

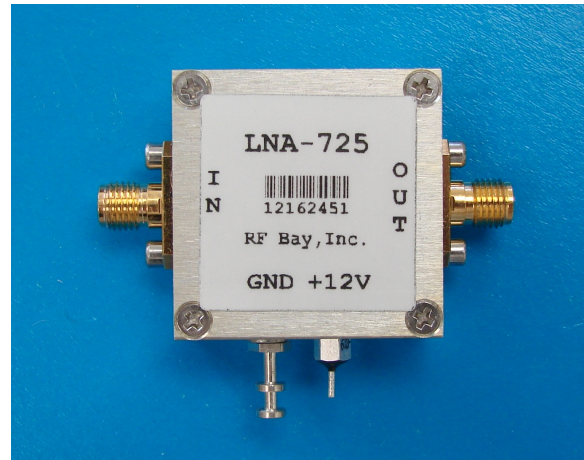
LNA Series

5 – 700MHz Low Noise Amplifier

Features

- Frequency Range: 5-700MHz
- Gain: 25dB
- P_{1dB}: +23dBm
- IP3: +38dBm
- Noise Figure: 1.5dB
- DC Power: 12V/150mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector

Picture



Description

LNA-725 is a 25dB Gain Flat Frequency Response Low Noise Amplifier operates in frequency range from 5 to 700MHz.

