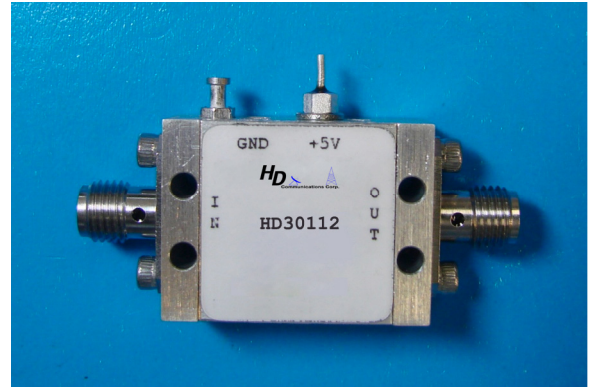


## HD30112

## 5 – 18 GHz RF Amplifier

### Features

- Frequency Range: 5-18GHz
- Gain: 13dB
- $P_{1dB}$ : +17dBm
- IP3: +25dBm
- Noise Figure: 4.8dB (typ.)
- DC Power: 5V @ 145mA
- SMA-female connectorized



### Description

HD30112 is a high performance RF Microwave Driver Amplifier, with standard frequency range of 5GHz to 18GHz.

### Electrical Specifications @+25 °C, $Z_{in}=Z_{out}=50$ Ohm, $V_{supply} = +5VDC$

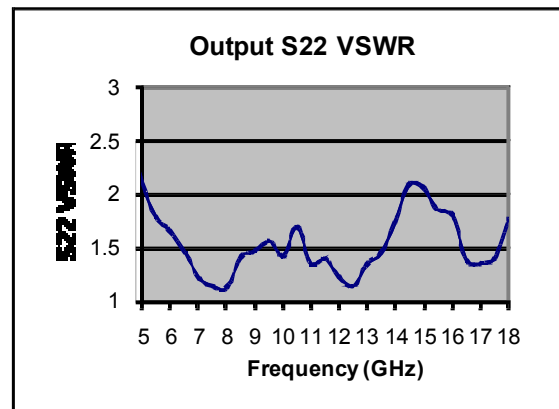
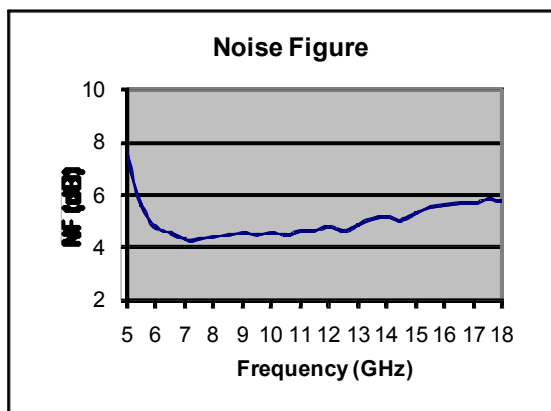
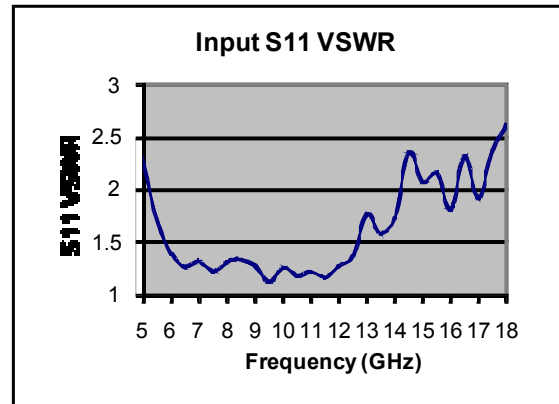
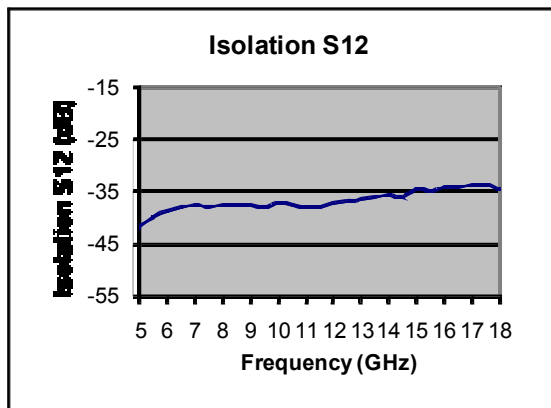
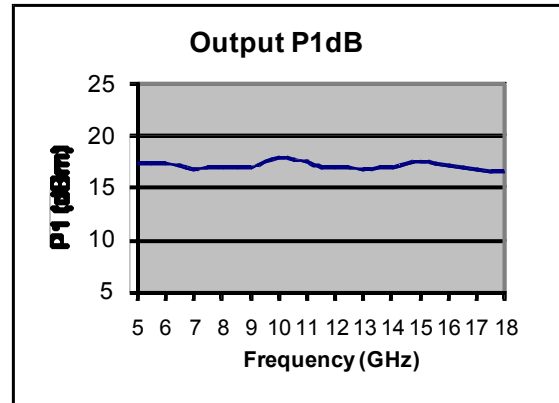
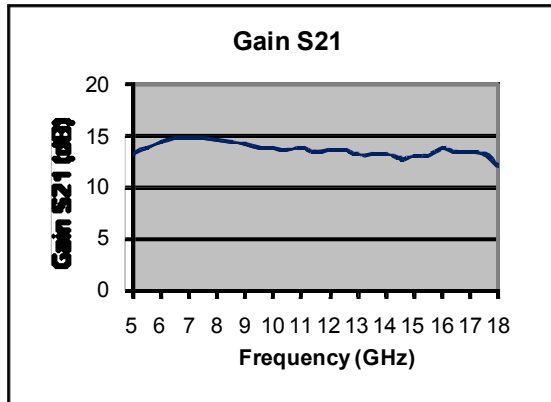
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	5		18
Gain (S21) f = 5GHz	dB		13.2	
f = 12GHz	dB	12.0	13.5	
f = 18GHz	dB		12.0	
Gain Variation Over Temperature	dB/°C		0.02	0.03
Output Power $P_{1dB}$	dBm		+17	
Saturated Output Power $P_{Sat}$	dBm		+19	
Output Third Order Intercept IP3	dBm		+25	
Noise Figure @12GHz	dB		4.8	5.5
Reverse Isolation (S12) @12GHz	dB		-37	
VSWR-Input (S11)	ratio:1	2.8 @5GHz	1.3 @12GHz	2.6 @18GHz
VSWR-Output (S22)	(unitless)	2.7 @5GHz	1.3 @12GHz	1.8 @18GHz
DC Power Supply - voltage	V	4.5	5.0	5.5
DC Power Supply - current	mA		145	160
Operating Temperature	°C	-40		+85

## HD30112

## 5 – 18 GHz RF Amplifier

Size (RF/DC feedthru's excluded)	Inch	1.00 (L) x 0.75 (W) x 0.45 (H)
Weight	Oz	0.6 (17 grams)

