

HD28187

5–3500MHz RF Amplifier

Features

- Frequency Range: 5-3500MHz
- Gain: 16dB
- P_{1dB}: +19.5dBm
- IP3: +34dBm
- Noise Figure: 4.5dB
- DC Power: 12V/80mA
- SMA Connector

Performance at 2000MHz

Description

HD28187 is a wideband RF Amplifier operates with frequency range from 5MHz to 3500MHz (usable to 6GHz).



Electrical Specifications @ +25 °C, Z_s = Z_L = 50 Ohms, V_{cc}=+12V

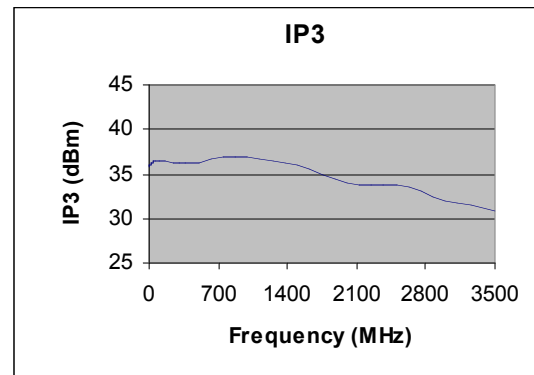
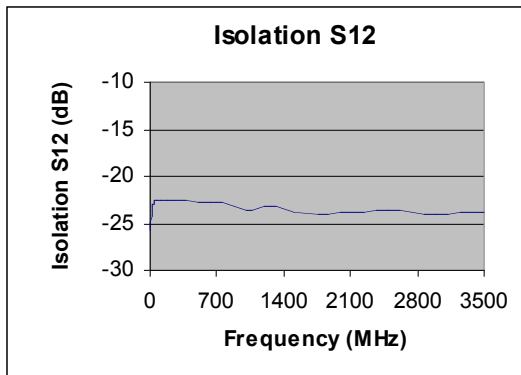
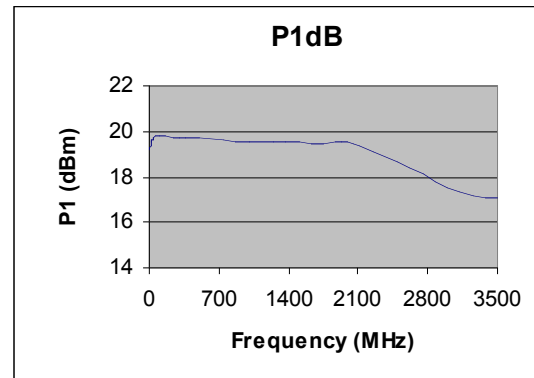
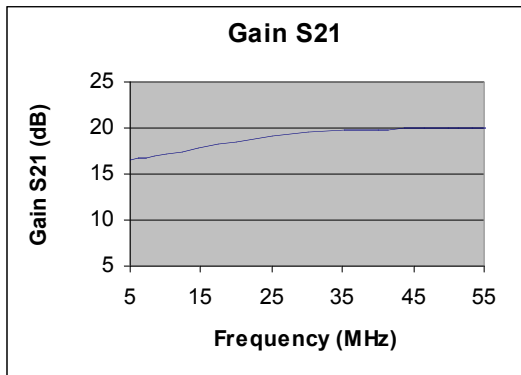
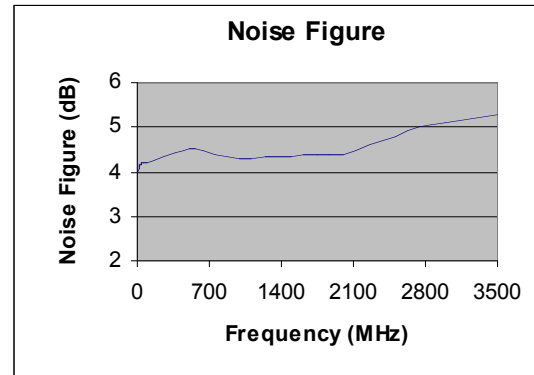
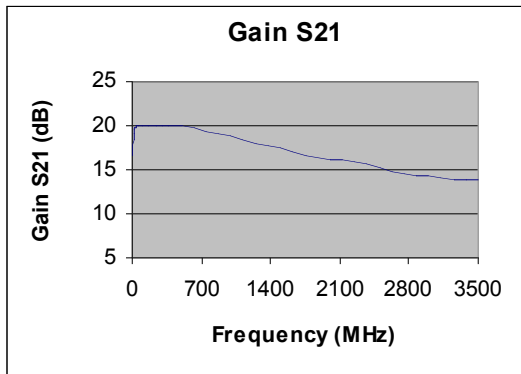
| Parameter | Unit | Minimum | Typical | Maximum |
|-------------------|------|---------|---------|---------|
| Frequency Range | MHz | 5 | | 3500 |
| Gain | | | | |
| f = 5MHz | dB | | 16.5 | |
| f = 100MHz | dB | | 20.0 | |
| f = 500MHz | dB | | 20.0 | |
| f = 1000MHz | dB | | 18.7 | |
| f = 1500MHz | dB | | 17.5 | |
| f = 2500MHz | dB | | 15.0 | |
| f = 3500MHz | dB | | 13.8 | |
| P _{1dB} | dBm | | +19.5 | |
| IP3 | dBm | | +34.0 | |
| Noise Figure | dB | | 4.5 | |
| Reverse Isolation | dB | | -23.8 | |
| VSWR | | | | |
| Input VSWR | | | 1.5:1 | |
| Output VSWR | | | 1.5:1 | |

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| | | | | |
|-----------------|----|----|----|----|
| DC Power Supply | V | 10 | 12 | 24 |
| Supply Current | mA | | 80 | |

