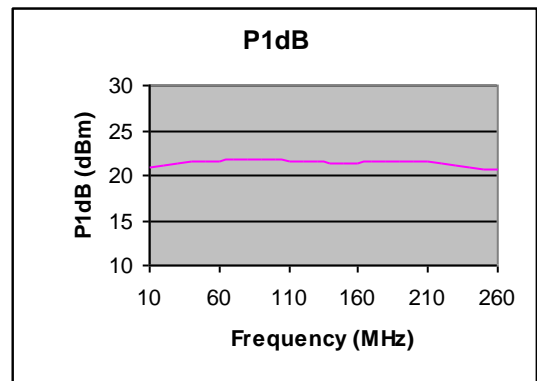
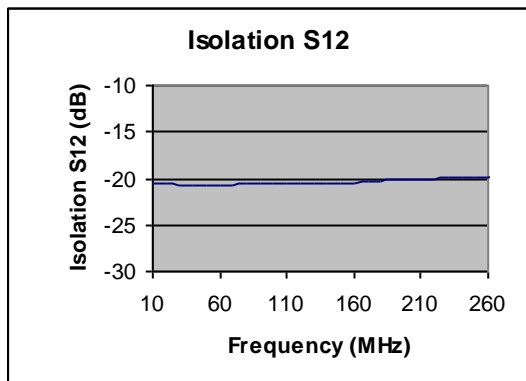
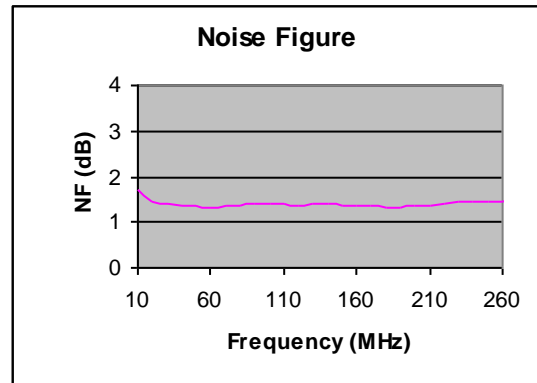
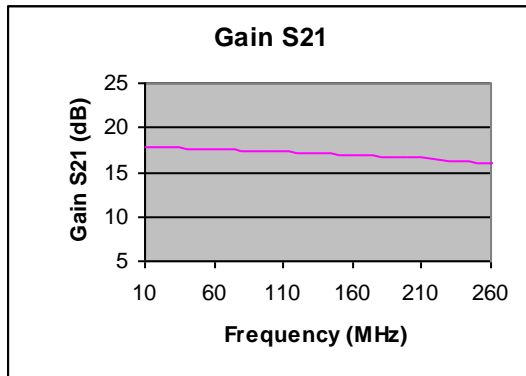
- Wireless Infrastructure
- Military & Aerospace
- Test and Measurement

