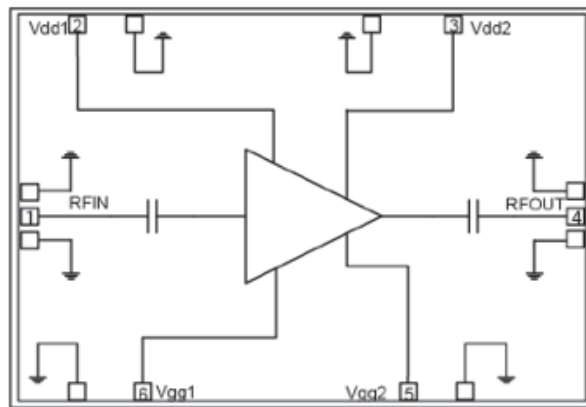


Features

- Frequency: 2-12GHz
- Gain: 25dB
- Psat: +40dBm
- PAE: 20% @Psat
- Power Supply: 28V @600mA
- Die Size : 4.95 x 3.9 mm

Typical Applications

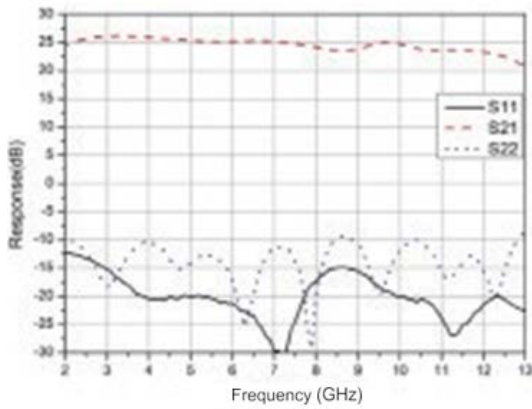
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

Functional Block Diagram

Electrical Specifications

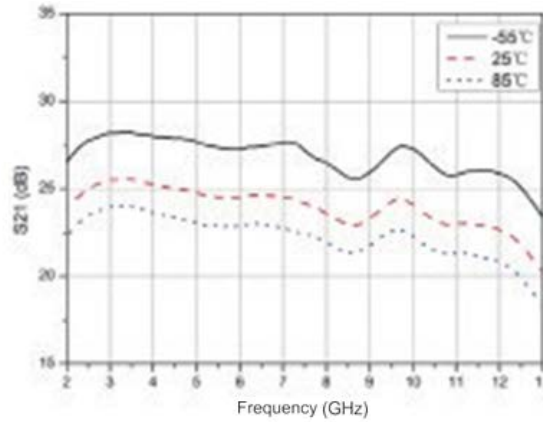
TA = +25°C, Vd1 = Vd2 = +28V, Idd = 600mA (On-wafer Measurement Results)

Parameters	Min.	Typ.	Max.	Units
Frequency	2-12			GHz
Gain		25		dB
Psat		40		dBm
PAE		20		%
Input Return Loss		-20		dB
Output Return Loss		-15		dB
Operating Current		600		mA