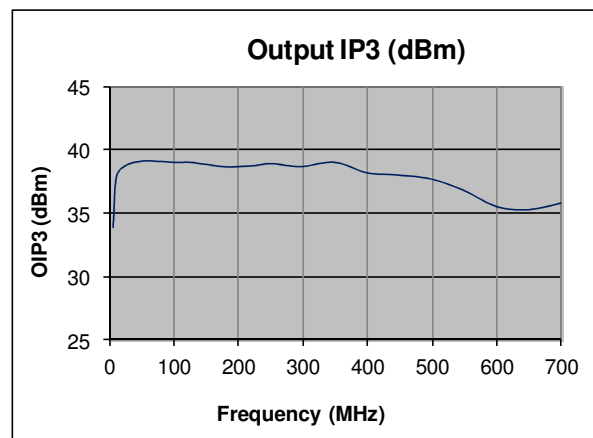
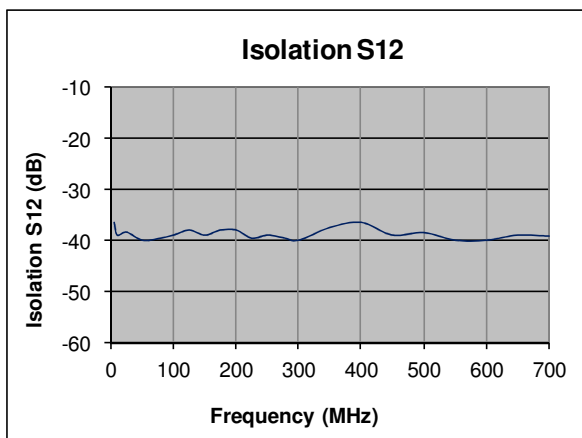
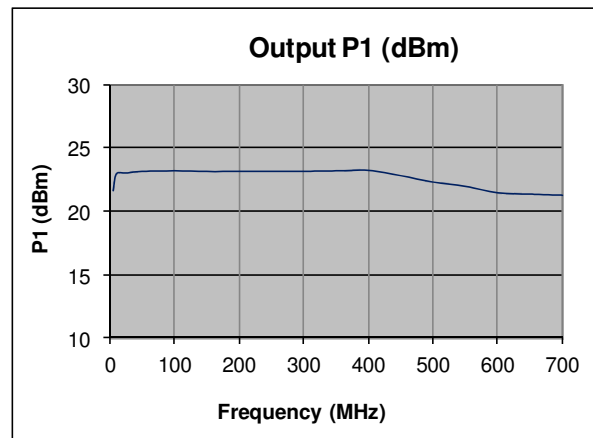
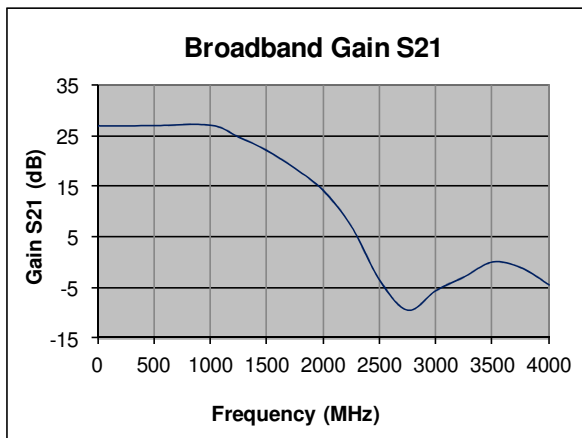
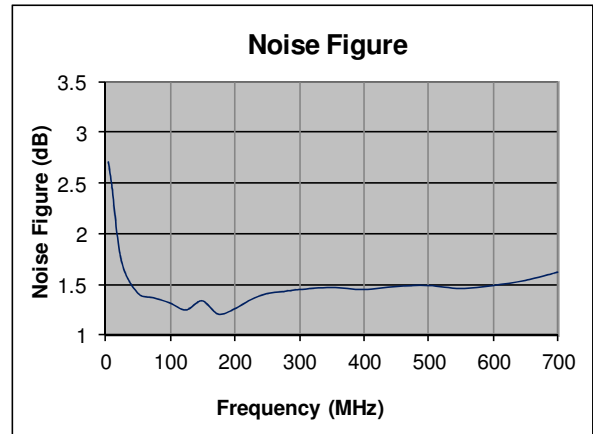
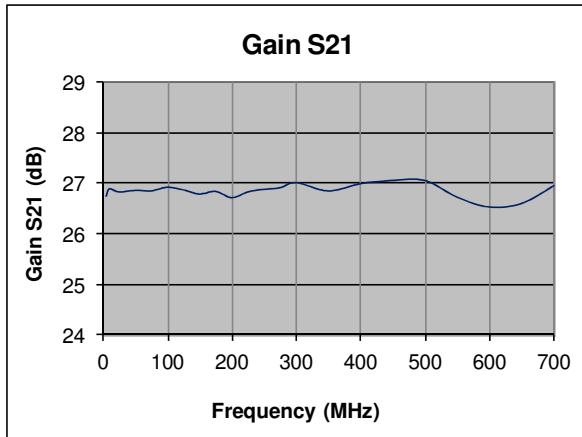
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{supply} = 12V

