

## HD24391

## 902 – 928MHz Low Noise Amplifier

### Features

- Frequency Range: 902-928MHz
- Gain: 24dB
- P<sub>1dB</sub>: +13dBm
- IP3: +25dBm
- Noise Figure: 1.2dB
- DC Power: 6 - 24V
- SMA Connector



Performance measured @ 915MHz

### Description

HD24391 is a 1.2dB Noise Figure Low Noise Amplifier operates with ISM band frequency range from 902 to 928MHz.

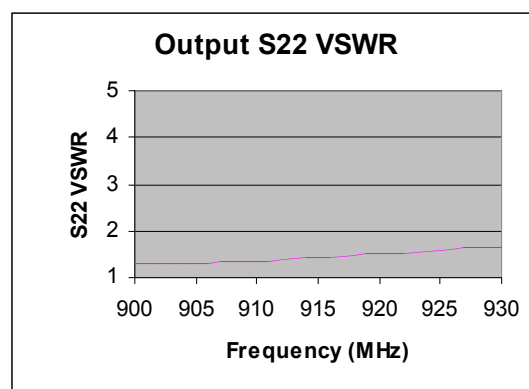
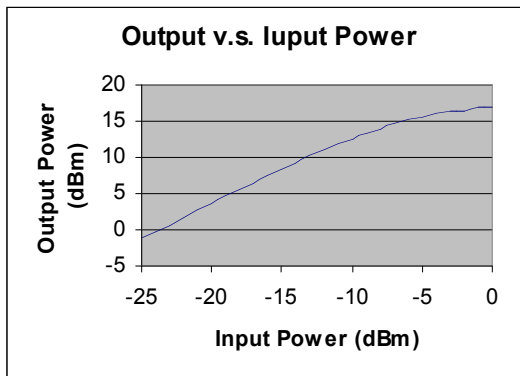
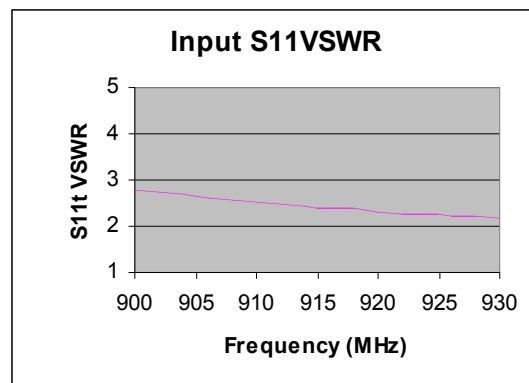
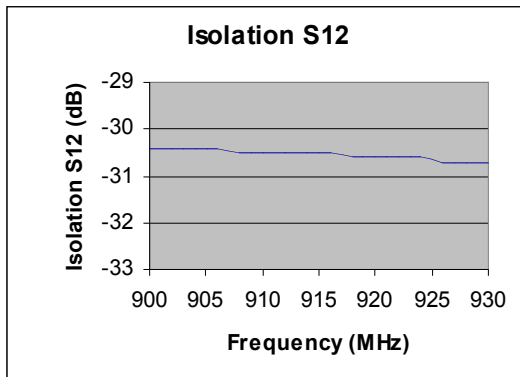
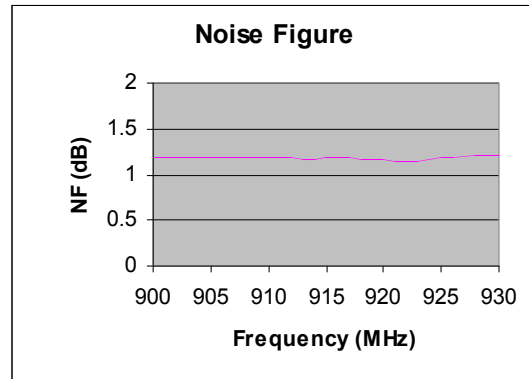
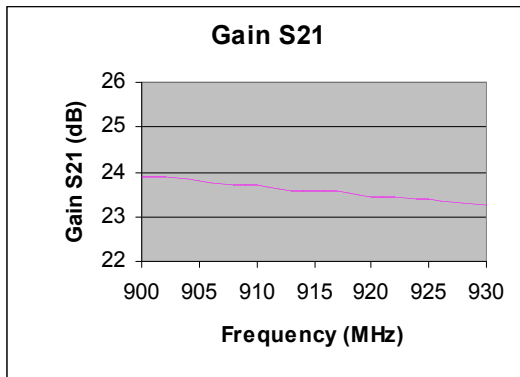
### Electrical Specifications @ +25 °C

| Parameter                      | Unit | Minimum | Typical | Maximum |
|--------------------------------|------|---------|---------|---------|
| Frequency Range                | MHz  | 902     |         | 928     |
| Gain f = 902MHz                | dB   |         | 23      |         |
| f = 915MHz                     | dB   | 22      | 23      |         |
| f = 928MHz                     | dB   |         | 23      |         |
| Gain Flatness f = 902 – 928MHz | dB   |         | ± 0.4   |         |
| P <sub>1dB</sub> f = 915MHz    | dBm  |         | +13     |         |
| IP3 f= 915MHz                  | dBm  |         | +25     |         |
| Noise Figure                   | dB   |         | 1.2     | 1.3     |
| Reverse Isolation              | dB   |         | -30     |         |
| VSWR f = 915MHz                |      |         |         |         |
| Input VSWR                     |      |         | 2.4:1   |         |
| Output VSWR                    |      |         | 1.4:1   |         |
| DC Power Supply                | V    | 6       | 12      | 24      |
| Supply Current                 | mA   |         | 25      |         |

**HD24391**

**902 – 928MHz Low Noise Amplifier**

**Typical Performance @ +25 °C**



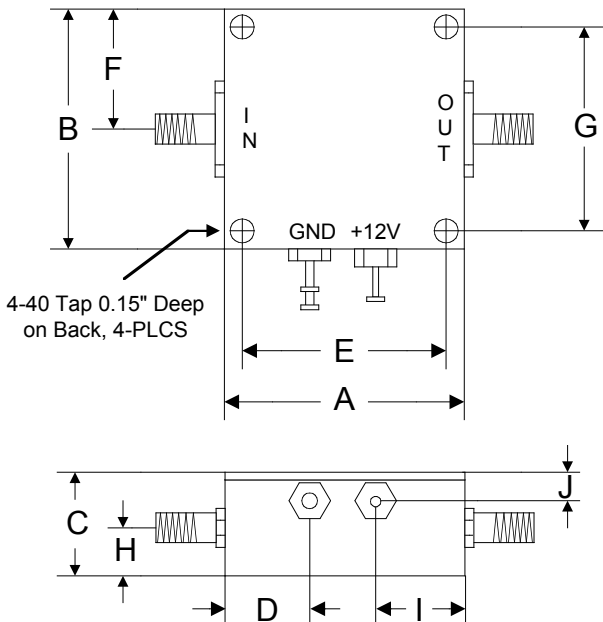
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### Absolute Maximum Ratings

| 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  |