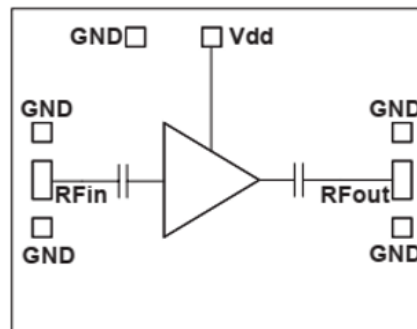


Features

- Single Biasing Voltage(Self Biased)
- Frequency: 37-48GHz
- Small Signal Gain: 13dB
- Noise Figure: 2.5dB
- P1dB: +2dBm
- Power supply: +2V@17mA
- I/O 50 Ohm matching: VSWR < 1.6

Functional Block Diagram

Typical Applications

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

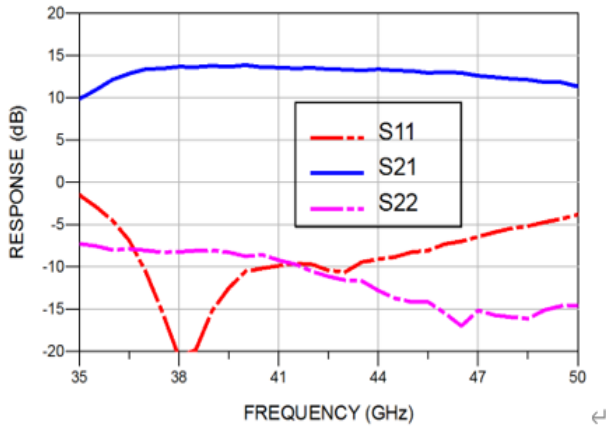
Electrical Specifications

TA = +25°C, Vdd = +2V (On-wafer Measurement Results)

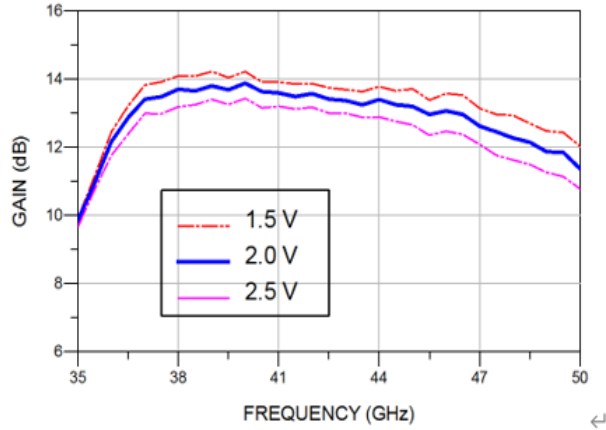
Parameters	Min.	Typ.	Max.	Units
Frequency	37-48			GHz
Gain		13		dB
Gain Flatness	-1		+1	
Noise Figure		2.5		dB
Output 1dB Compression (P1dB)		+2		dBm
Input Return Loss		10		dB
Output Return Loss		12		dB
Operating Current (@Vdd = 2.0V)		17		mA



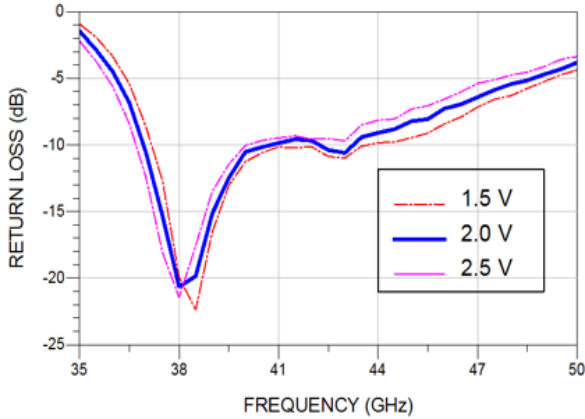
Frequency Response



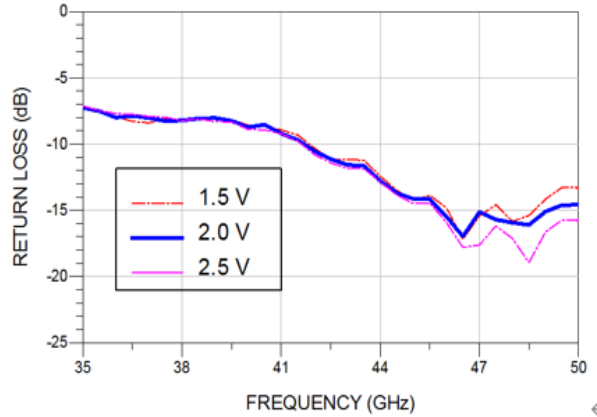
Gain vs. Supply Voltage



Input Return Loss vs. Supply Voltage



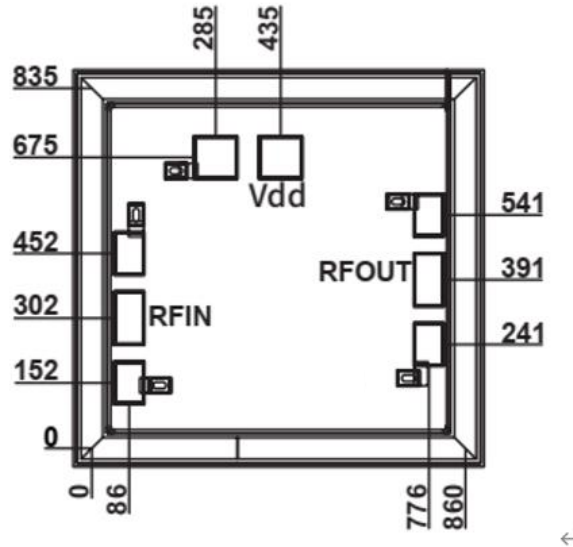
Output Return Loss vs. Supply Voltage





Outline Drawing:

All Dimensions in μm



Assembly Drawing (Bond testing)

