



## DESCRIPTION

AMCOM's AM001020LN-P1 is a broadband Low Noise Amplifier module. It is designed for general purpose applications. It operates from 10 MHz to 1000 MHz with Noise Figure of 2.0 dB and small signal gain of 33 dB. The module operates using a 12V 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: 10-1000MHz
- Gain: 33dB
- P1dB: +11dBm
- IP3: +23dBm
- Noise Figure: 2.0dB
- DC Power: 12V
- SMA Connector

## APPLICATIONS

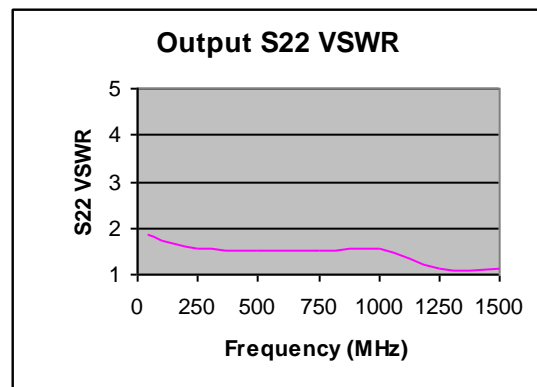
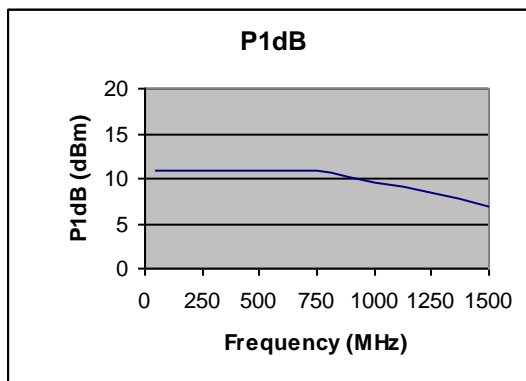
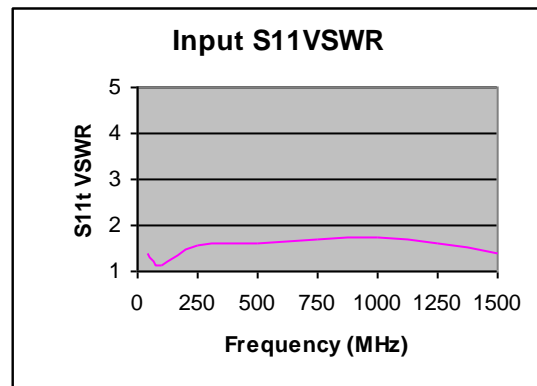
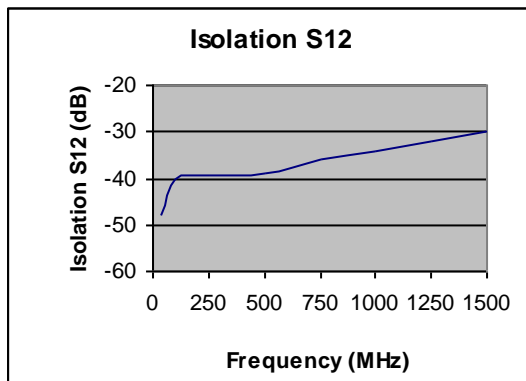
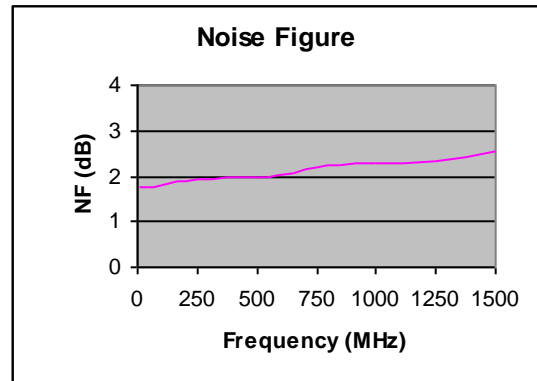
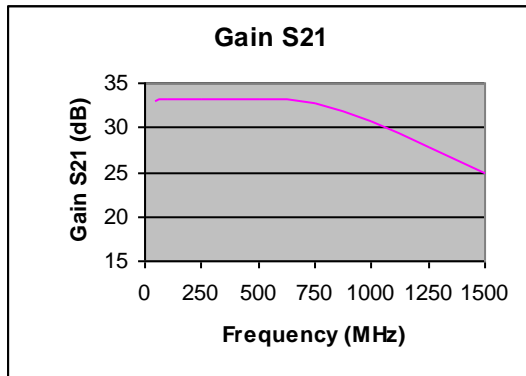
- Wireless Infrastructure
- Military & Aerospace
- Test and Measurement

Performance measured @ 500MHz

## Electrical Specifications @ +25 °C

| Parameter                  | Unit | Minimum | Typical | Maximum |
|----------------------------|------|---------|---------|---------|
| Frequency Range            | MHz  | 10      |         | 1000    |
| Gain f = 40MHz             | dB   |         | 33      |         |
| f = 500MHz                 | dB   |         | 33      |         |
| f = 1000MHz                | dB   |         | 30      |         |
| P <sub>1dB</sub> f = 40MHz | dBm  |         | +11     |         |
| f = 500MHz                 | dBm  |         | +11     |         |
| f = 1000MHz                | dBm  |         | +9      |         |
| IP3 f= 500MHz              | dBm  |         | +23     |         |
| Noise Figure f = 40MHz     | dB   |         | 1.8     |         |
| f = 500MHz                 | dB   |         | 2.0     |         |
| f = 1000MHz                | dB   |         | 2.3     |         |
| VSWR f = 500MHz            |      |         |         |         |
| Input VSWR                 |      |         | 1.5:1   |         |
| Output VSWR                |      |         | 1.5:1   |         |
| DC Power Supply            | V    | 9       | 12      | 15      |
| Supply Current             | mA   |         | 35      |         |

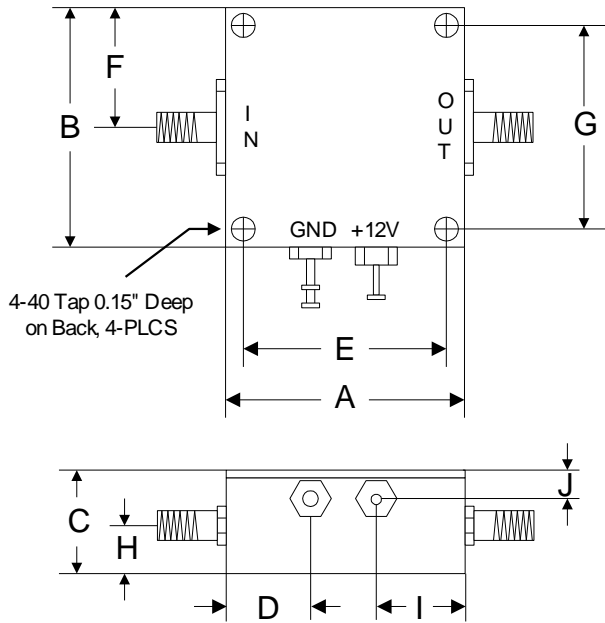
Typical Performance @ +25 °C



### Absolute Maximum Ratings

| Parameter             | Absolute Maximum  |
|-----------------------|-------------------|
| RF Input Power        | +13dBm            |
| Supply Voltage        | +16V              |
| 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  |