



DESCRIPTION

AMCOM's AM010514LN-P1 is a broadband Low Noise Amplifier module. It is designed for general purpose applications. It operates from 50 MHz to 450 MHz with Noise Figure of 1.4 dB and small signal gain of 34 dB. The module operates using a 9 – 18V/100mA 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: 50 - 450MHz
- Gain: 34dB
- P_{1dB}: +18.5dBm
- IP3: +34dBm
- Noise Figure: 1.4dB
- DC Power: 9-18V/100mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector

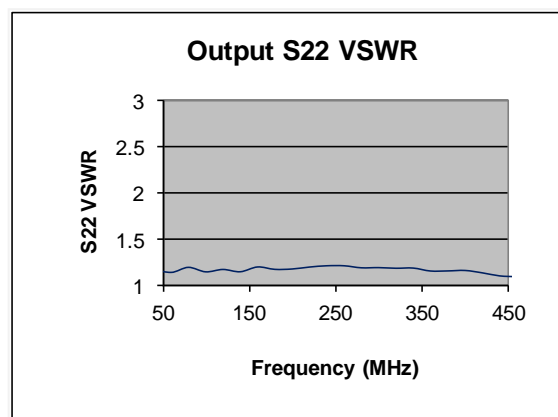
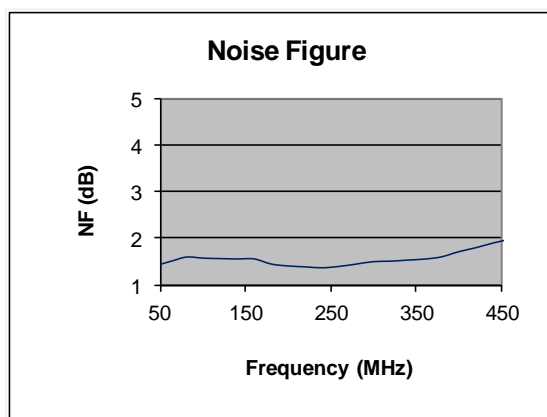
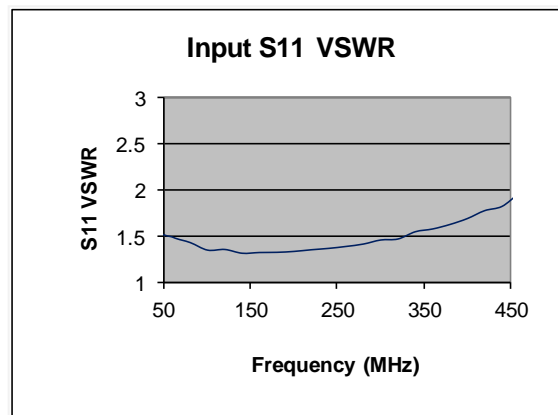
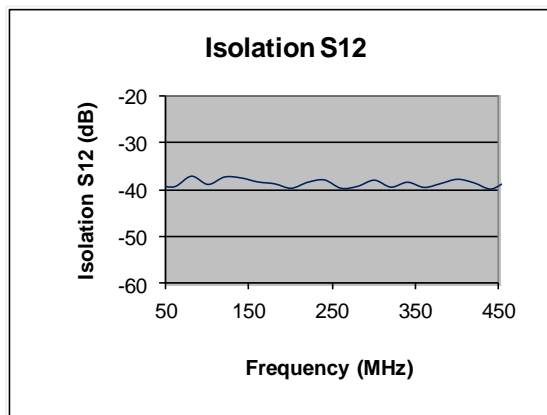
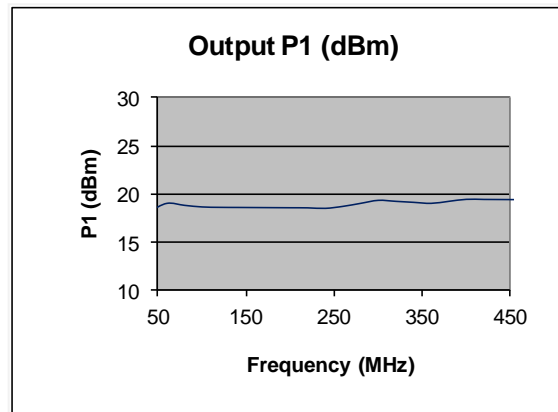
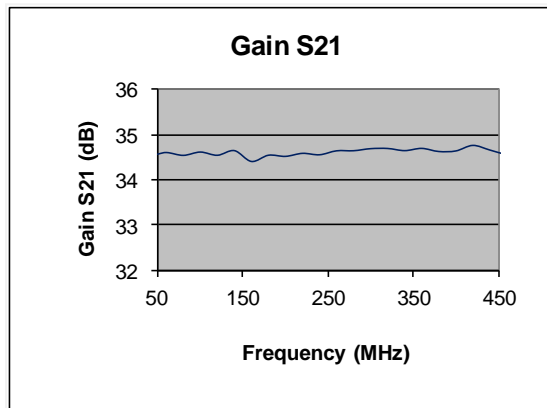
APPLICATIONS