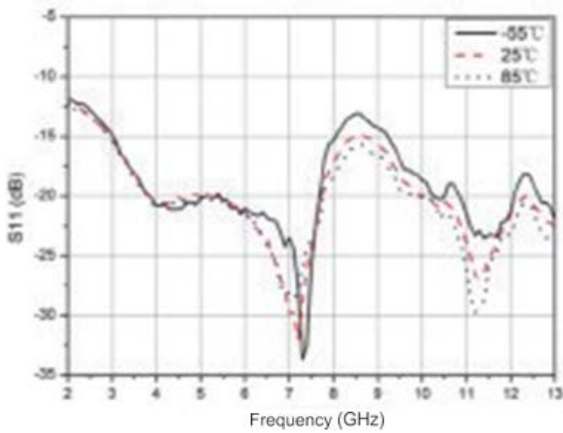
Frequency Response vs. Frequency



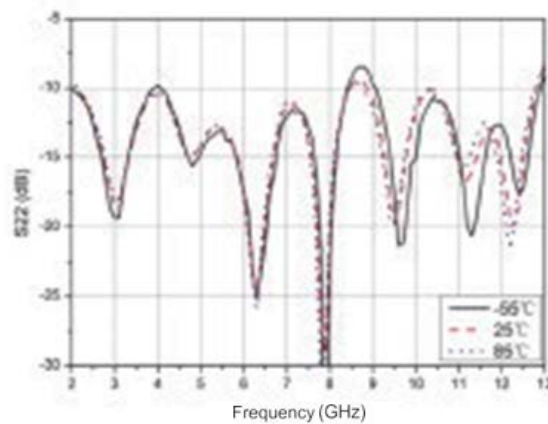
Gain vs. Temperature



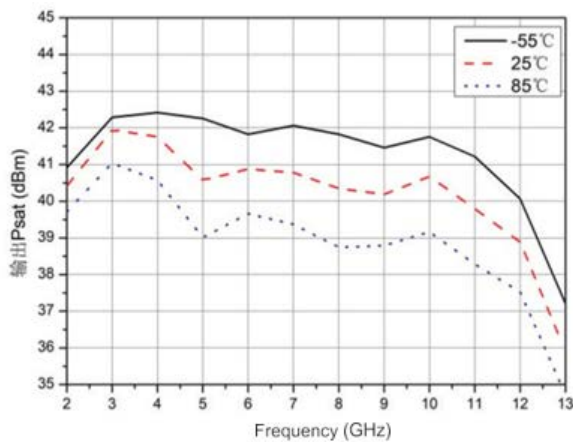
Input Return Loss vs. Temperature



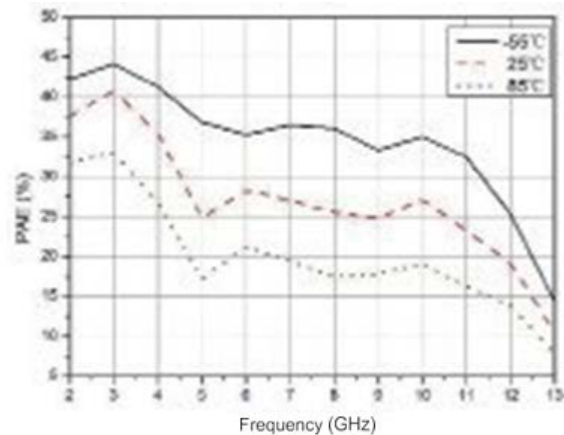
Output Return Loss vs. Temperature



Psat vs. Temperature

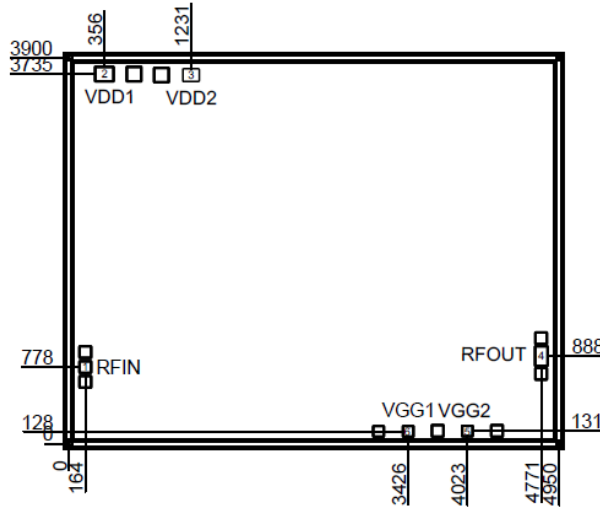


PAE vs. Temperature





Outline Drawing:
All Dimensions in μm

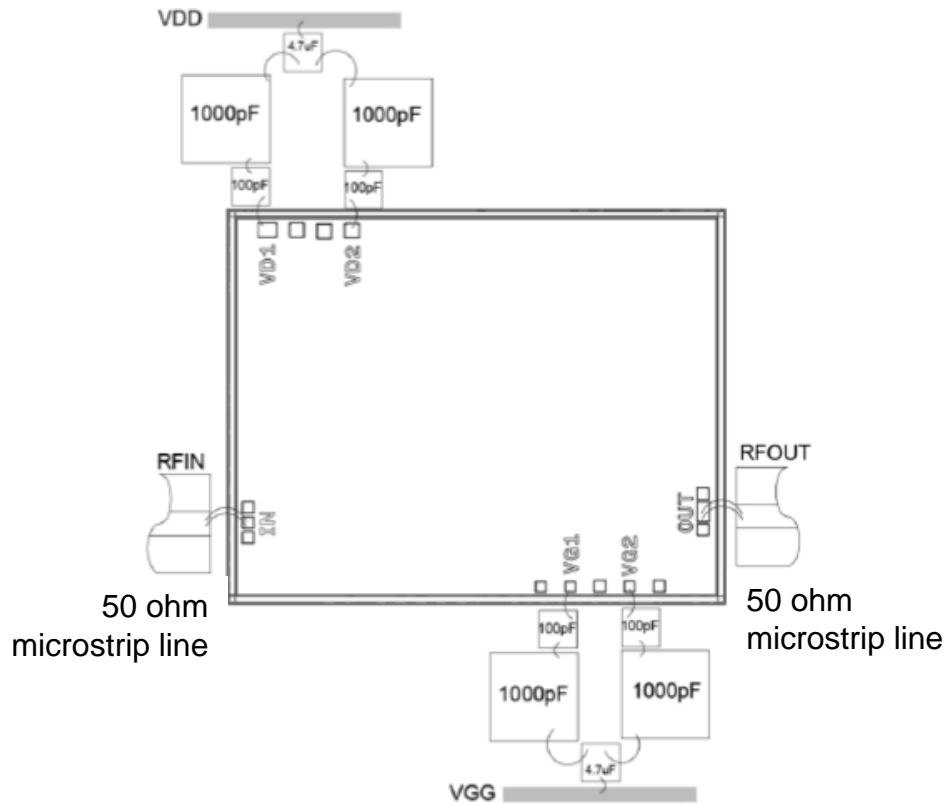


Pad Description

Pad	Function	Description
1	RF IN	Signal input terminal, connected to 50 Ω circuit.
4	RF OUT	Signal output terminal, connected to 50 Ω circuit.
2,3	Vdd1,Vdd2	Amplifier source bias; external bypass capacitor required.
5,6	VGG1,VGG2	Amplifier gate bias; external bypass capacitor required.



Assembly Drawing (Bond testing)



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. Supply voltage: +30V
2. RF Input power: +30dBm
3. Operating temperature: -55°C to +85°C
4. Storage temperature: -65°C to +150°C