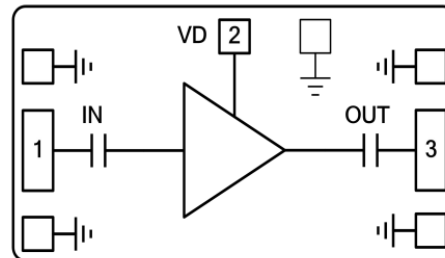


Features

- Single Biasing Voltage (Self Biased)
- Operating Frequency: 2-4GHz
- Noise Figure: 0.6dB
- Gain: 29dB
- P1dB: +14dBm
- Self Biasing +5V @ 33 mA
- Input/Output: 50Ω matched
- Die Size: 1.5 x 1.0 x 0.1 mm

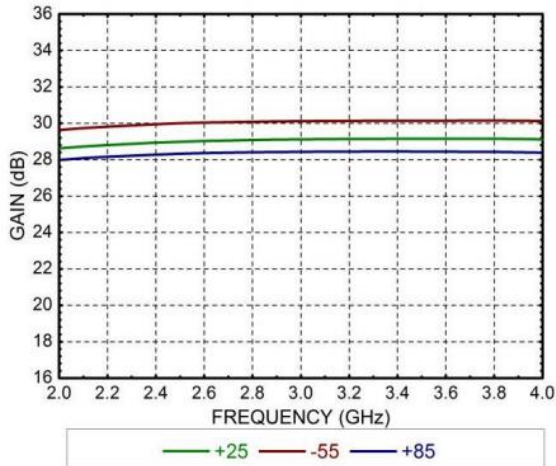
Typical Applications

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

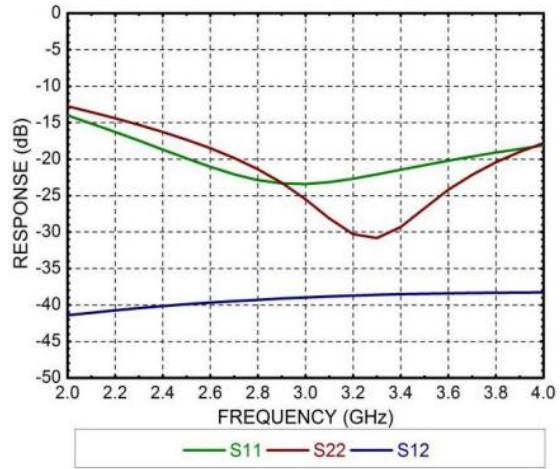
Functional Block Diagram

Electrical Specifications
TA = +25°C, Vdd = +5V, Idd = 33mA

Parameters	Min.	Typ.	Max.	Units
Frequency		2-4		GHz
Gain		29		dB
Gain Flatness		±0.3		dB
Input Return Loss		17		dB
Output Return Loss		17		dB
Output 1dB Compression (P1dB)		14		dBm
Saturated Output Power (Psat)		15		dBm
Output Third Order Intercept (IP3)		23		dBm
Noise Figure		0.6		dB
Operating Current	20	33	50	mA

