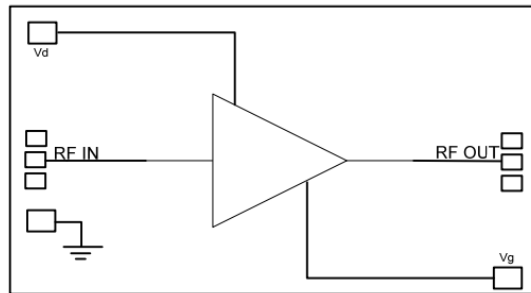


Features

- Frequency: 0.1-27GHz
- Small Signal Gain: 14dB
- Noise Figure: 2.2dB typ.
- P1dB: 18dBm
- Power Supply: +7.5 V/55 mA
- Input/Output: 50Ω
- Die Size: 0.995 x 0.76 x 0.1 mm

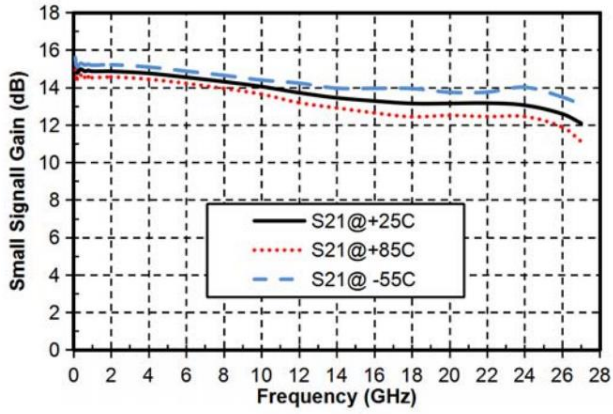
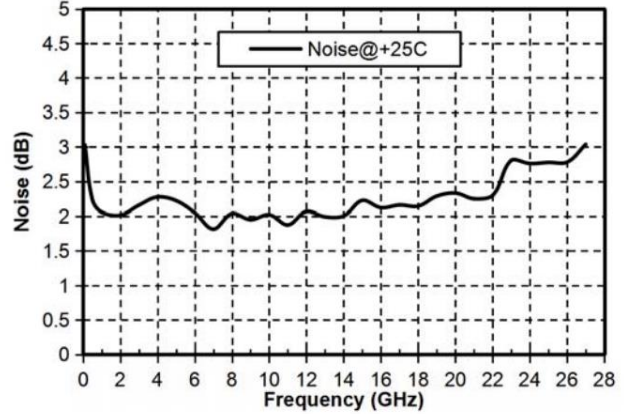
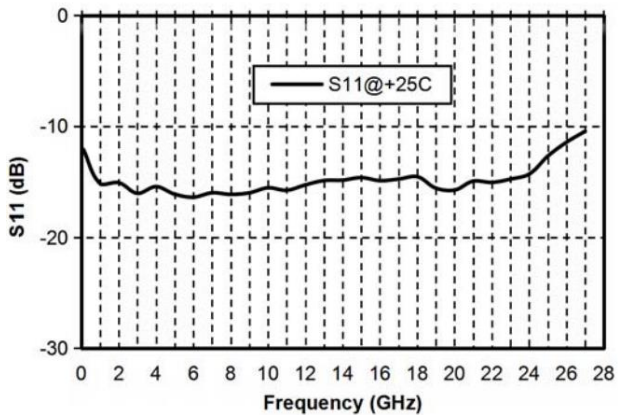
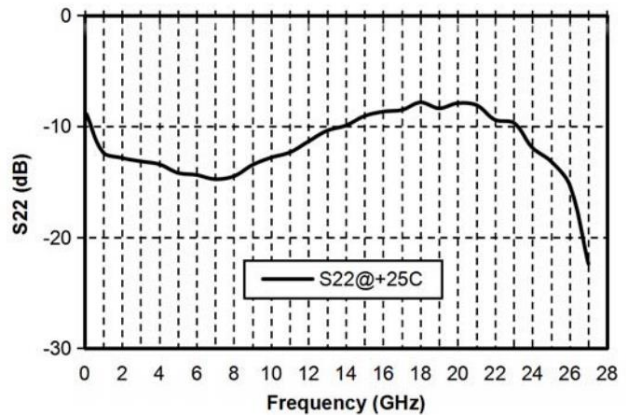
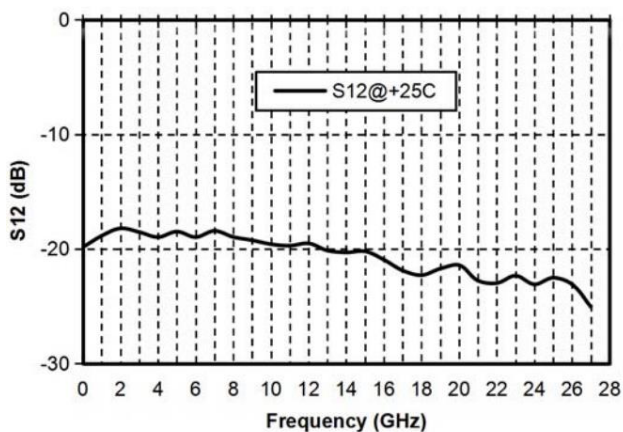
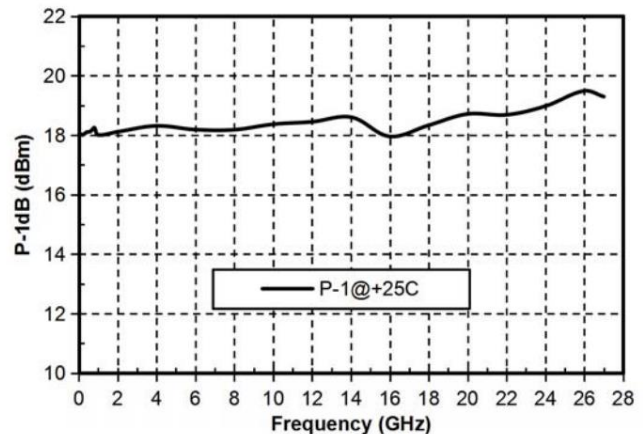
Functional Block Diagram

