

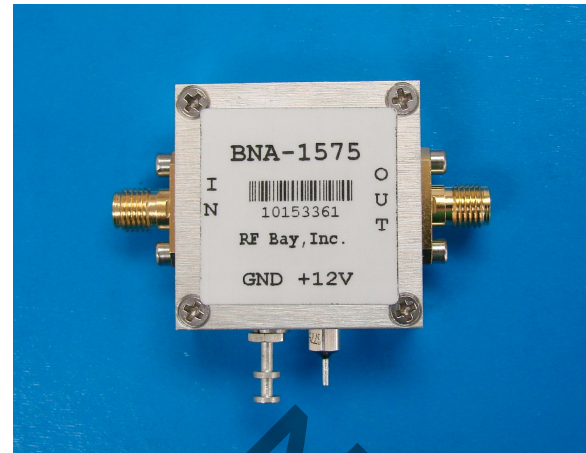
BNA Series

1575.42MHz L1 Band GPS Amplifier

Features

- Center Frequency: 1575.42MHz
- Gain: 33dB
- Bandwidth: 40MHz
- P_{1dB} : +3dBm
- IP3: +15dBm
- Noise Figure: 1.1dB
- DC Power: 12V/10mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector

Picture



Performance measured @ 1575.42MHz

Description

BNA-1575 is Band Limited Low Noise Amplifier designed for L1 Band GPS receive application.

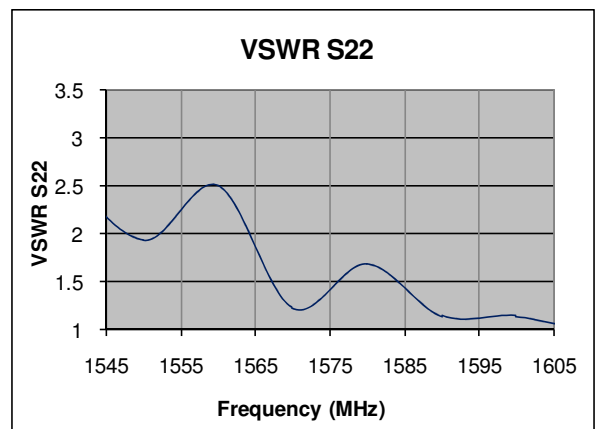
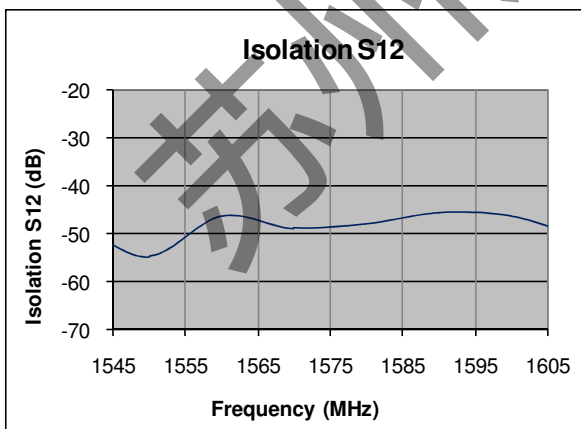
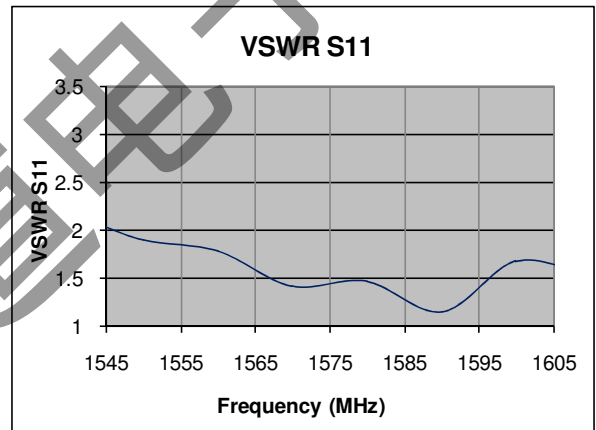
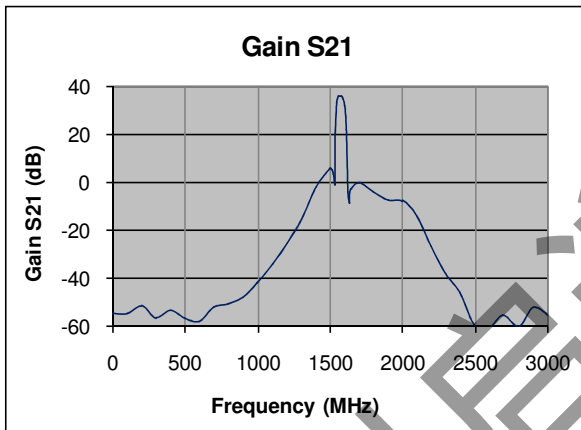
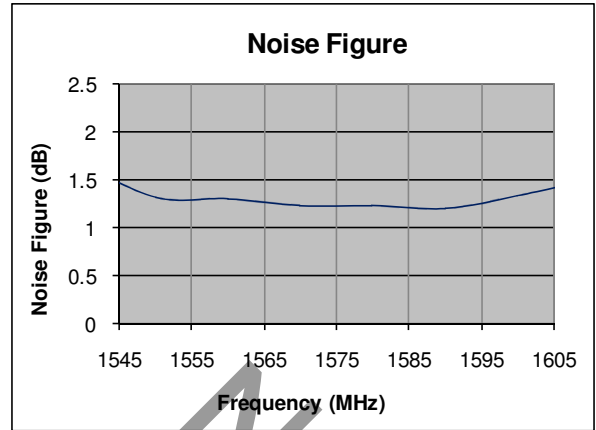
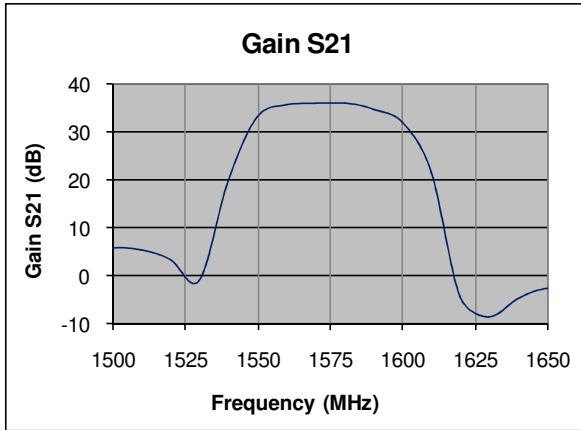
Electrical Specifications @ +25 °C, $Z_{in} = Z_{out} = 50 \Omega$, $V_{cc} = 12V$