| Parameter | Unit | Minimum | Typical | Maximum |
|-----------------------------------|------|---------|----------|---------|
| Frequency Range | MHz | 5 | | 700 |
| Gain S ₂₁ f = 5MHz | dB | 24.0 | 26.7 | |
| f = 25MHz | dB | 24.0 | 26.8 | |
| f = 100MHz | dB | 24.0 | 26.9 | |
| f = 300MHz | dB | 24.0 | 27.0 | |
| f = 500MHz | dB | 24.0 | 27.0 | |
| f = 700MHz | dB | 24.0 | 26.9 | |
| Gain Flatness | dB | | ± 0.25 | ± 0.5 |
| P _{1dB} @ 350MHz | dBm | +21 | +23 | |
| Output IP3 @ 350MHz | dBm | +30 | +38 | |
| Noise Figure @ 350MHz | dB | | 1.5 | 1.8 |
| Reverse Isolation S ₁₂ | dB | | -37 | |
| VSWR Input VSWR S ₁₁ | | | 1.2:1 | 2.0:1 |
| Output VSWR S ₂₂ | | | 1.4:1 | 2.0:1 |
| DC Power Supply | V | 11 | 12 to 15 | 30 |
| Supply Current | mA | | 150 | 180 |

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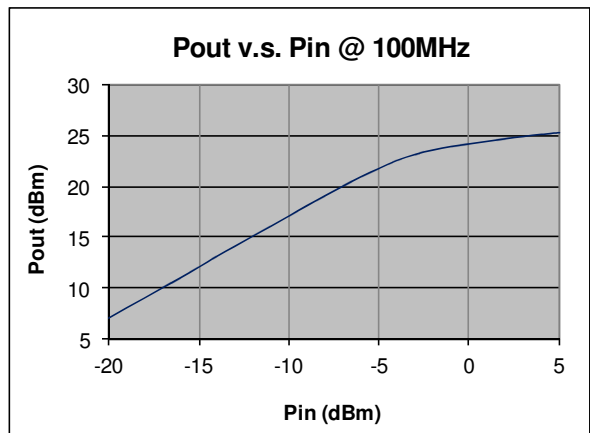
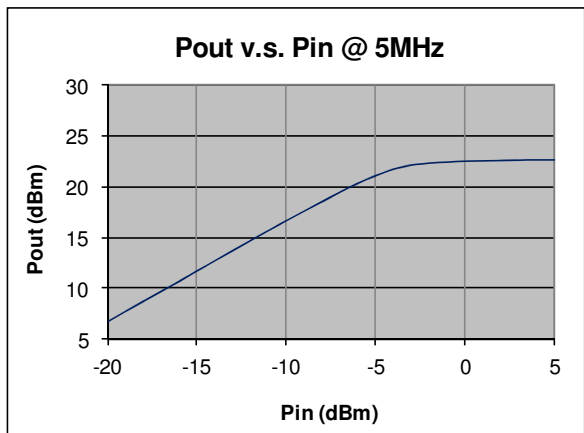
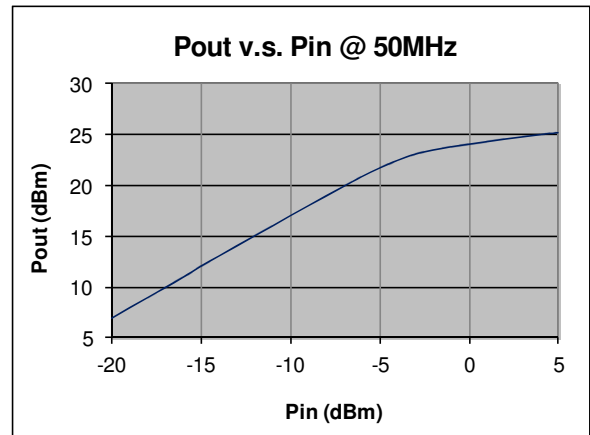
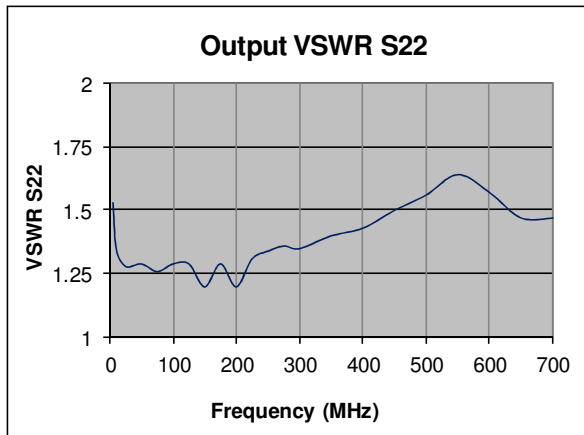
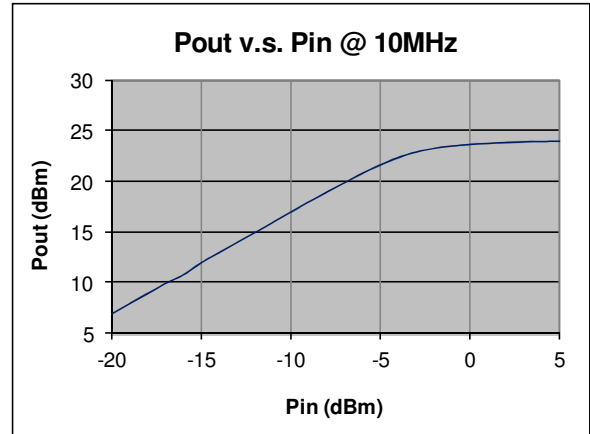
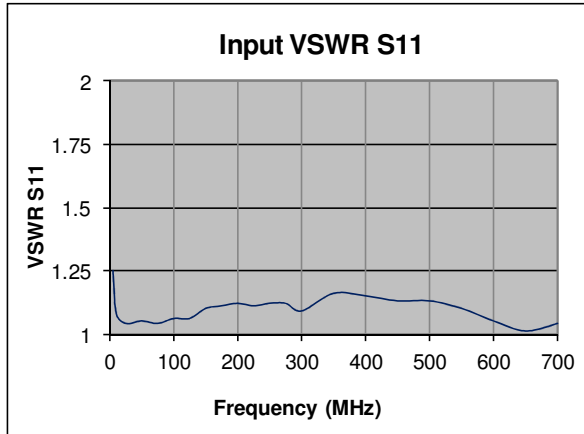
Typical Performance @ +25 °C



