

### DESCRIPTION

AMCOM's AM000509LN-P1 is a broadband Low Noise Amplifier module. It is designed for general purpose applications. It operates from 10 MHz to 550 MHz with Noise Figure of 0.9 dB and small signal gain of 19 dB. The module operates using a 6 – 24V 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 - 550MHz
- Gain: 19dB
- P<sub>1dB</sub>: +8dBm
- IP3: +20dBm
- Noise Figure: 0.9dB
- DC Power: 6-24V
- SMA Connector

Performance measured @ 275MHz

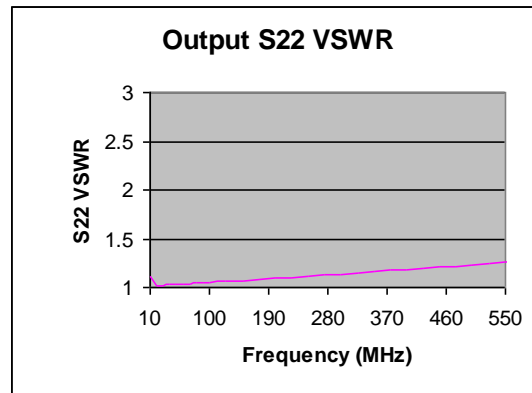
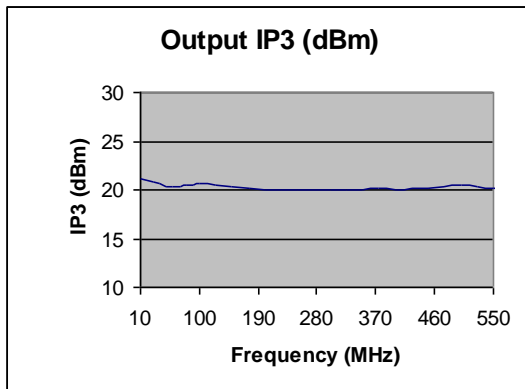
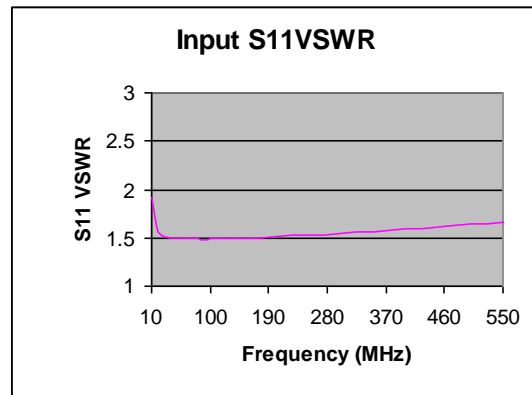
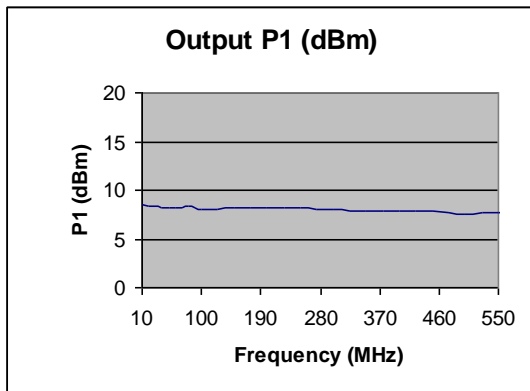
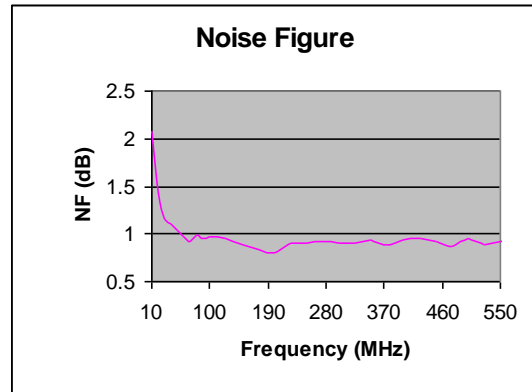
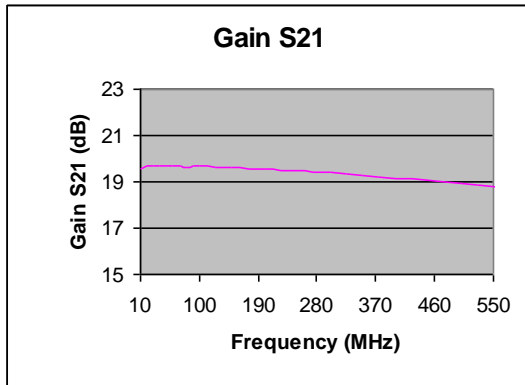
### APPLICATIONS

- Wireless Infrastructure
- Military & Aerospace
- Test and Measurement

### Electrical Specifications @ +25 °C, Z<sub>in</sub> = Z<sub>out</sub> = 50 Ω, V<sub>cc</sub> = 12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		550
Gain f = 10MHz	dB		19.5	
f = 275MHz	dB		19.3	
f = 550MHz	dB		18.8	
Gain Flatness	dB		± 0.7	
P <sub>1dB</sub>	dBm		+8	
IP3	dBm		+20	
Noise Figure	dB		0.9	
Reverse Isolation	dB		-23	
VSWR Input VSWR			1.5:1	
Output VSWR			1.2:1	
DC Power Supply	V	6	12	24
Supply Current	mA		30	

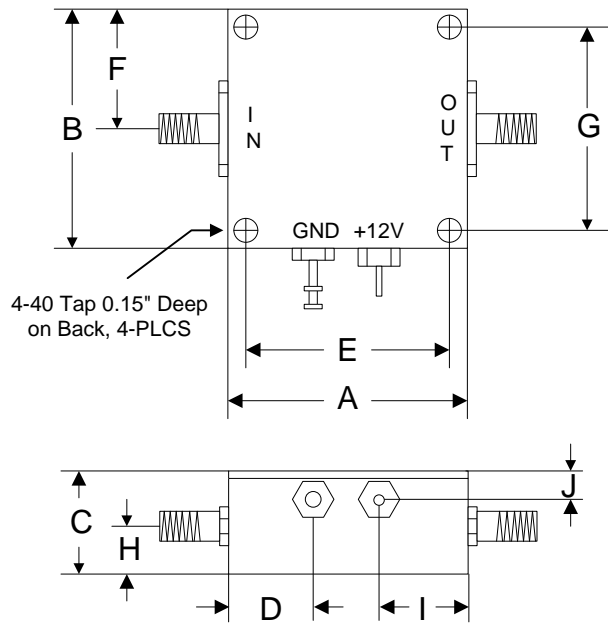
Typical Performance @ +25 °C



### 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
<b>Inch</b>	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
<b>mm</b>	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76