Performance measured @ 150MHz

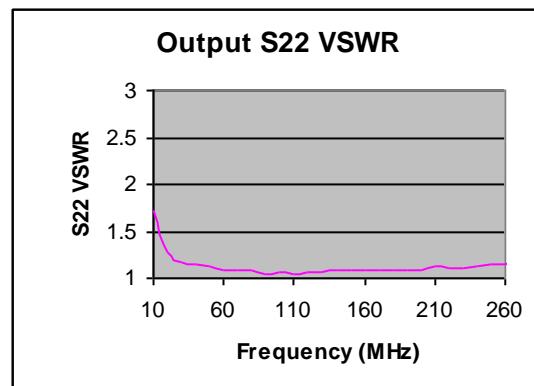
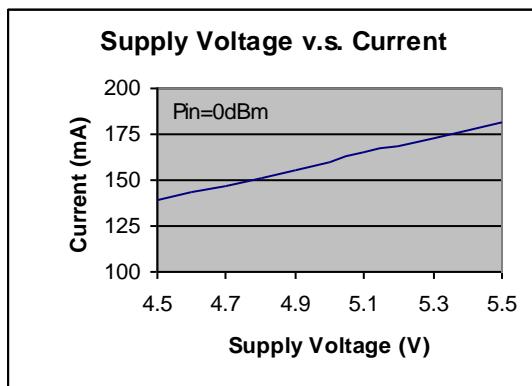
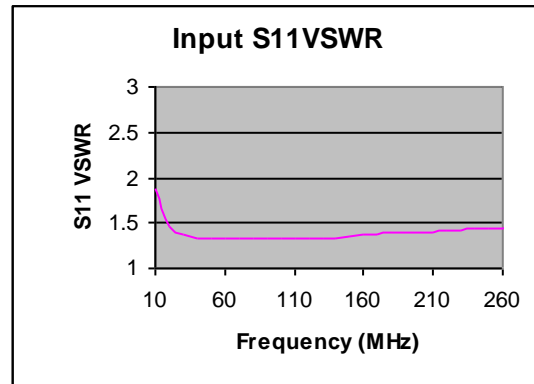
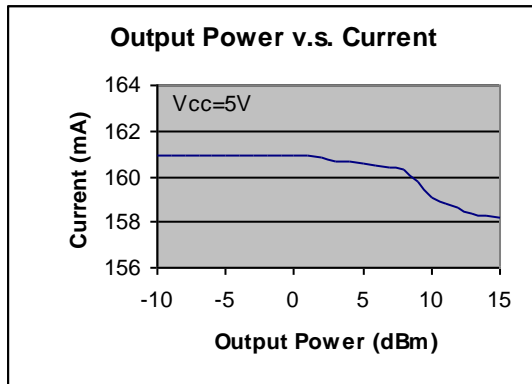
### Electrical Specifications @ +25 °C, Z<sub>in</sub> = Z<sub>out</sub> = 50 Ω, V<sub>cc</sub> = +5.0V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		250
Gain				
f = 10MHz	dB		17.5	
f = 150MHz	dB		17.0	
f = 250MHz	dB		16.0	
P <sub>1dB</sub>				
f = 150MHz	dBm		+21	
IP3				
f = 150MHz	dBm		+39	
Noise Figure	dB		1.4	
Reverse Isolation	dB		-20	
VSWR				
f = 150MHz				
Input VSWR			1.4:1	
Output VSWR			1.1:1	
DC Power Supply	V	4.75	5	5.25
Supply Current	mA		160	

Typical Performance @ +25 °C



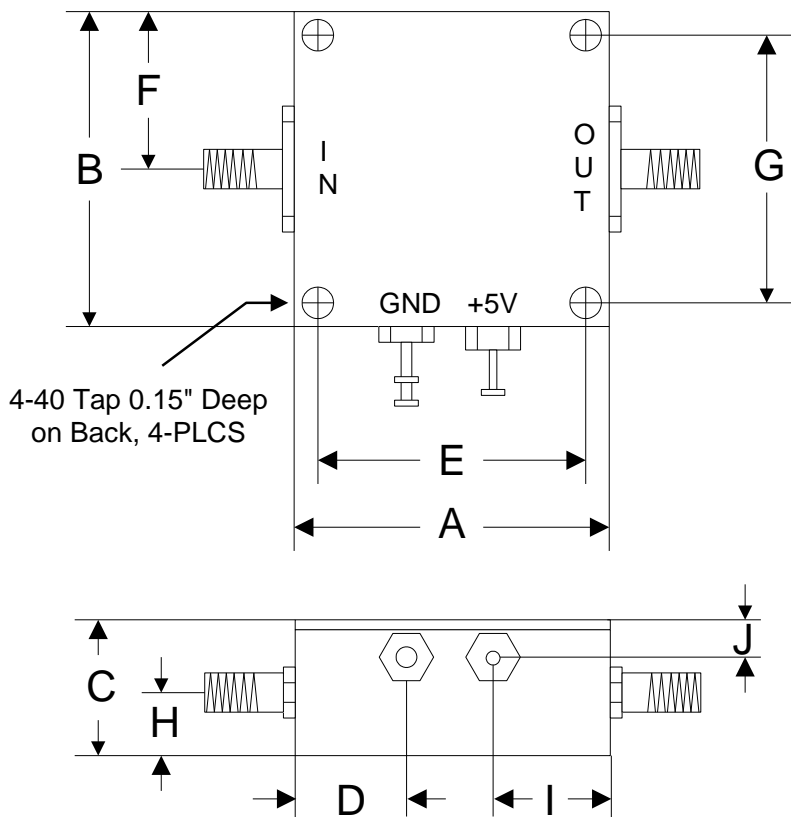
Typical Performance @ +25 °C



### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+20dBm
Supply Voltage	+6V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### Outline



	A	B	C	D	E	F	G	H	I	J
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76