- Wireless Infrastructure
- Military & Aerospace
- Test and Measurement

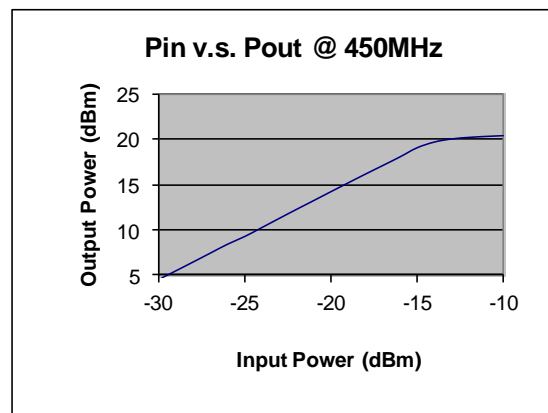
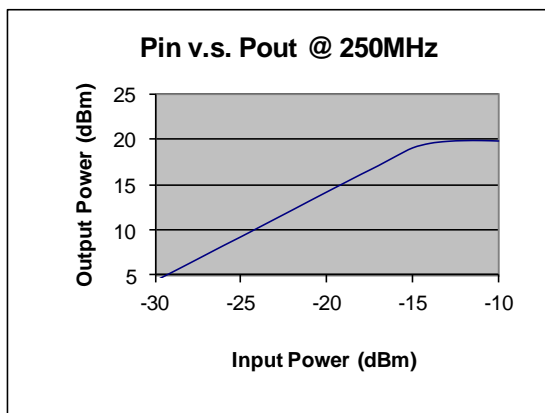
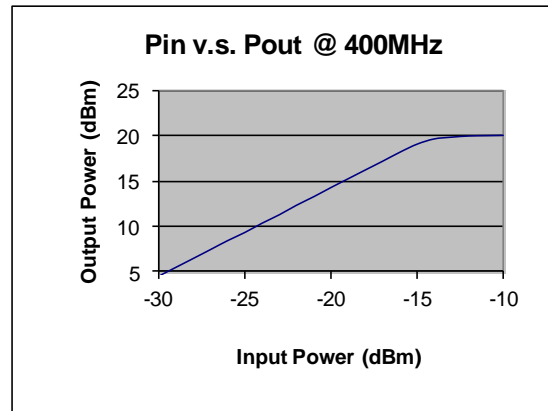
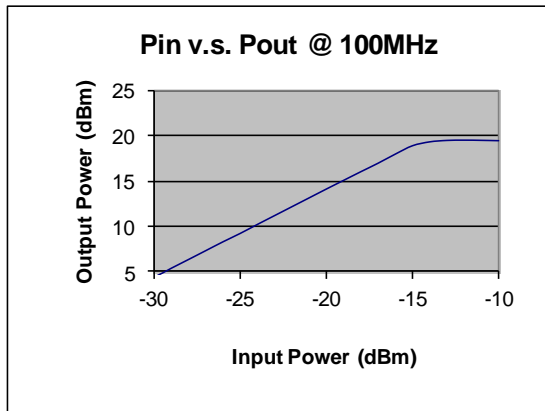
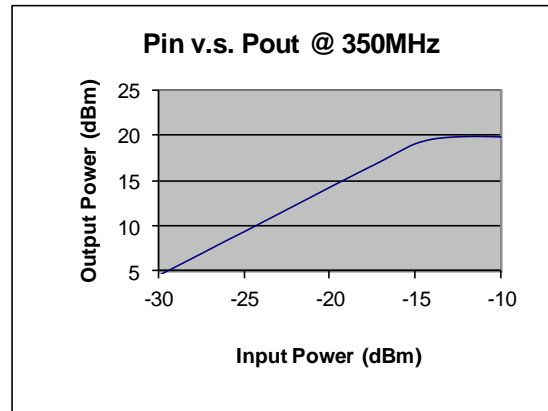
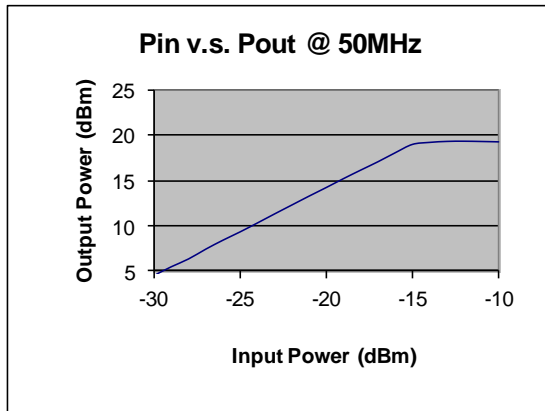
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{cc} = 12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	50		450
Gain				
f = 50MHz	dB		34.5	
f = 100MHz	dB		34.6	
f = 250MHz	dB	33	34.6	
f = 400MHz	dB		34.6	
f = 450MHz	dB		34.6	
Gain Flatness	dB		± 0.1	± 0.3
P _{1dB}	dBm	+17	+18.5	
IP3	dBm	+33	+34.0	
Noise Figure	dB		1.4	1.8
Reverse Isolation	dB		-38	-35
VSWR				
Input VSWR			1.4:1	1.5:1
Output VSWR			1.2:1	1.3:1
DC Power Supply	V	9	12 to 15	18
Supply Current	mA		100	