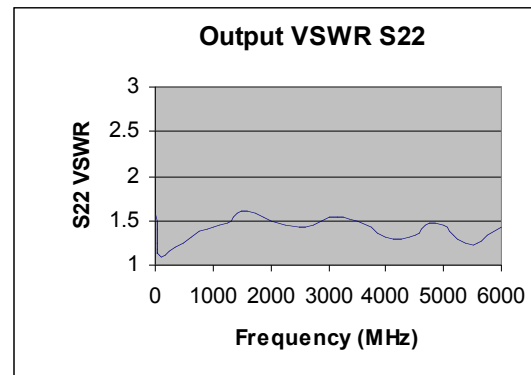
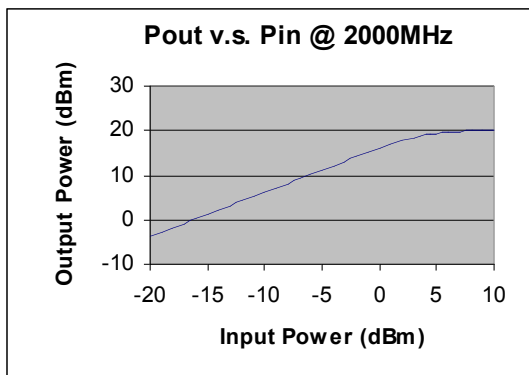
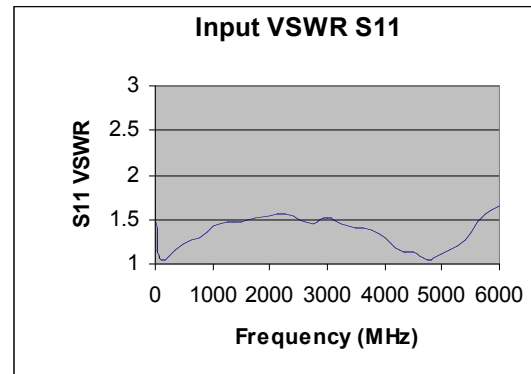
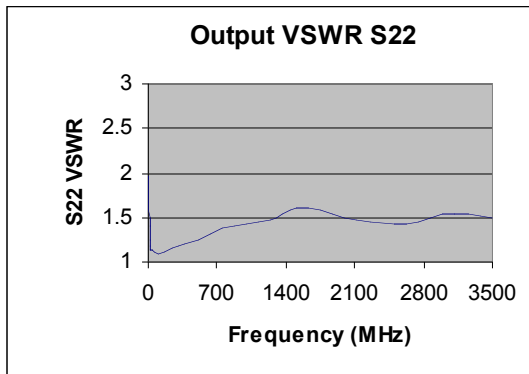
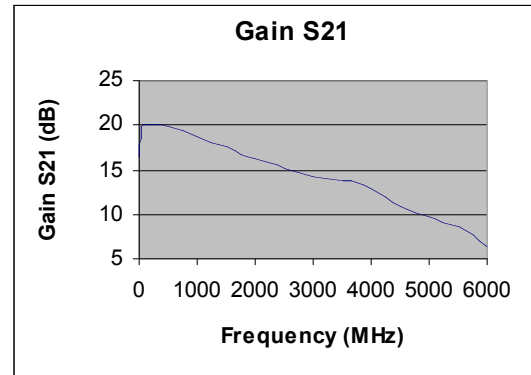
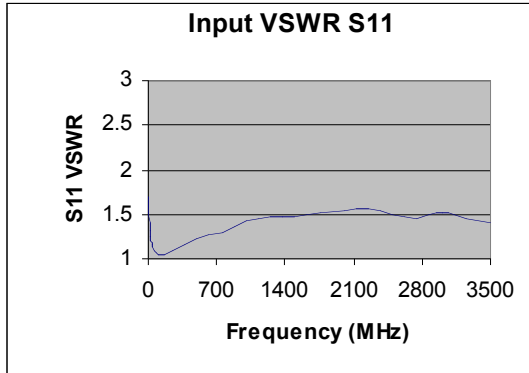
Typical Performance @ +25 °C



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Typical Performance @ +25 °C



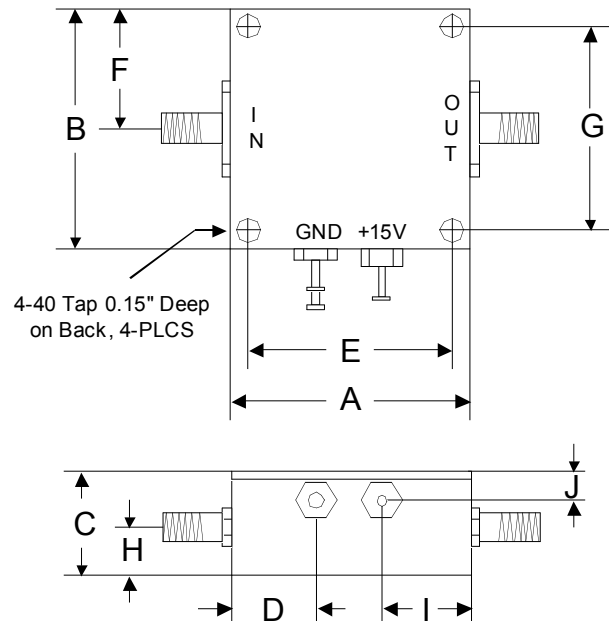
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Absolute Maximum Ratings

| Parameter | Absolute Maximum |
|-----------------------|-------------------|
| RF Input Power | +17dBm |
| Supply Voltage | +25V |
| Operating Temperature | -40 °C to +85 °C |
| Storage Temperature | -55 °C to +100 °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 |