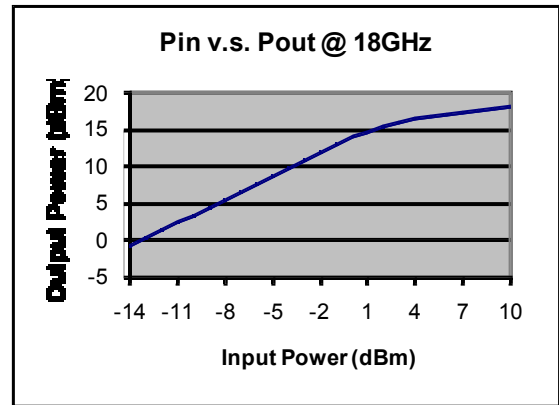
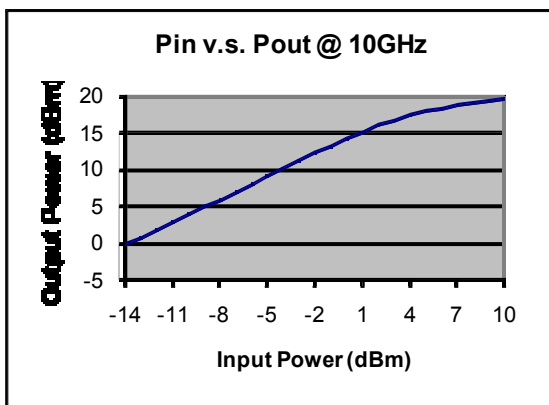
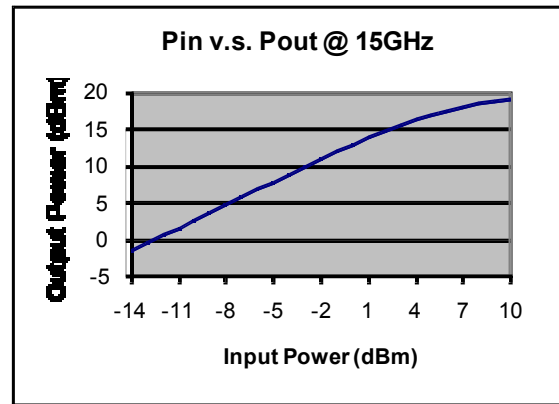
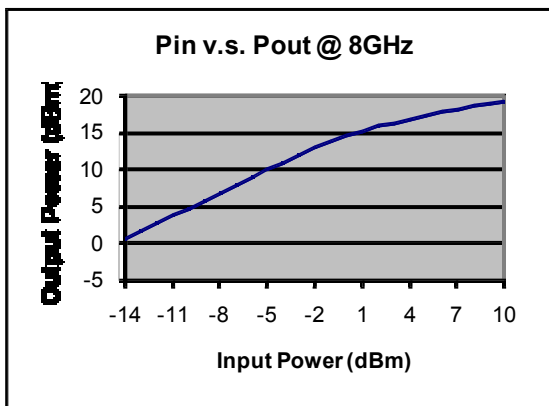
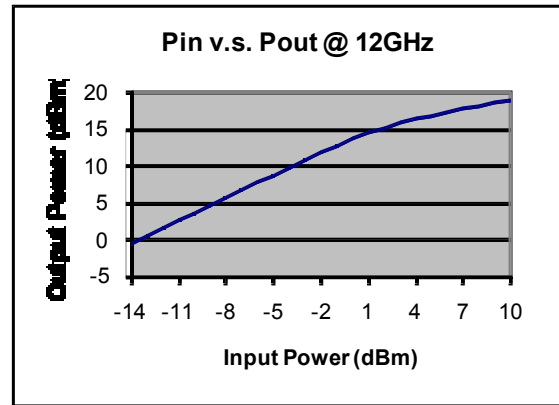
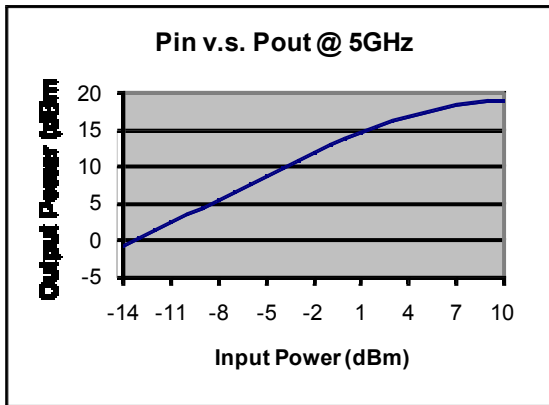
### Typical Performance @+25 °C



**HD30112**

**5 – 18 GHz RF Amplifier**

**Typical Performance @+25 °C**



## HD30112

## 5 – 18 GHz RF Amplifier

### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+20dBm
Supply Voltage (Survival)	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### Outline

