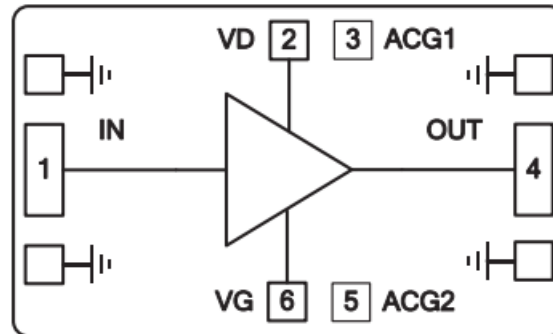


**Features**

- 1.5dB Positive Slope
- Noise Figure: 2.3dB
- Gain: 17dB
- P1dB: +14dBm
- Biasing: +5V @ 67mA
- Impedance: 50Ω
- Die Size: 2.3 x 1.3 x 0.1 mm

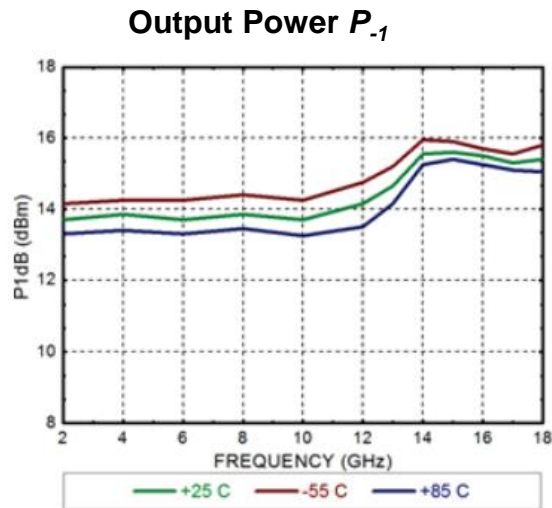
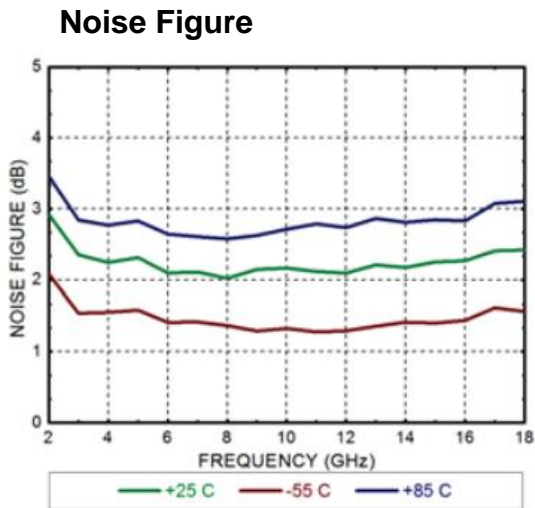
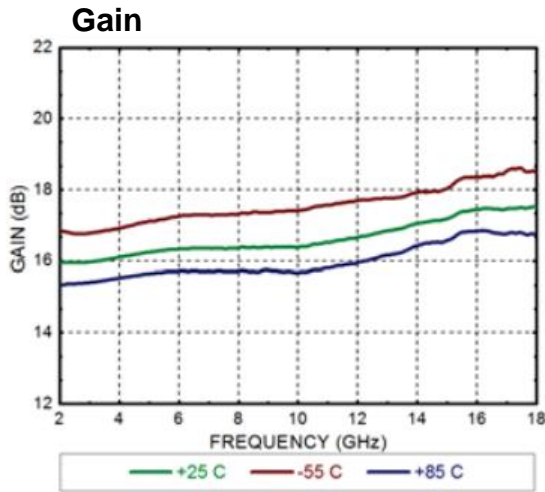
**Typical Applications**

- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

**Functional Block Diagram**

**Electrical Specifications**

TA = +25°C, VDD = +5V Idd = 67mA

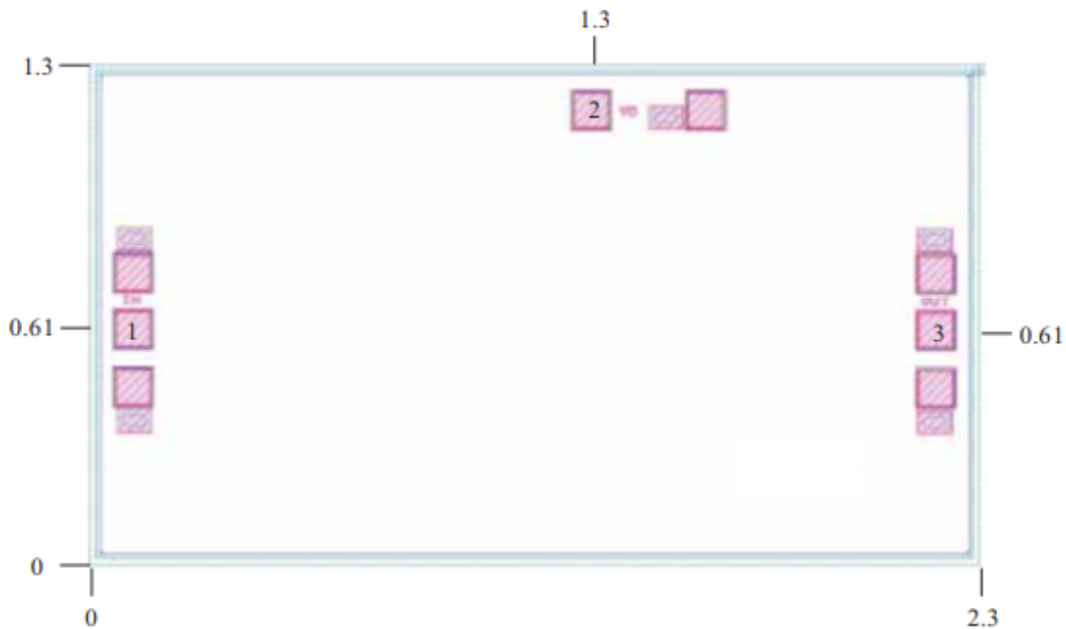
Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
<b>Frequency</b>	2 -6			6-12			12-18			GHz
<b>Gain</b>		16			16.5			17.2		dB
<b>Gain Flatness</b>		±0.2			±0.2			±0.4		dB
<b>Input Return Loss</b>		12			15			15		dB
<b>Output Return Loss</b>		20			15			15		dB
<b>Output 1dB Compression (P1dB)</b>		13.7			13.8			15		dBm
<b>Saturated Output Power (Psat)</b>		16.5			16.5			17.5		dBm
<b>Output Third Order Intercept (IP3)</b>		22.5			22.5			24		dBm
<b>Noise Figure</b>		2.4			2.2			2.3		dB
<b>Current</b>	35	67	86	35	67	86	35	67	86	mA





### Outline Drawing:

All Dimensions in mm

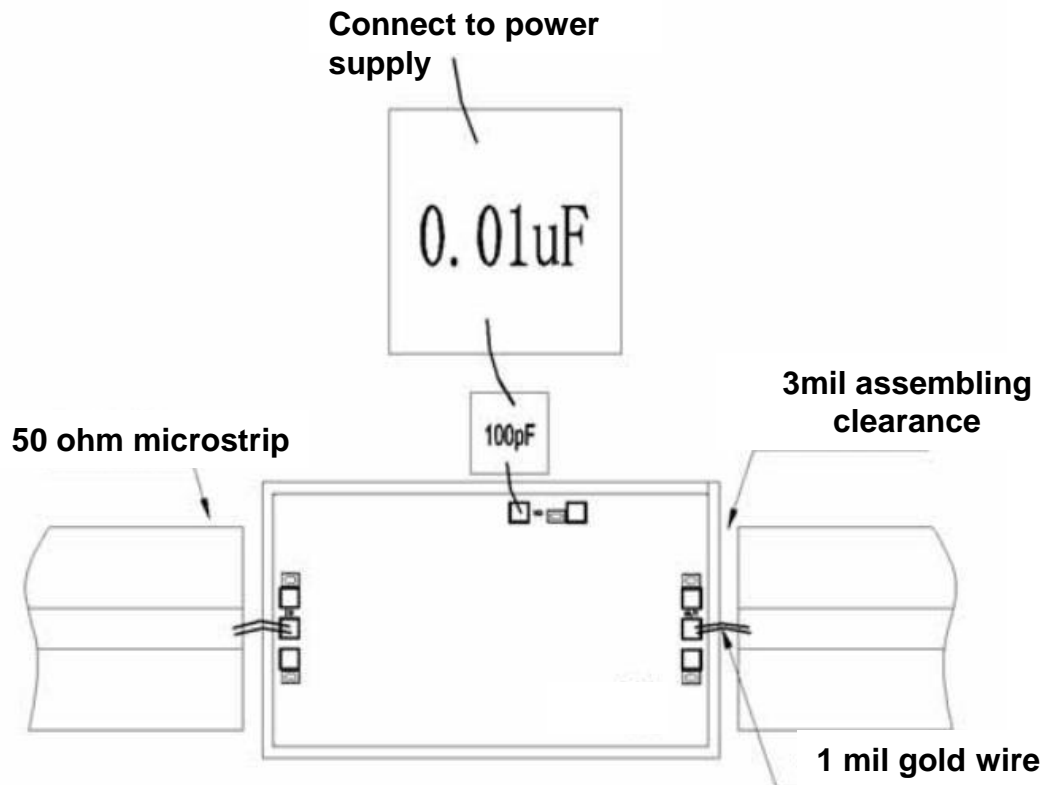


### Pad Description

PAD	Function	Description
1	IN	Input AC coupling 50Ω Impedance
2	VD	This pad provides power supply voltage for the amplifier and requires external 100pF and 0.01μF bypass capacitor.
3	OUT	Output AC coupling 50Ω Impedance
Die Bottom	GND	Die bottom must be connected to RF/DC ground



### Assembly Drawing



#### Notes:

1. Die thickness: 100um
2. Typical bond pad is 100\*100  $\mu\text{m}^2$
3. Bond pad metalization: Gold
4. Backside metalization: Gold
5. Backside of the die (GND)
6. No connection required for unlabeled bond pads

#### Maximum Ratings:

1. Power supply voltage: +6V
2. RF input power: +18dBm
3. Storage temperature: -65°C to +175°C
4. Operating temperature: -55°C to +85°C