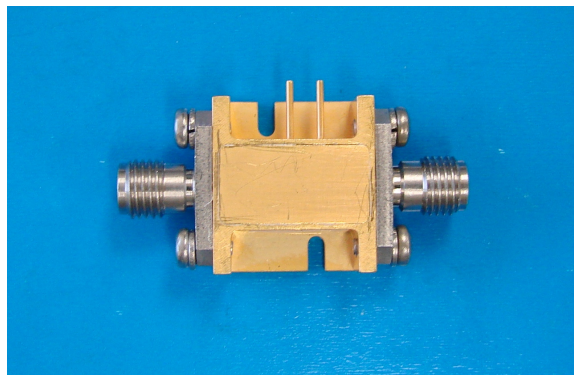


## Features

- Frequency Range: 0.5 - 18GHz
- Gain: 33dB min.
- P<sub>1dB</sub>: +23dBm
- IP3: +31dBm
- Noise Figure: 3.5dB max.
- DC Power: 15V @ 390mA
- Field Replaceable SMA-F

## Photo



## Description

HD31293 is a high performance Microwave Low Noise (& Driver) Amplifier, with standard frequency range of 0.5GHz to 18GHz.

## Electrical Specifications @+23 °C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, V<sub>supply</sub> = +15VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	0.5		18
Gain (S21)	dB	33	35-40	
Gain Flatness	dB			±3.0
Output Power P <sub>1dB</sub>	dBm	+23	+25	
Output Third Order Intercept IP3	dBm		+31	
Noise Figure	dB		2.7	3.5
Isolation (S12)	dB		-60	
VSWR-Input (S11)	ratio:1			2.5:1
VSWR-Output (S22)	(unitless)			2.5:1
DC Power Supply - voltage	V	12	15	
DC Power Supply - current	mA		390	470
Operating Temperature	°C	-54		+85
Size (RF/DC feedthru's excluded)	Inch/mm	0.650 x 0.646 x 0.223/16.5 x 16.4 x 5.7 (LxWxH)		
Weight	Oz	0.35 (10 grams)		

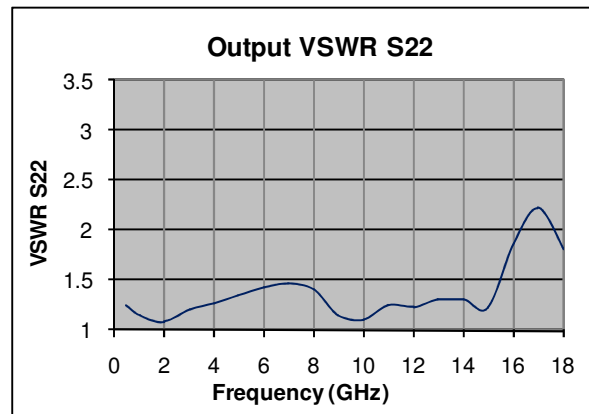
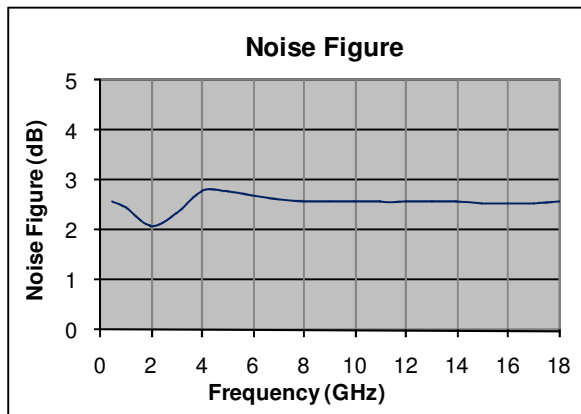
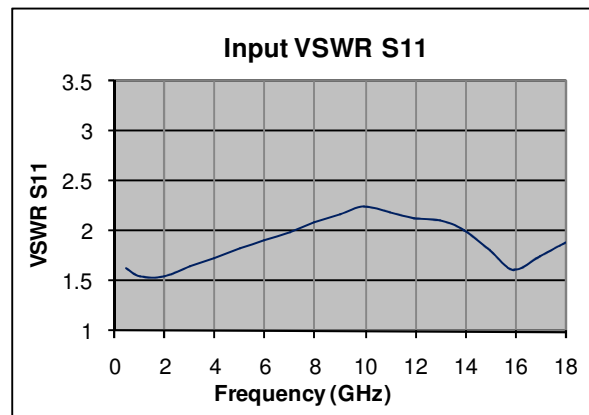
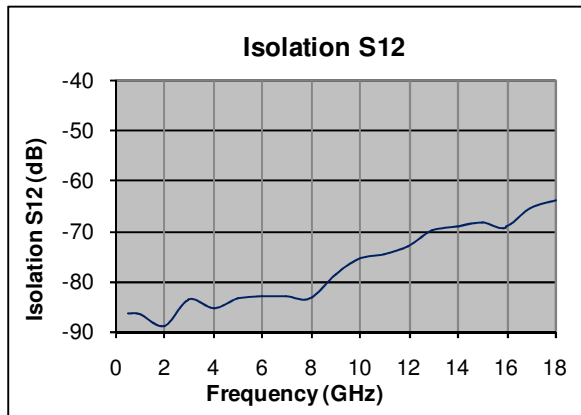
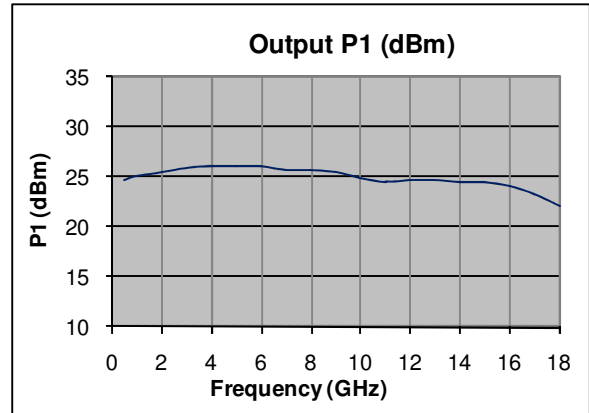
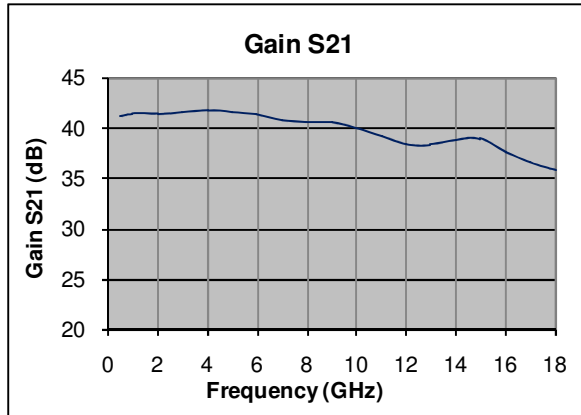
**WARNING: MUST USE HEAT SINK IF CASE TEMPERATURE EXCEEDS 50 °C**

# HD Communications

HD31293

0.5 – 18GHz Low Noise Amplifier

## Typical Performance @ +25 °C



# HD Communications

HD31293

0.5 – 18GHz Low Noise Amplifier

## Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage (Survival)	+16V
Operating Temperature	-54 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

## Outline

