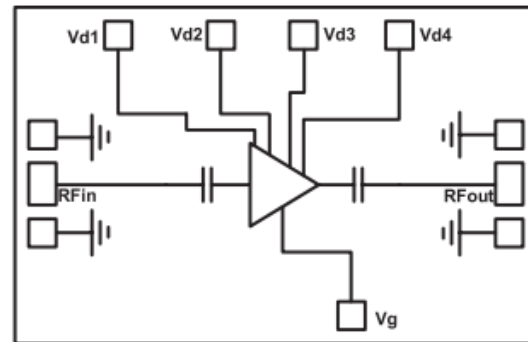


**Features**

- Frequency: 5-20GHz
- Gain: 29dB
- Gain Flatness:  $\pm 1$ dB
- P1dB: +22.5dBm
- Power supply: +5.0V@180mA
- Input/output 50 ohm matching: VSWR<1.8

**Typical Applications**

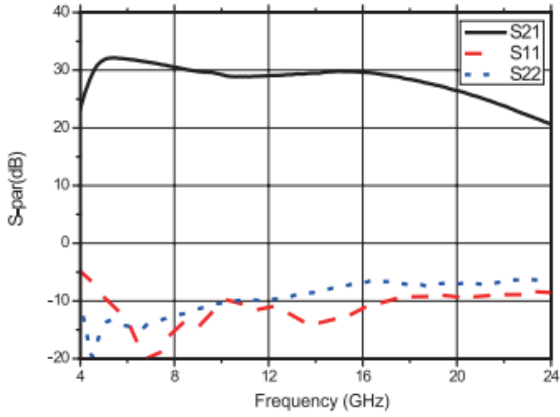
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

**Functional Block Diagram**

**Electrical Specifications**
**TA = +25°C, Vd1=Vd2=Vd3=Vd4= +5.0V, Vg = -0.6V**

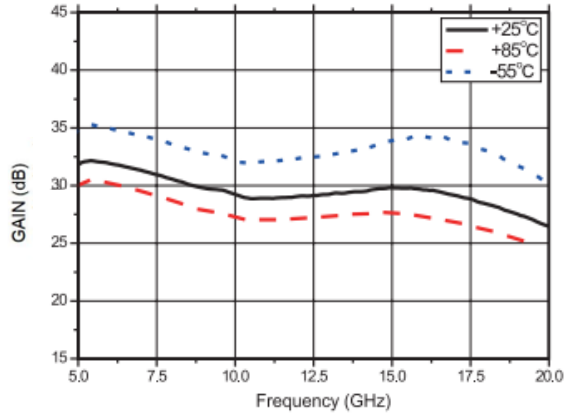
Parameters	Min.	Typ.	Max.	Units
Frequency		5-20		GHz
Gain		29		dB
P1dB		22.5		dBm
Psat		23		dBm
Input Standing Wave		2		
Output Standing Wave		2		
Operating Current		180		mA



