

Features

- Single Biasing Voltage (Self Biased)
- Frequency: 2-26GHz
- Gain: 15dB
- Noise Figure: 1.5~3.6dB
- Input /Output Return Loss:>17dB/>11dB
- P1dB: 10.3~15dBm
- IP3: 26dBm
- Power Supply: +5 V@60 mA
- Die Size: 3.12 x 1.38 x 0.1 mm

Typical Applications

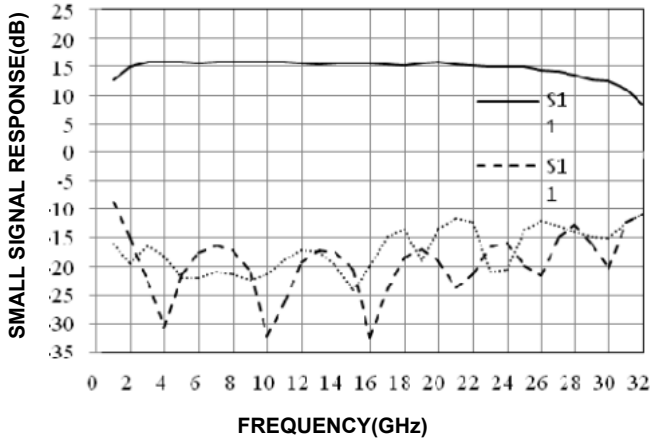
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics


Electrical Specifications
TA = +25°C, Vd = +5V

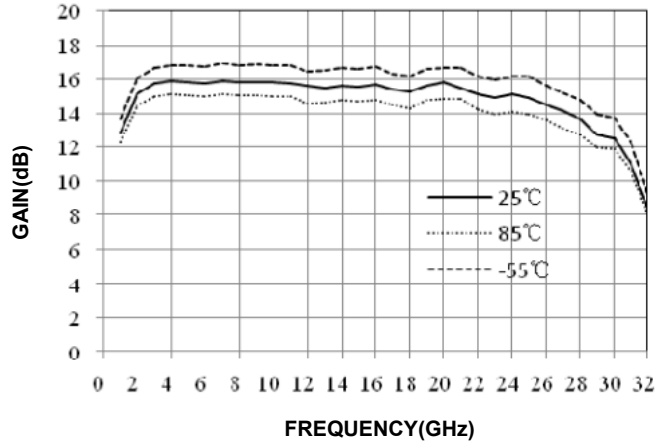
Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency	2-5			5-20			20-26			GHz
Gain	14.5	15.0	15.5	15.0	15.5	16.0	14.5	15	15.5	dB
Noise Figure	1.5	2.5	3.0	1.5	2.0	3.0	2.5	3.0	3.7	dB
P1dB	14.5	15.0	15.5	13.0	14.0	15.0	10.0	12.0	13.0	dBm
Input RL		14.0			20.0			14.0		dB
Output RL		20.0			8.0			8.0		dB



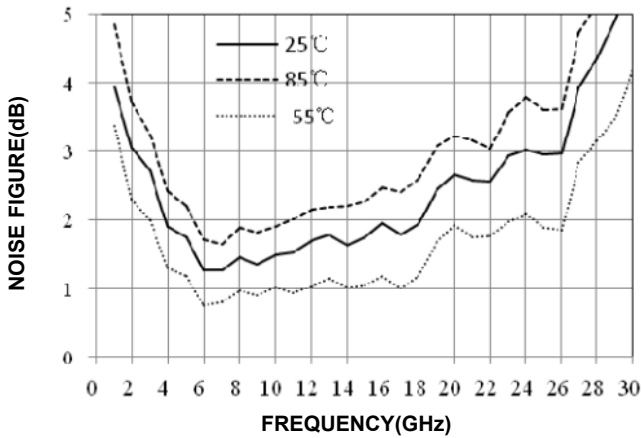
Small Signal Response (25°C)



