

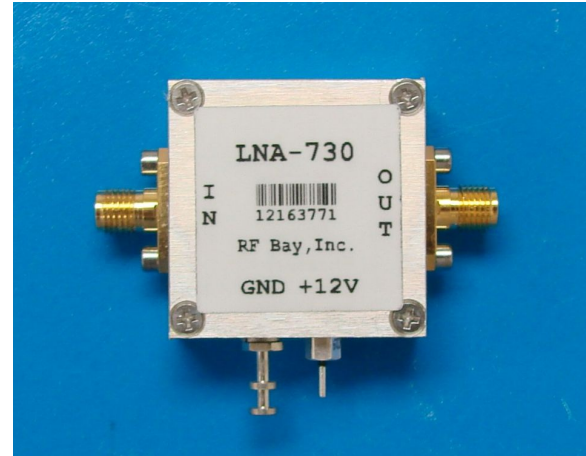
LNA Series

50 – 750MHz Low Noise Amplifier

Features

- Frequency Range: 50-750MHz
- Gain: 20dB
- P_{1dB}: +19dBm
- IP3: +33dBm
- Noise Figure: 1.3dB
- DC Power: 12V/75mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector

Picture



Description

LNA-730 is a 20dB Gain 1.3dB Noise Figure Low Noise Amplifier operates in frequency range from 50 to 750MHz.

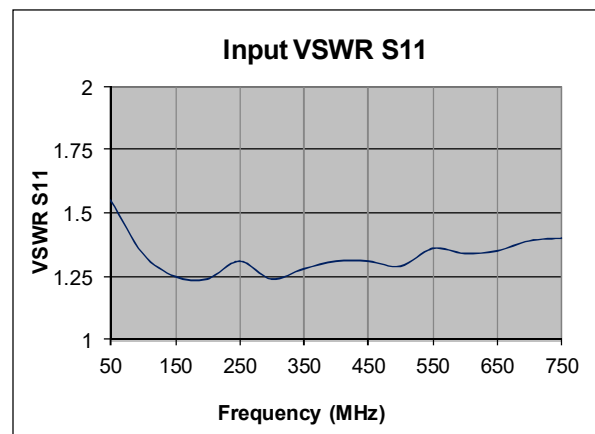
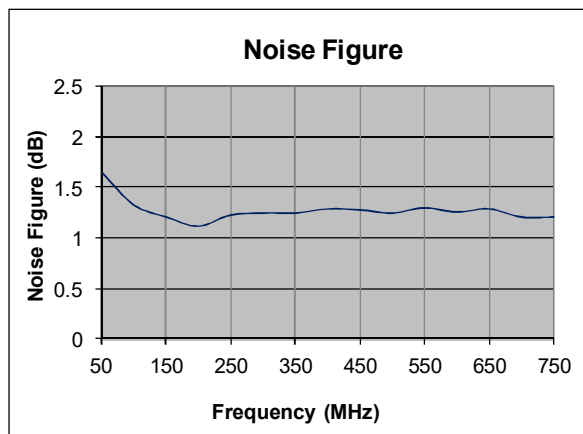
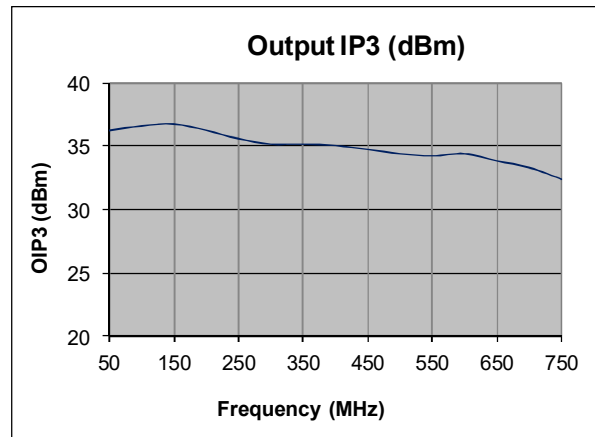
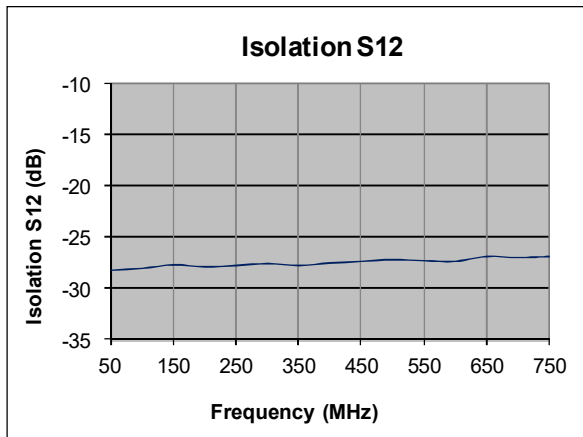
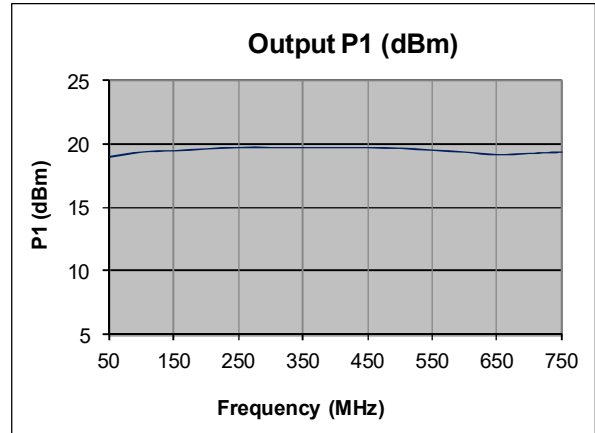
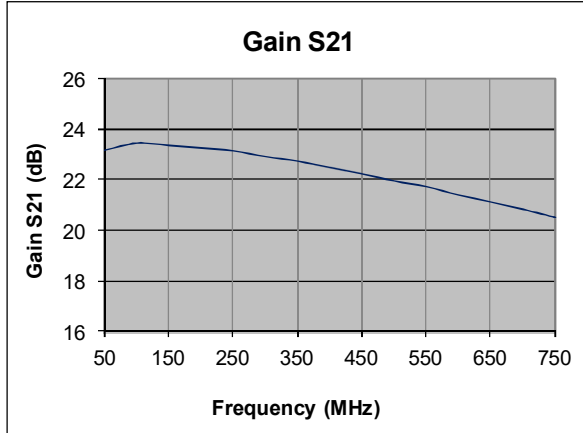
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{supply} = 12V