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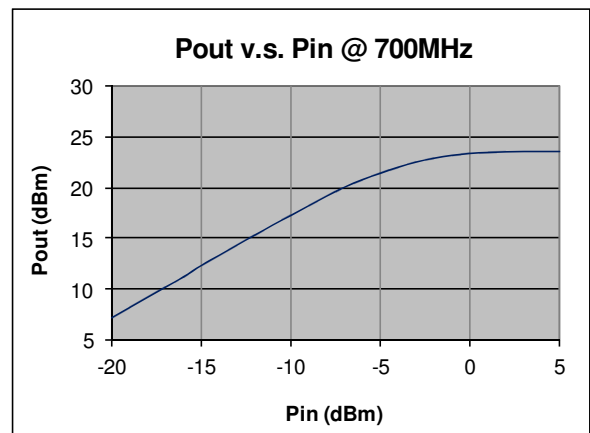
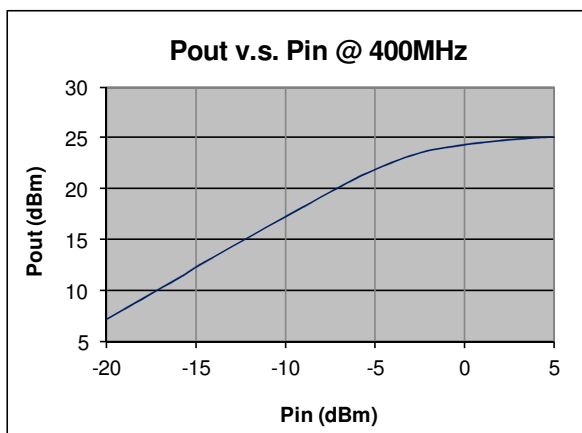
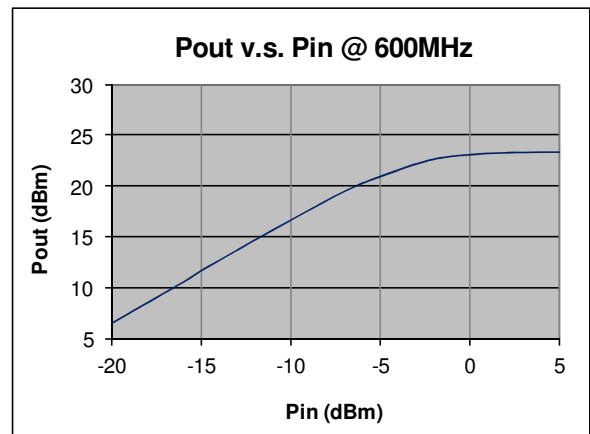
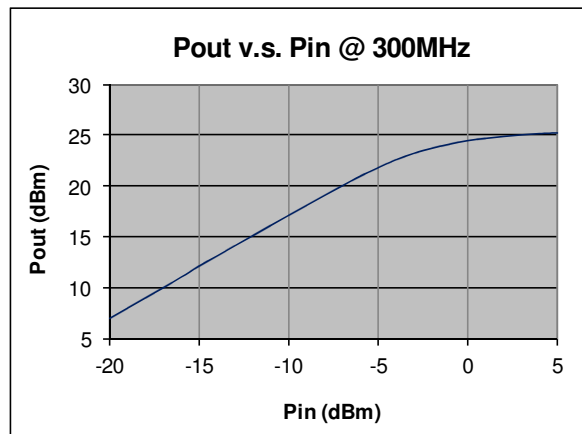
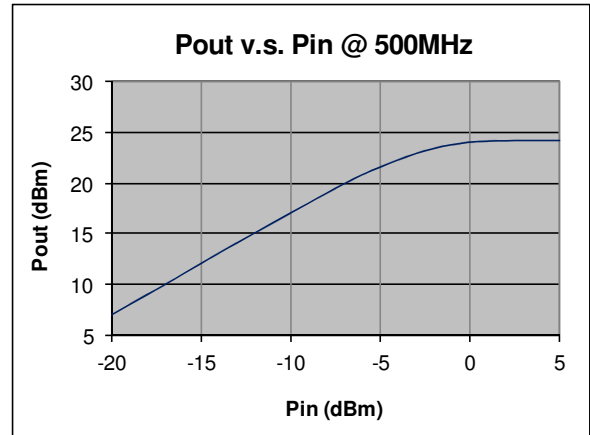
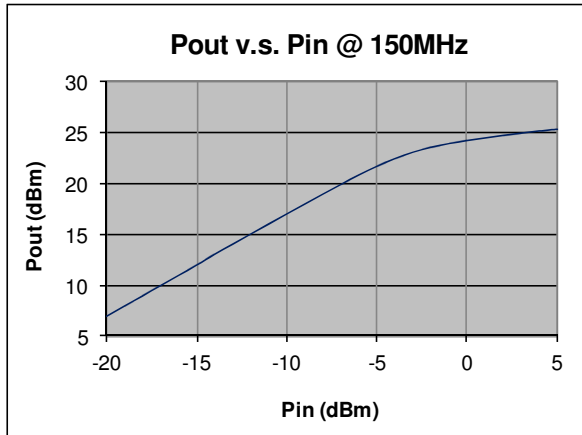
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Typical Performance @ +25 °C