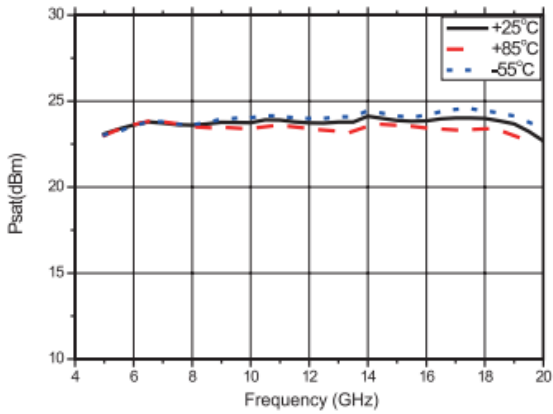
### S-par vs. Frequency



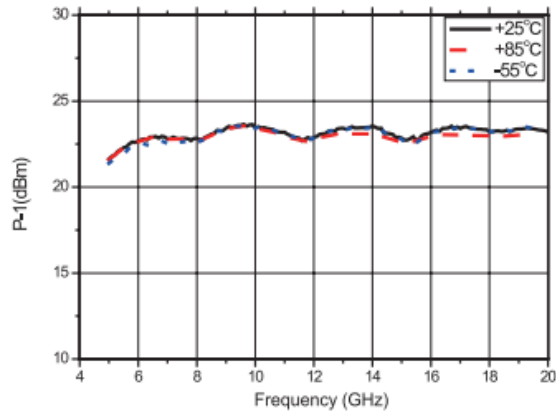
### Gain vs. Frequency



### Psat vs. Frequency

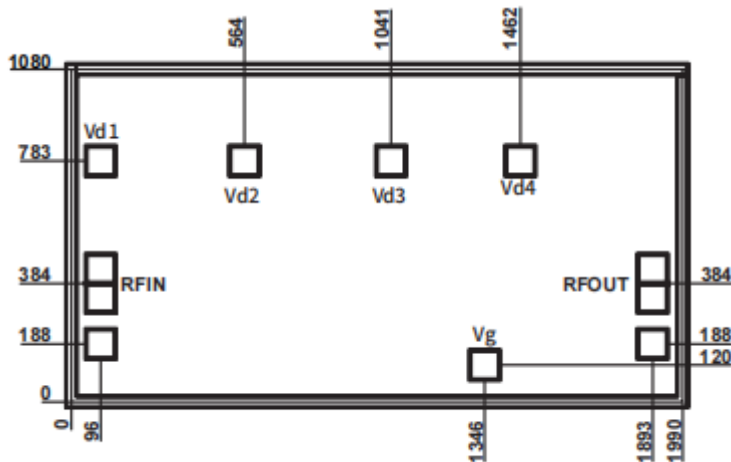


### P-1dB vs. Frequency



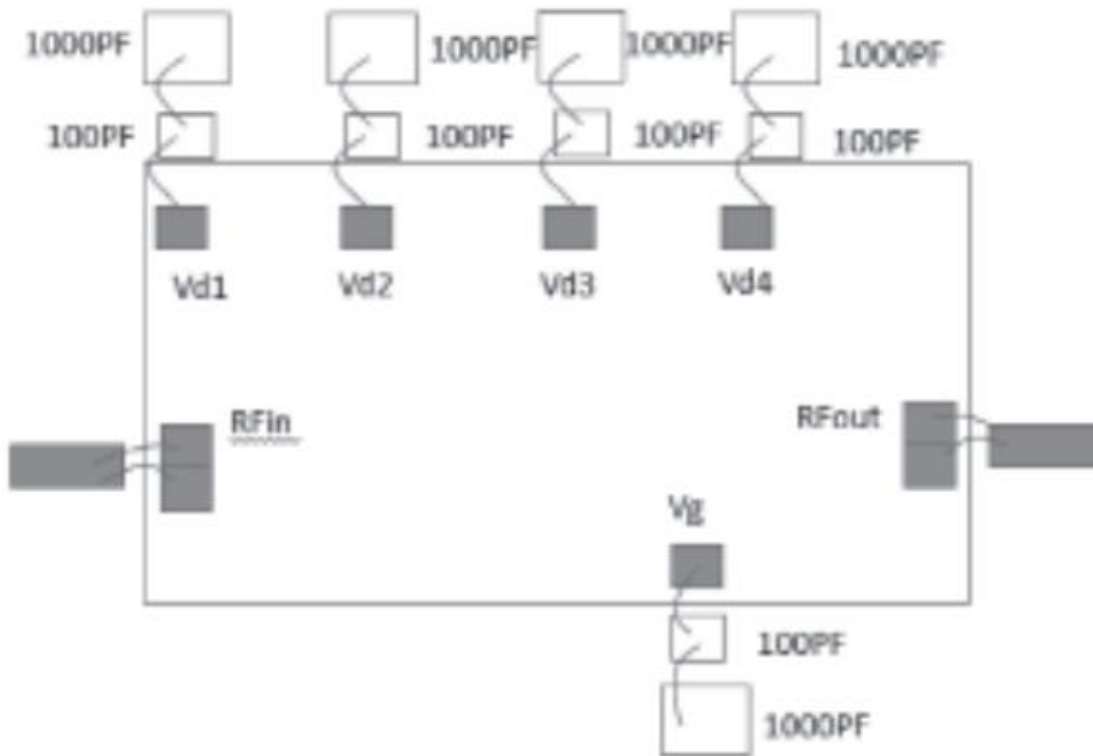
### Outline Drawing:

All Dimensions in um





### 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. Maximum input power: +15dBm
2. Maximum drain voltage: 6V
3. Gate voltage control range: -0.2V~-2V
4. Thermal resistance: 87°C/W
5. Operating temperature: -55°C to +85°C
6. Storage temperature: -65°C to +150°C