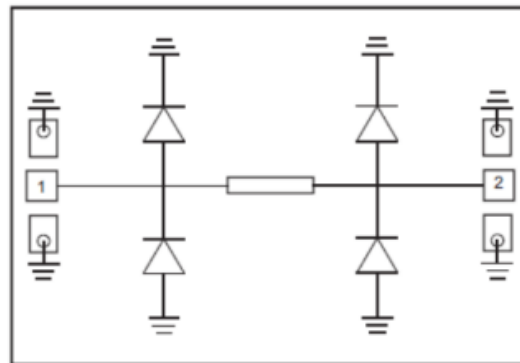


**Features**

- Frequency: 8-12GHz
- Insertion Loss: 0.4dB
- Limit Power: 14dBm
- Tolerance Power: 40dBm(CW)
- Input/Output: 50Ω
- Die Size: 1.72x1.11x 0.1 mm

**Typical Applications**

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

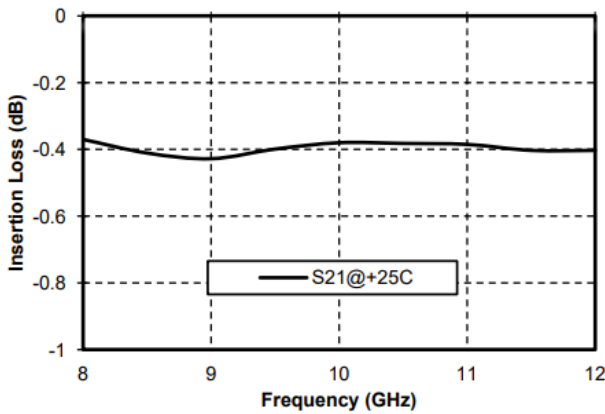
**Functional Block Diagram**

**Electrical Specifications**

TA = +25°C

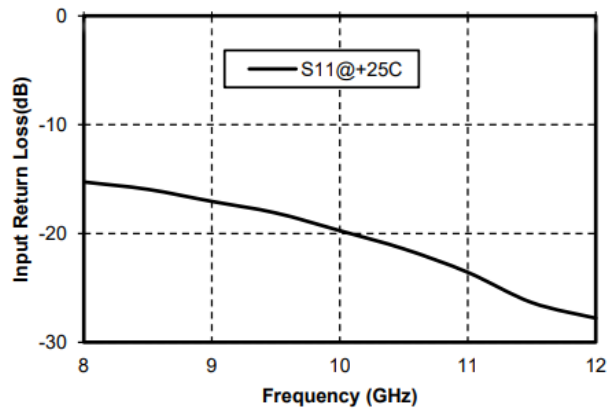
Parameters	Min.	Typ.	Max.	Units
Frequency	8-12			GHz
Insertion Loss	-	0.4	-	dB
Input Return Loss	-	20	-	dB
Output Return Loss	-	20	-	dB
Limit Power	-	14	-	dBm
Tolerance Power		40		dBm



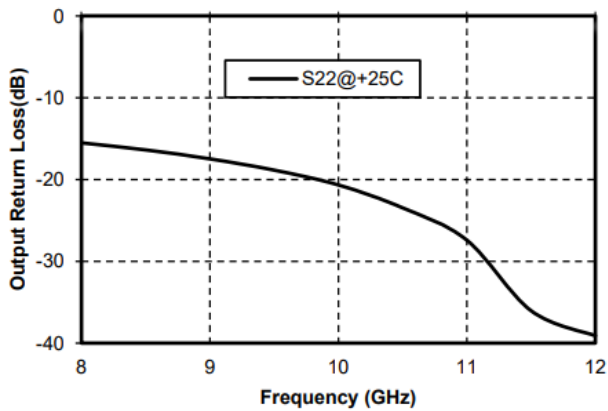
### Insertion Loss Vs. Frequency



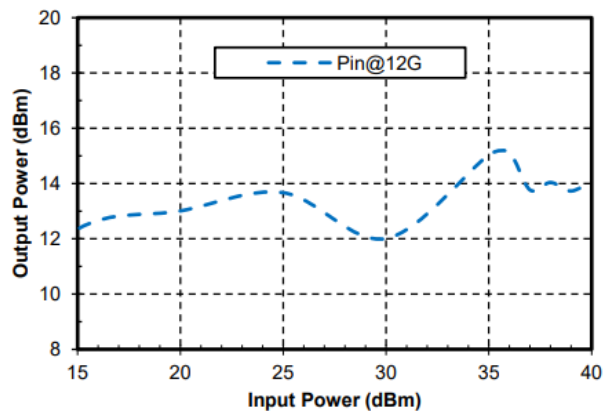
### Input Return Loss Vs. Frequency



### Output Return Loss Vs. Frequency



### Limit Power @12G





### Outline Drawing:

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



### Pad Description

PAD	Function	Description
1	RF IN	RF signal input, A DC blocking capacitor has been integrated at the input of the chip
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: +40dBm
2. Storage temperature: -65°C to +150°C
3. Operating temperature: -55°C to 125°C