

Features

- Frequency: 26-38GHz
- Small Signal Gain: 25.5dB
- P1dB: 27dBm
- Psat: 27.5dBm
- Power Supply: +5V@700mA
- Input/Output: 50Ω
- Die Size: 2.47 x 1.49 x 0.1 mm

Typical Applications

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

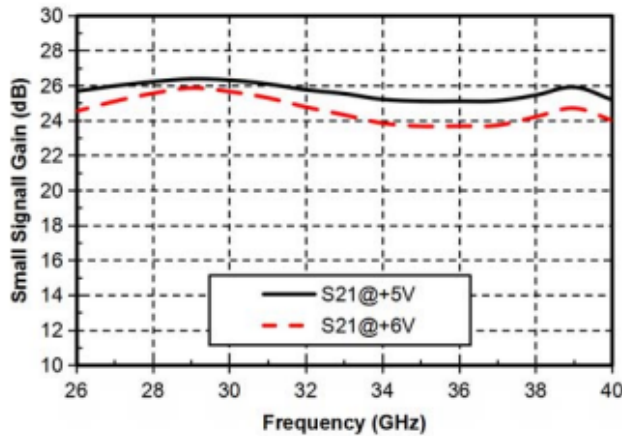
Electrical Specifications

TA = +25°C, Vd = +5V, Ids=700mA

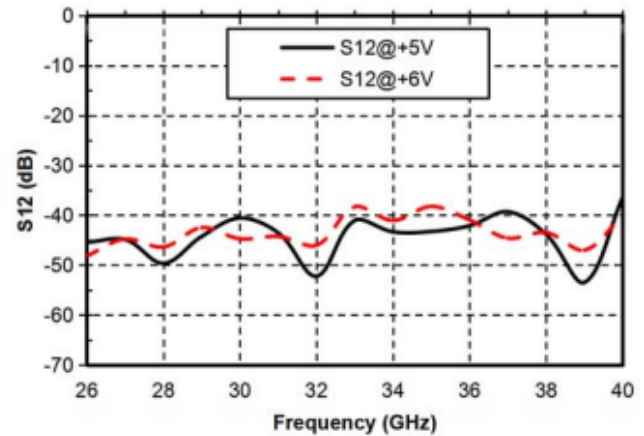
Parameters	Min.	Typ.	Max.	Units
Frequency		26-38		GHz
Small Signal Gain		25.5		dB
Gain Flatness		±0.6		dB
P1dB		27		dBm
Psat		27.5		dBm
Input Return Loss		12		dB
Output Return Loss		12		dB

*Adjust Vg during -2V~0V, recommended Vg is around -0.85V.