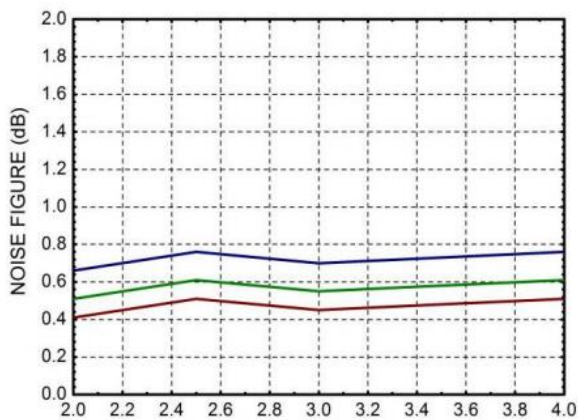
Gain



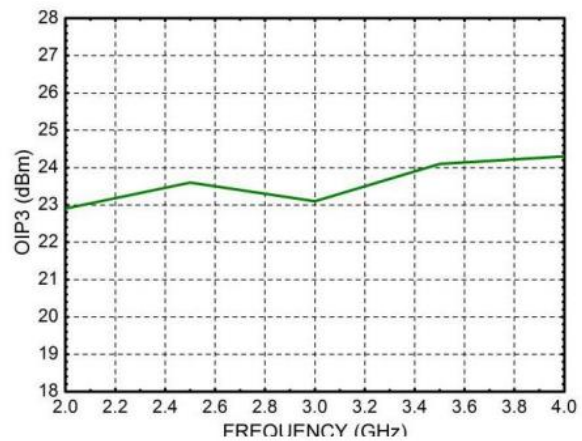
Return Loss & Reverse Isolation



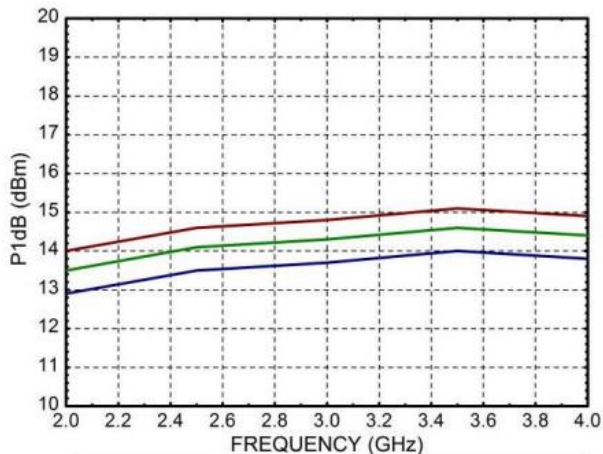
Noise Figure



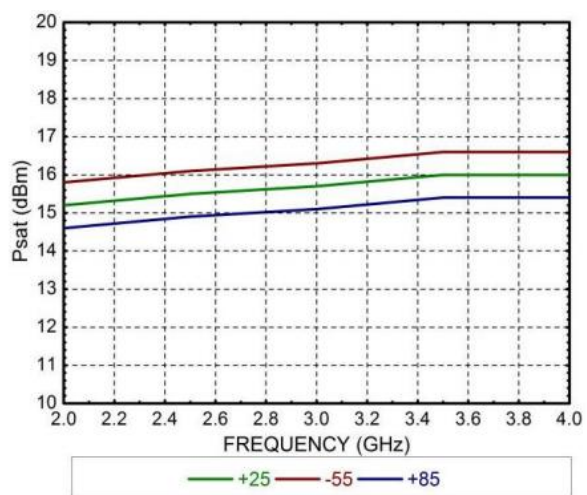
OIP3



Output Power P-1



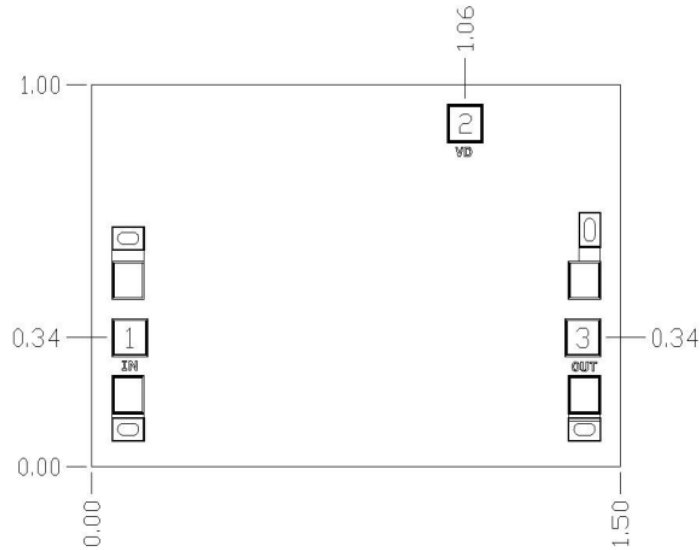
Psat





Outline Drawing:

All Dimensions in mm

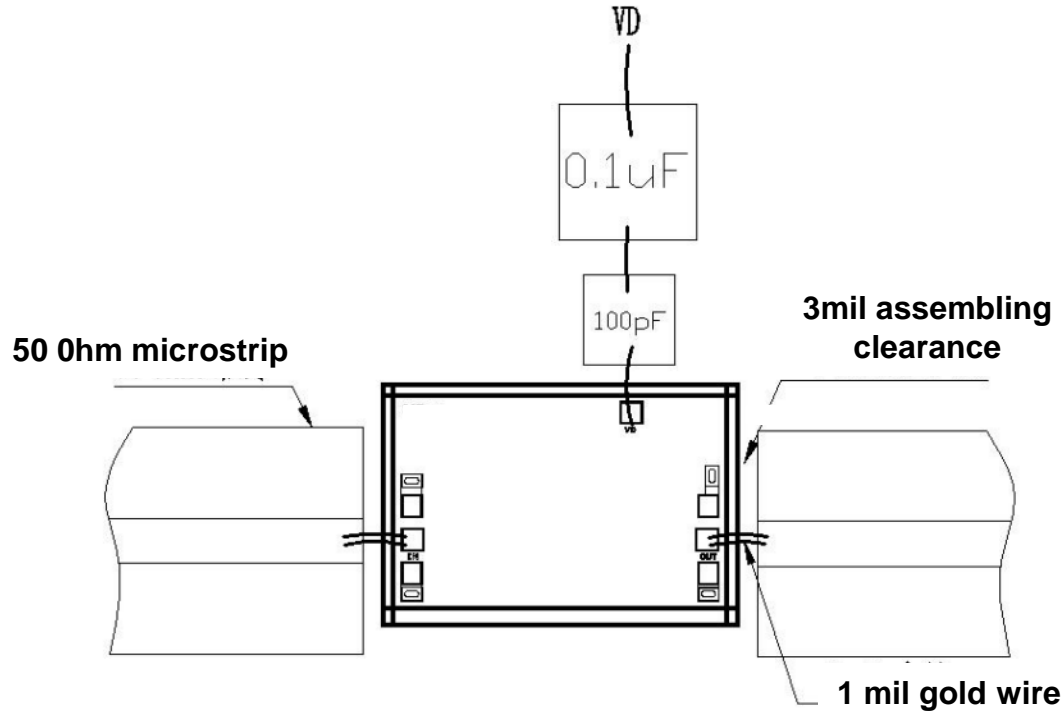


Pad Description

PAD	Function	Description
1	IN	This pad is AC coupling, 50 ohm matched
2	VD	This pad provides the power supply voltage of the amplifier and needs to be externally connected with the 100pF bypass capacitor.
3	OUT	This pad is AC coupling, 50 ohm matched
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 μm^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 +150°C
4. Operating temperature: -55°C to +85°C