



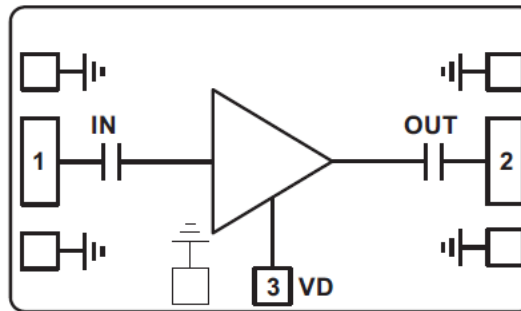
Features

- Gain: 16dB
- P1dB: +18dBm
- Psat: +20.5dBm
- Noise Figure: 1.6dB
- Biasing: +5V @ 45 mA
- Impedance: 50Ω
- Die Size: 1.5 x 1.3 x 0.1 mm

Typical Applications

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

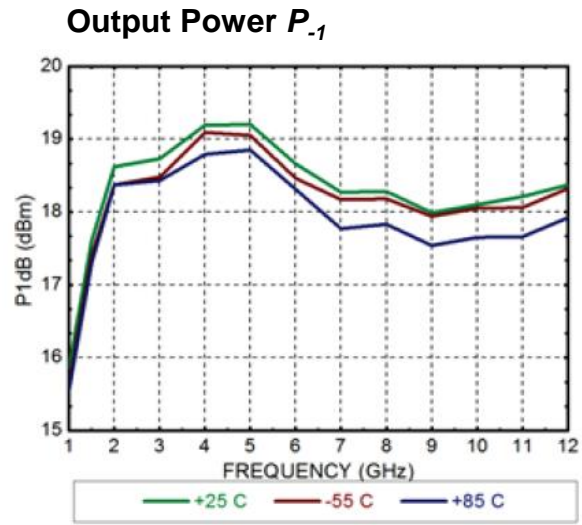
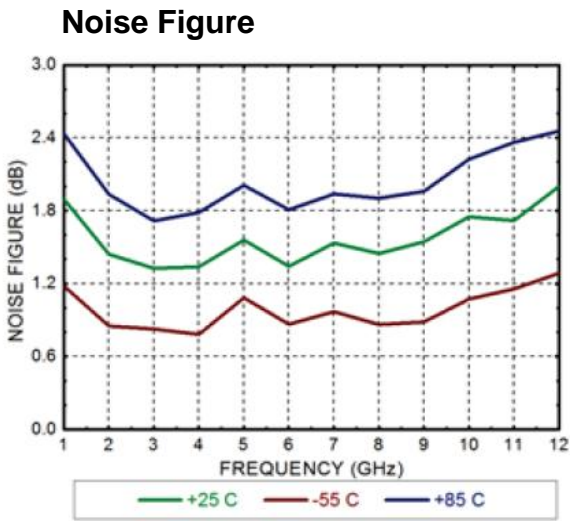
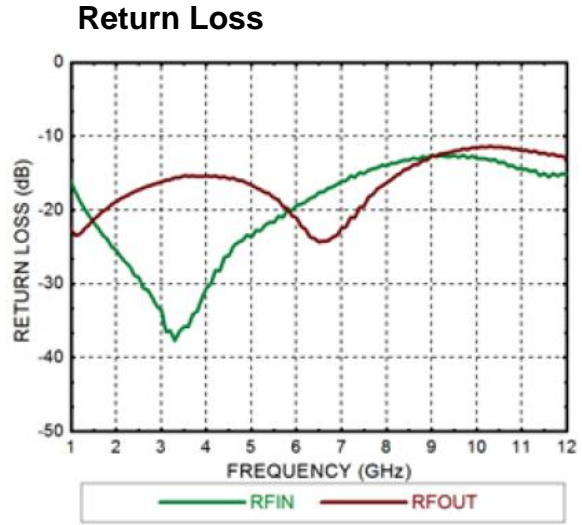
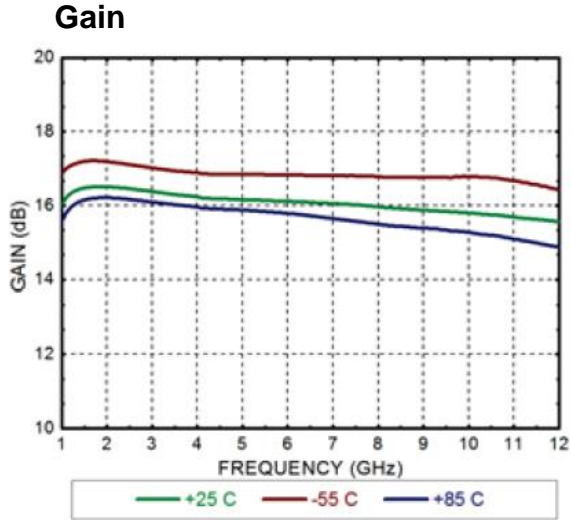
Functional Block Diagram