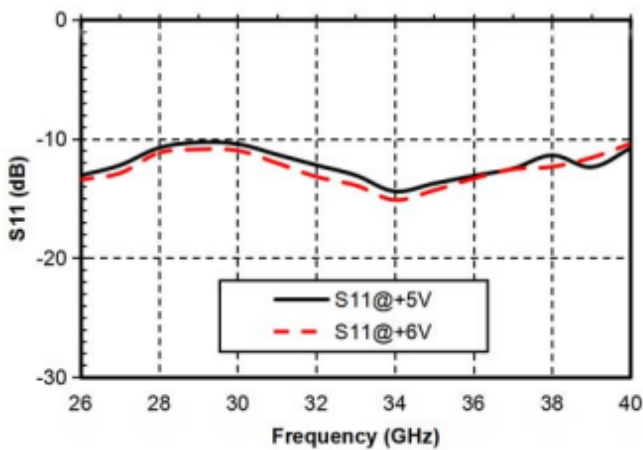
Gain vs. Frequency



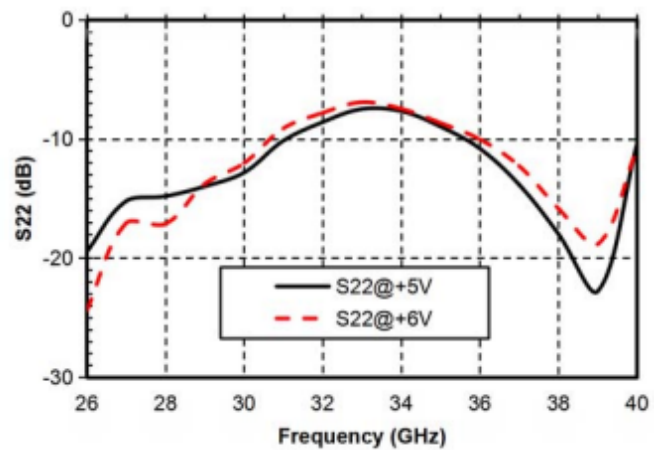
Reverse Isolation vs. Frequency



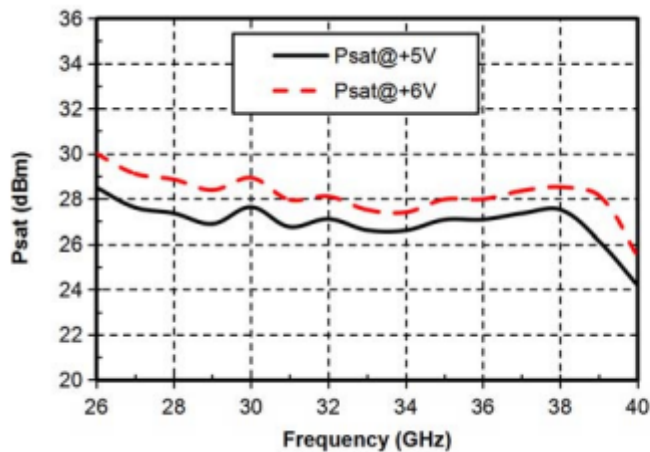
Input Return Loss vs. Frequency



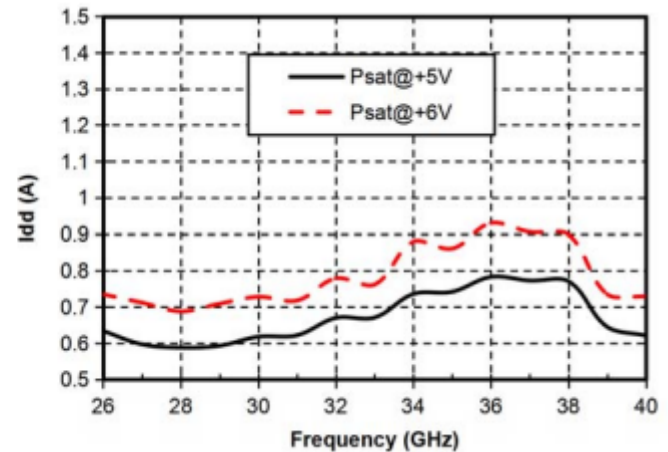
Output Return Loss vs. Frequency



Psat vs. Frequency

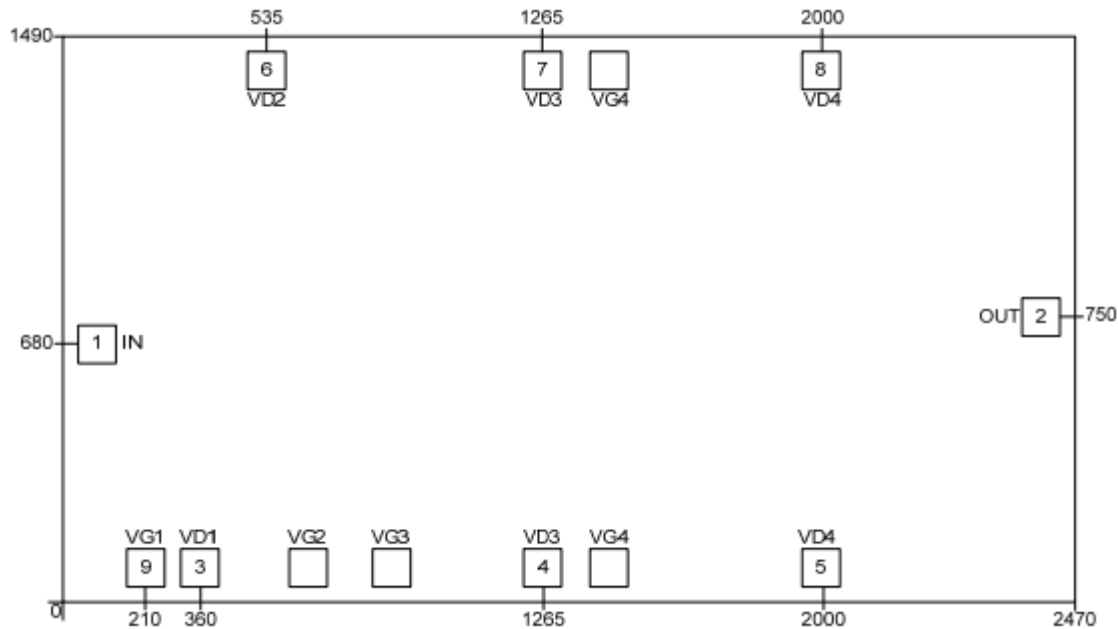


Vdd vs. Frequency





Outline Drawing:
All Dimensions in μm

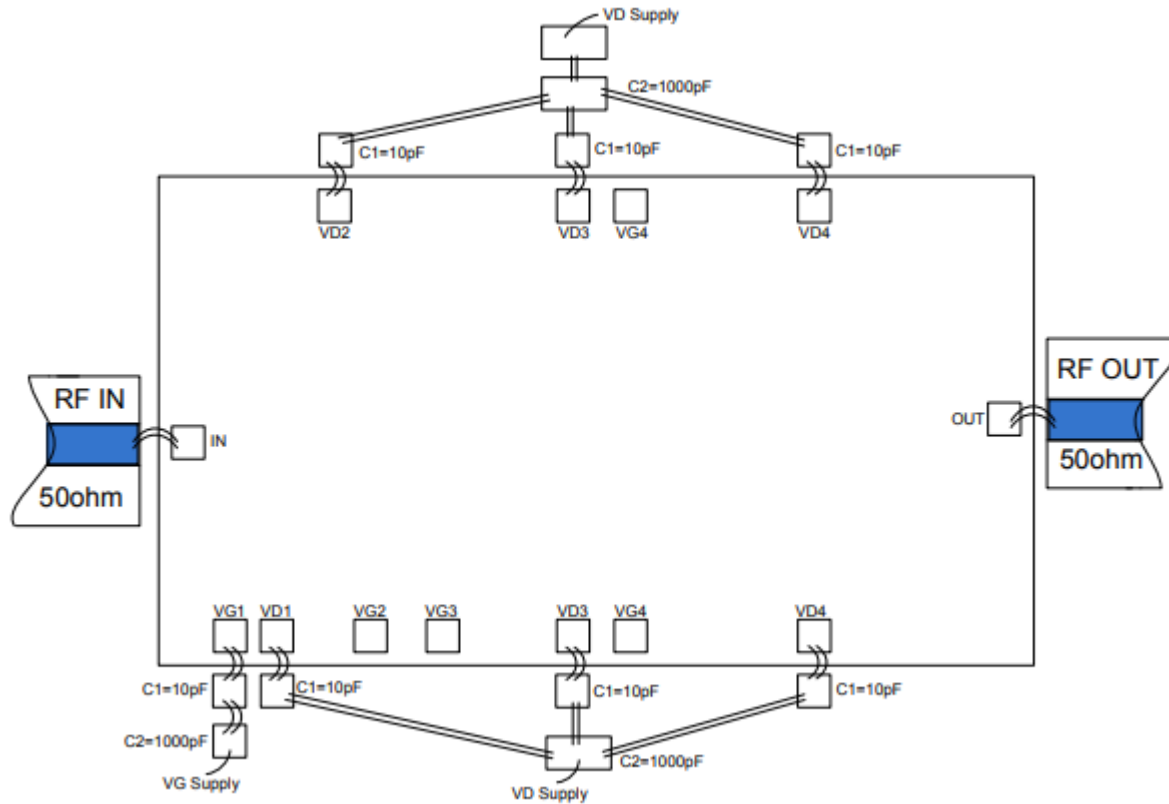


Pad Description

PAD	Function	Description
1	RF IN	RF signal input terminal, no blocking capacitor required
2	RF OUT	RF signal output terminal, no blocking capacitor required
3~8	Vd1~Vd4	Amplifier drain bias, connected to external 10pF and 1000pF bypass capacitor.
9	Vg1	Amplifier gate bias, connected to external 10pF and 1000pF 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. 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