| Parameter | Unit | Minimum | Typical | Maximum |
|--------------------------------|------|---------|----------------|---------|
| Frequency Range | MHz | 1555 | 1575.42 | 1595 |
| Bandwidth | MHz | | ±20 | |
| Gain | dB | | 33 | |
| Gain Flatness | dB | | ± 0.5 | ± 1.0 |
| P_{1dB} | dBm | | +3 | |
| IP3 | dBm | | +15 | |
| Noise Figure | dB | | 1.1 | 1.3 |
| Reverse Isolation | dB | | -47 | |
| VSWR Input VSWR Output VSWR | | | 1.5:1 1.5:1 | |
| DC Power Supply | V | 5 | 12 | 15 |
| Supply Current | mA | | 10 | |

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Typical Performance @ +25 °C



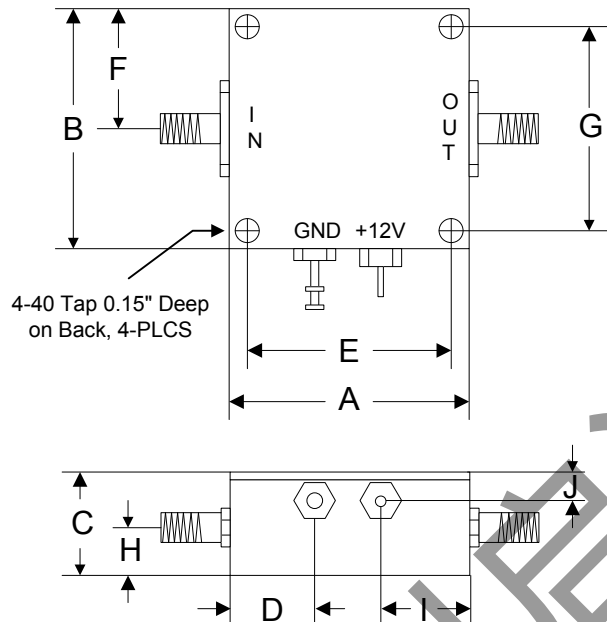
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1575.42MHz L1 Band GPS Amplifier

Absolute Maximum Ratings

| Parameter | Absolute Maximum |
|-----------------------|-------------------|
| RF Input Power | +15dBm |
| Supply Voltage | +20V |
| 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 |