Typical Applications

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

Electrical Specifications

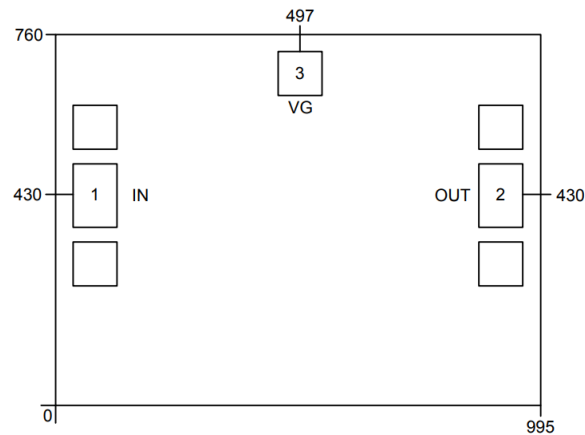
TA = +25°C, Vd = +7.5V with 30 Ω resistor, Vg = +0.6V

Parameters	Min.	Typ.	Max.	Units
Frequency	0.1-27			GHz
Small Signal Gain	-	14	-	dB
Gain Flatness		±1.7		dB
Noise Figure	-	2.2	3.5	dB
Output 1dB Compression (P1dB)	-	18	-	dBm
Saturated Output Power (Psat)	-	19	-	dBm
Input Return Loss	-	14	-	dB
Output Return Loss	-	11	-	dB
Static current		55		mA

Gain vs. Temperature

Noise Figure vs. Frequency

Input Return Loss vs. Frequency

Output Return Loss vs. Frequency

Reverse Isolation vs. Frequency

P1dB vs. Temperature




Outline Drawing: All Dimensions in μm

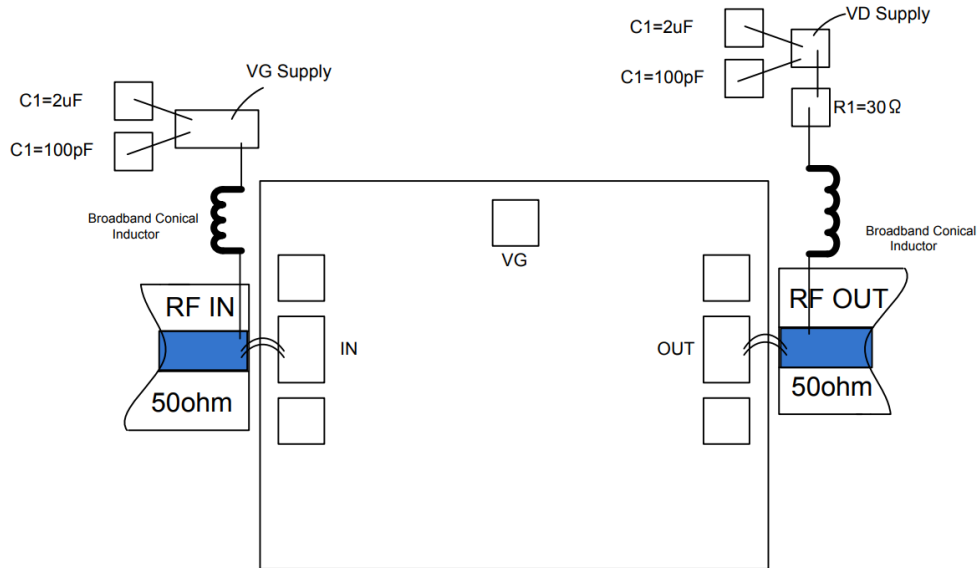


Pad Description

Pad	Function	Description
1*	RF IN, Vg	RF signal input terminal; Amplifier gate bias, external 100pF, 2uF bypass capacitor and inductance required, DC blocking capacitor required.
2*	RF OUT, Vd	RF signal output terminal; Amplifier drain bias, external 100pF, 2uF bypass capacitor and inductance required, DC blocking capacitor required
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. Maximum drain voltage: +7V
2. Maximum input power: +20dBm
3. Operating temperature: -55°C to +85°C
4. Storage temperature: -65°C to +150°C