Typical Performance @ +25 °C



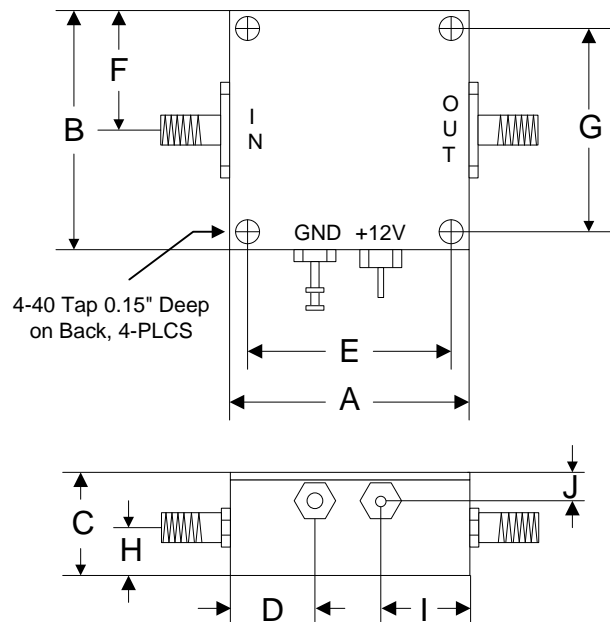
Typical Performance @ +25 °C



Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+25V
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