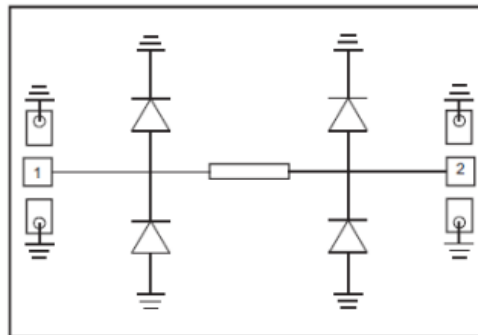


**Features**

- Frequency:1-6GHz
- Insertion Loss: 0.3dB (typ.)
- Limit Power:15dBm
- Tolerance Power:46dBm(CW)
- Input/Output: 50Ω
- Die Size: 1.92x1.22x 0.1 mm

**Typical Applications**

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

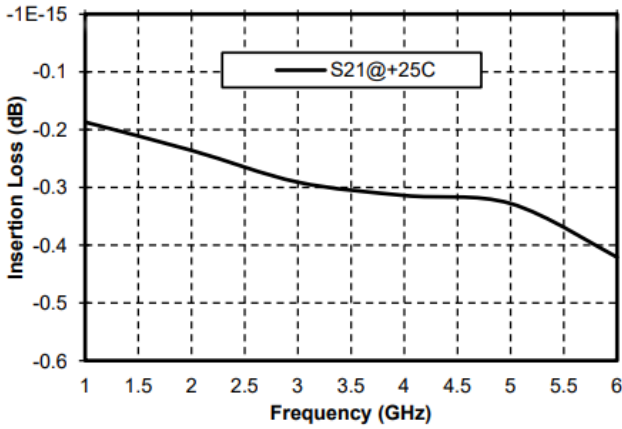
**Functional Block Diagram**

**Electrical Specifications**

TA = +25°C

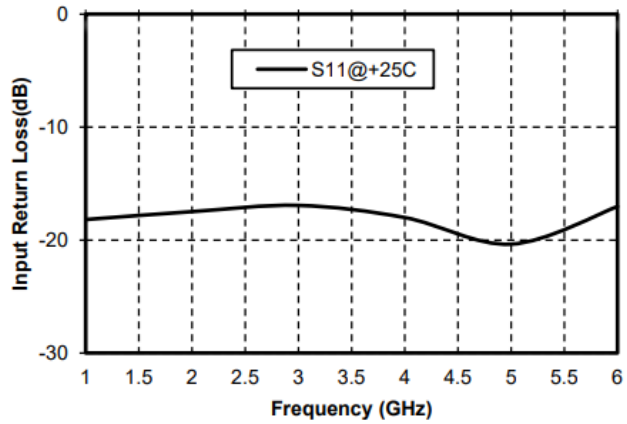
| Parameters         | Min. | Typ. | Max. | Units |
|--------------------|------|------|------|-------|
| Frequency          | 1-6  |      |      | GHz   |
| Insertion Loss     | -    | 0.3  | 0.4  | dB    |
| Input Return Loss  | 17   | 18   | -    | dB    |
| Output Return Loss | 17   | 20   | -    | dB    |
| Limit Power        | -    | 15   | -    | dBm   |
| Tolerance Power    |      | 46   |      | dBm   |



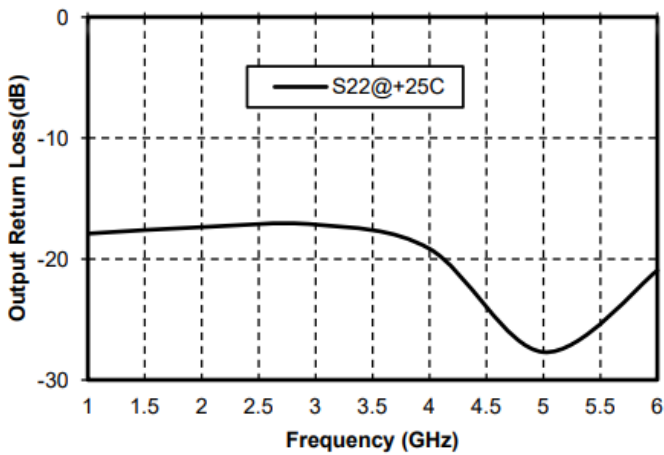
### Insertion Loss Vs. Frequency



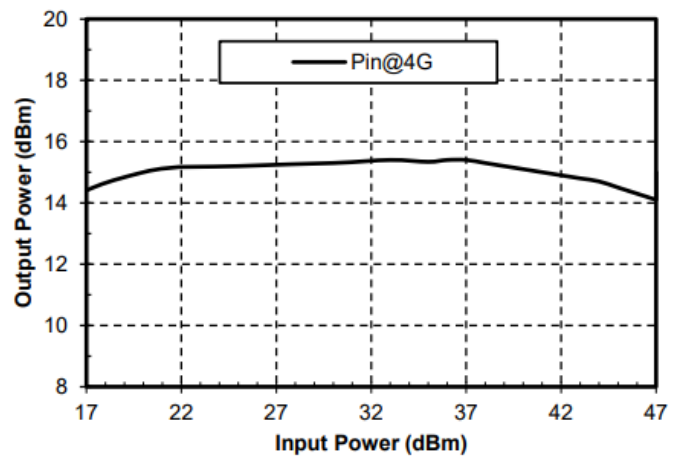
### Input Return Loss Vs. Frequency



### Output Return Loss Vs. Frequency



### Limit Power @4G





### Outline Drawing:

All Dimensions in um, tolerance range  $\pm 50\mu\text{m}$

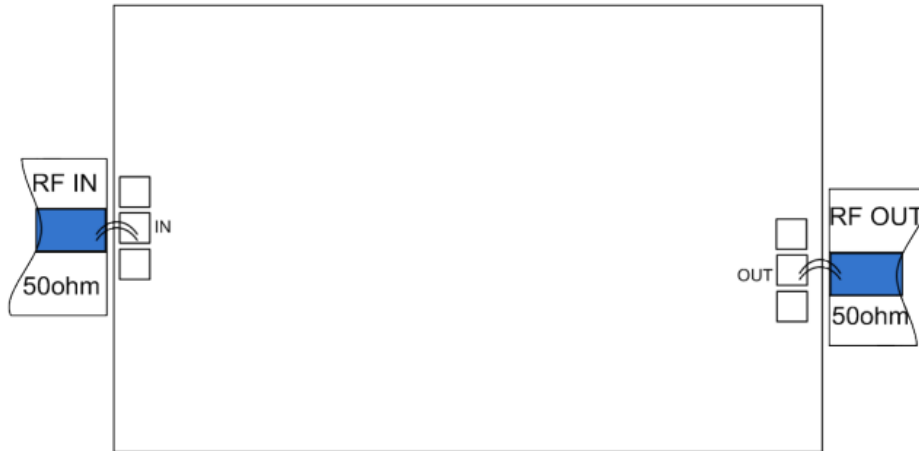


### Pad Description

| PAD        | Function  | Description   |
|------------|-----------|---|
| 1          | RF IN     | RF signal input, no DC blocking capacitor integrated at the chip input, external DC-blocking capacitor required |
| 2          | RF OUTPUT | RF signal output, A DC blocking capacitor has been integrated at the output of the chip                         |
| 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  $\mu\text{m}^2$
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. RF input power: +46dBm
2. Storage temperature: -65°C to +150°C
3. Operating temperature: -55°C to 125°C