

## 1 – 18GHz Low Noise Amplifier

### Features

- Frequency Range: 1-18GHz
- Gain: 42dB
- P<sub>1dB</sub>: +15dBm
- OIP3: +25dBm
- Noise Figure: 3.0dB
- DC Power: +12V @ 250mA
- SMA-female

### Description

HD33714 is a wide band high performance Low Noise (& Driver) Amplifier, with standard frequency range of 1 to 18GHz.

### Electrical Specifications @+25 °C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, DC Supply = +12VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	1		18
Gain S <sub>21</sub>	dB	42	45	
Gain Flatness	dB		±2.0	
Output Power P <sub>1dB</sub>	dBm	10	+15	
Output Third Order Intercept IP3	dBm		+25	
Noise Figure	dB		2.5	3.0
Reverse Isolation S <sub>12</sub>	dB	-55	-60	
Input VSWR S <sub>11</sub>			1.7:1	2.0:1
Output VSWR S <sub>22</sub>			1.7:1	2.5:1
DC Power Supply - voltage	V		+12	
DC Power Supply - current	mA		250	

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

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### Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+13V
RF Input Power	-10dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-65 °C to +150 °C

### ESD Sensitive Material



### Outline