| Parameter | Unit | Minimum | Typical | Maximum |
|-----------------------------------|------|---------|---------|---------|
| Frequency Range | MHz | 50 | | 750 |
| Gain S ₂₁ f = 50MHz | dB | | 23.2 | |
| f = 100MHz | dB | | 23.4 | |
| f = 200MHz | dB | | 23.0 | |
| f = 400MHz | dB | 20.0 | 22.5 | |
| f = 600MHz | dB | | 21.4 | |
| f = 750MHz | dB | | 20.5 | |
| Gain Flatness | dB | | ± 1.5 | ± 2.0 |
| P _{1dB} | dBm | +18 | +19 | |
| Output IP3 | dBm | +31 | +33 | |
| Noise Figure | dB | | 1.3 | 1.7 |
| Reverse Isolation S ₁₂ | dB | -25 | -27 | |
| VSWR Input VSWR S ₁₁ | | | 1.3:1 | 1.7:1 |
| Output VSWR S ₂₂ | | | 1.2:1 | 1.7:1 |
| DC Power Supply | V | 11 | 12 | 24 |
| Supply Current | mA | | 75 | 85 |

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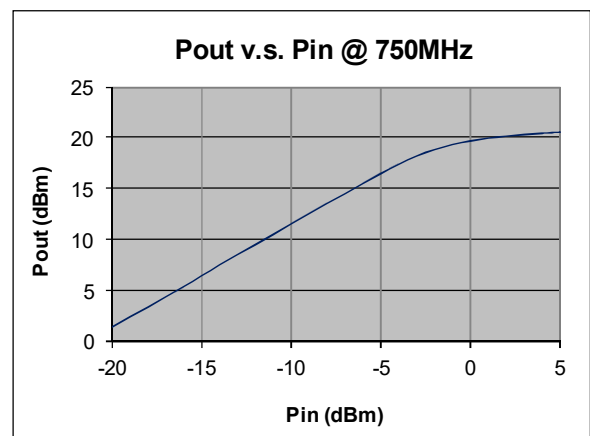
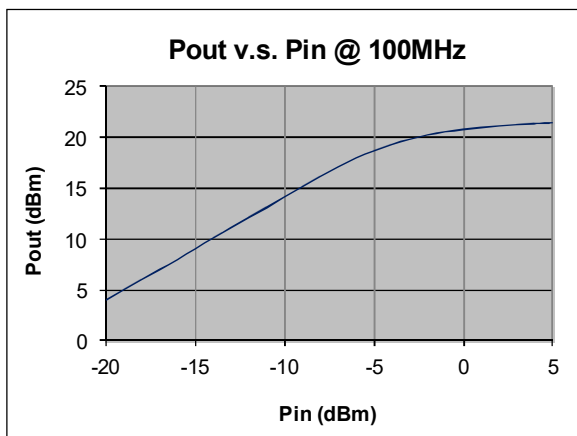
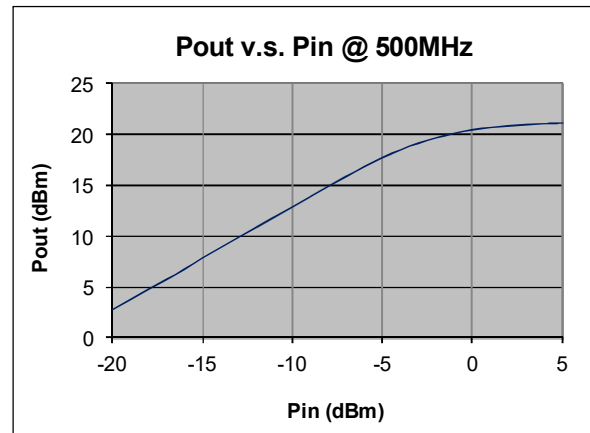
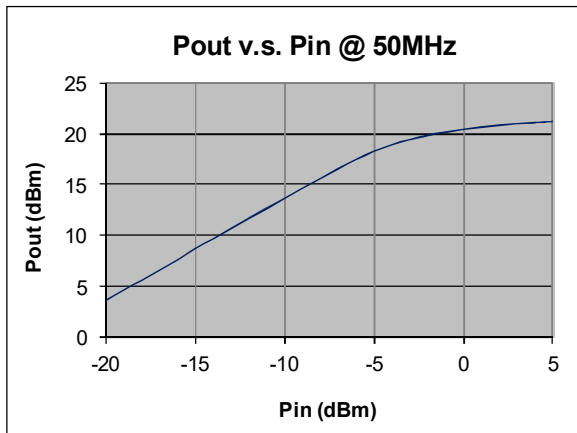
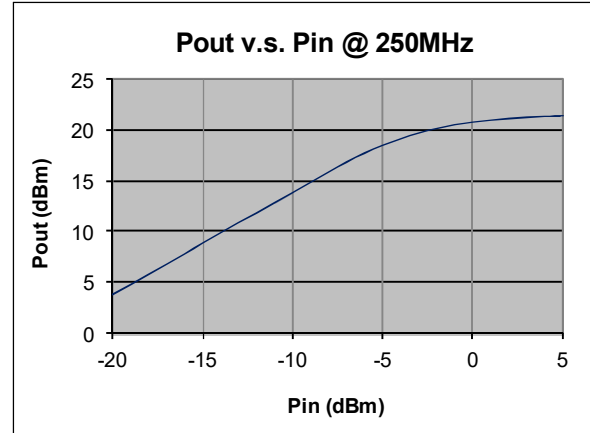
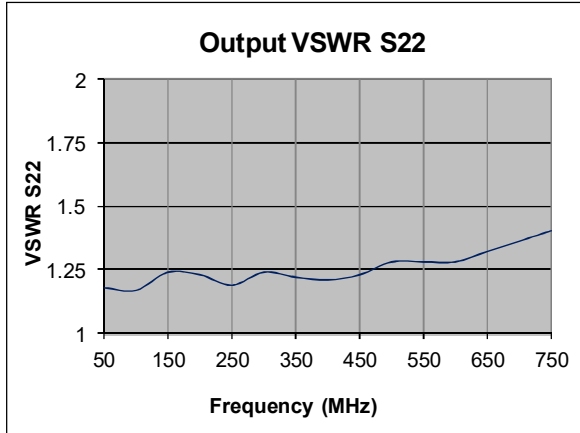
Typical Performance @ +25 °C



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Typical Performance @ +25 °C



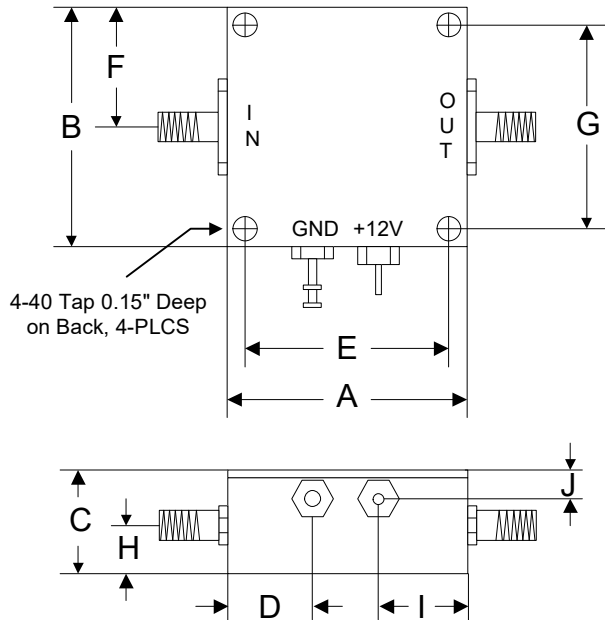
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50 – 750MHz Low Noise Amplifier

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 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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