Electrical Specifications

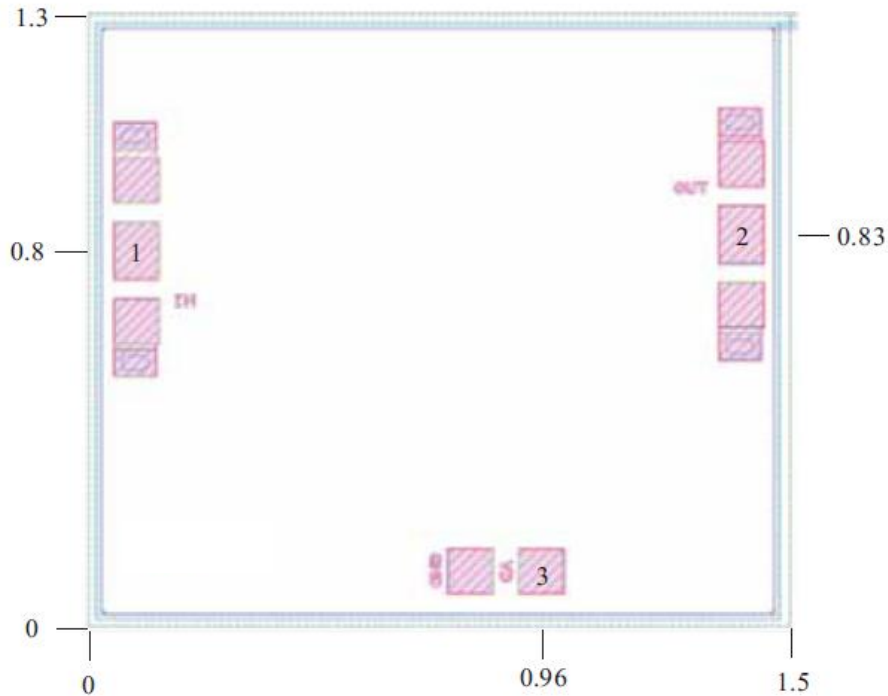
TA = +25°C, Vdd = +5V Idd = 45mA

Parameters	Min.	Typ.	Max.	Units
Frequency		1 - 12		GHz
Gain		16		dB
Gain Flatness		±0.5		dB
Input Return Loss		15		dB
Output Return Loss		15		dB
Output 1dB Compression (P1dB)		18		dBm
Saturated Output Power (Psat)		20.5		dBm
Output Third Order Intercept (IP3)		28		dBm
Noise Figure		1.6		dB
Current	30	45	68	mA





Outline Drawing: All Dimensions in mm

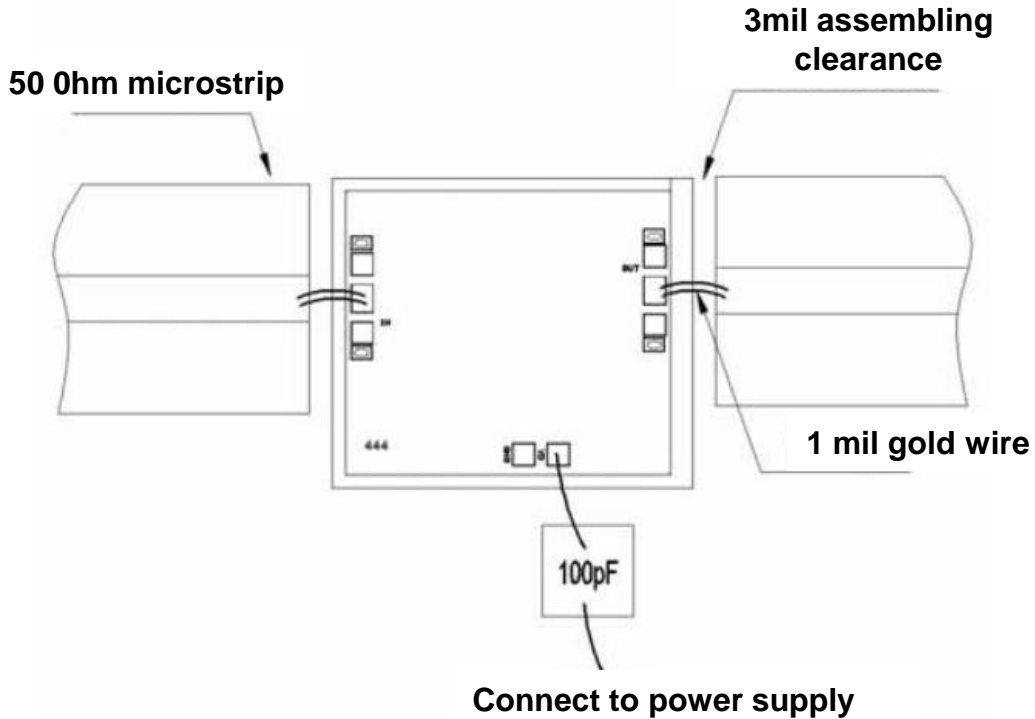


Pad Description

PAD	Function	Description
1	INPUT	Input AC coupling 50Ω Impedance
2	OUTPUT	Output AC coupling 50Ω Impedance
3	VD	It is used to provide power supply voltage for the amplifier. Attach 100pF bypass capacitor.
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: +15dBm
3. Storage temperature: -65°C to +175°C
4. Operating temperature: -55°C to +85°C