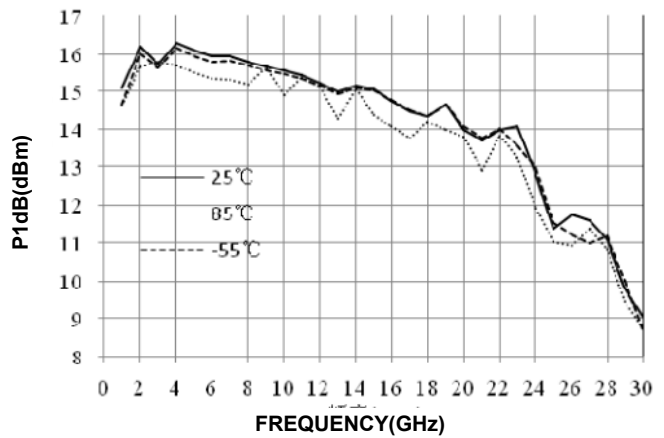
Gain vs. Temperature



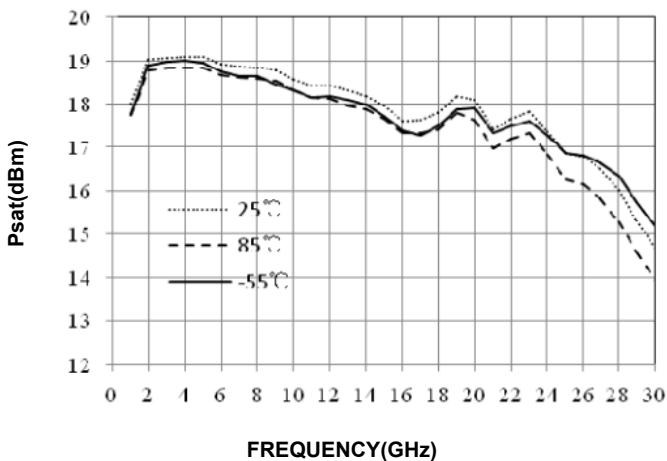
Noise Figure vs. Temperature



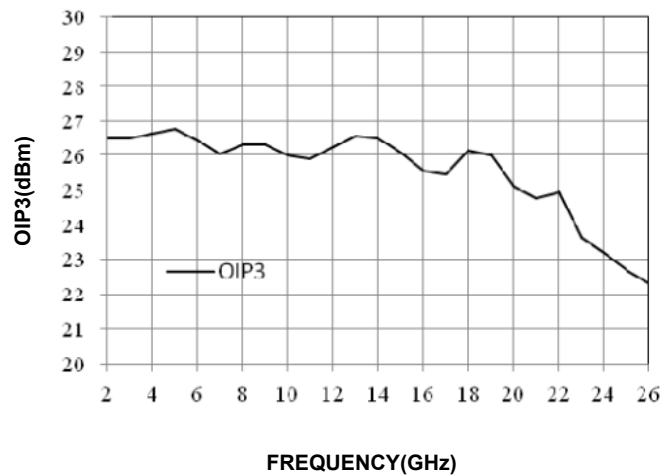
P1dB vs. Temperature



Psat vs. Temperature

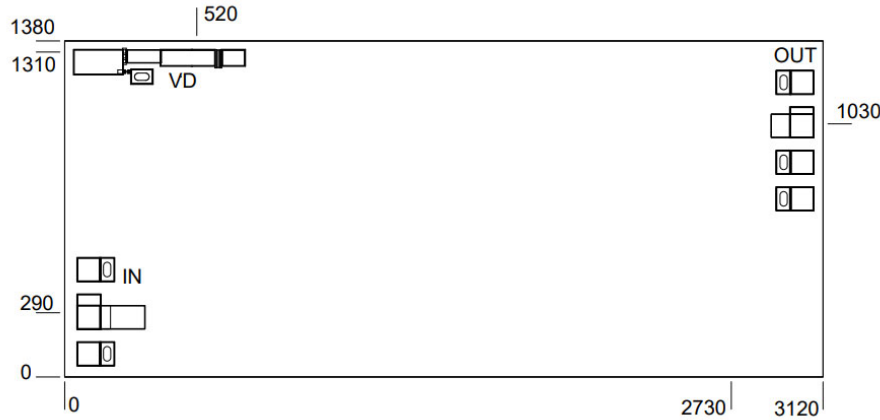


OIP3 (25°C)

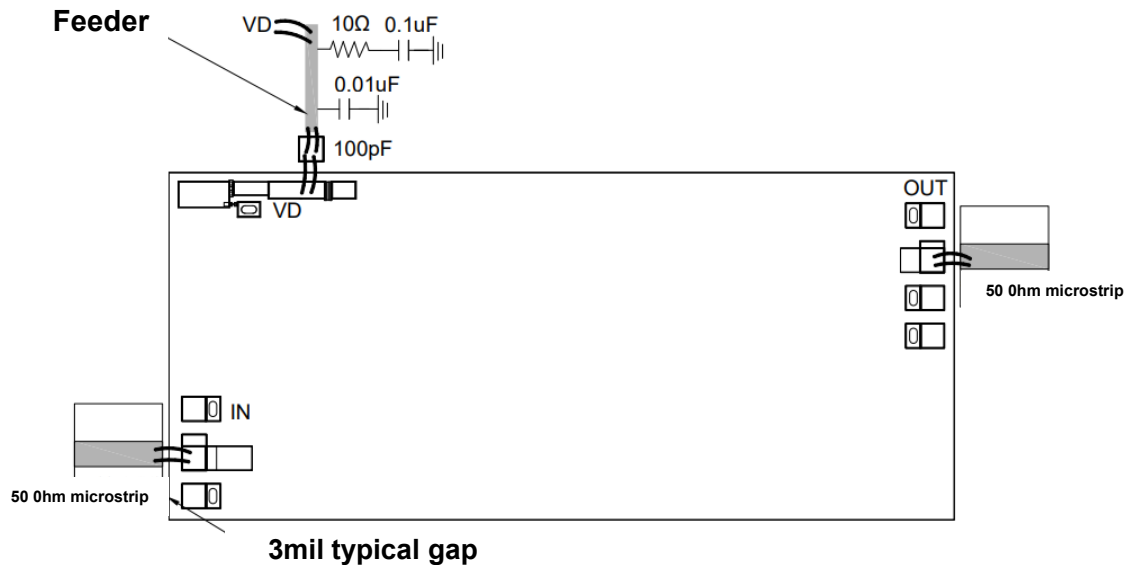




Outline Drawing: All Dimensions in μm



Assembly Drawing



Notes:

1. Die thickness: 100um
2. Typical bond pad is $100 \times 100 \mu\text{m}^2$
3. Bond pad metalization: Gold
4. Backside metalization: Gold
5. Backside of the die (GND)
6. No connection required for unlabeled bond pads
7. Internal DC Block at both input and output.
8. Input/Output use two 25um gold wire, length less than 250um is recommended.

Maximum Ratings:

1. Control voltage: +9V
2. Input power: +23dBm
3. Operating temperature: -55°C to $+125^\circ\text{C}$
4. Storage temperature: -65°C to $+150^\circ\text{C}$