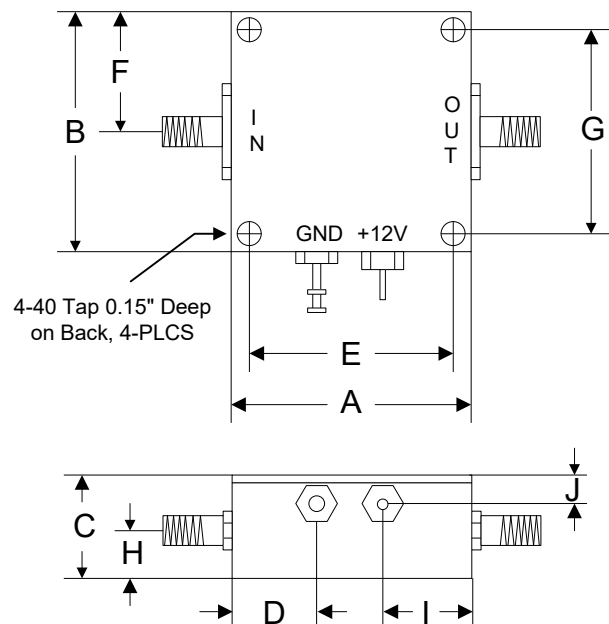
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Absolute Maximum Ratings

| Parameter | Absolute Maximum |
|-----------------------|-------------------|
| RF Input Power | +15dBm |
| Supply Voltage | +35V |
| 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 |

WARNING: MUST USE HEAT SINK IF CASE TEMPERATURE EXCEEDS 50 °C