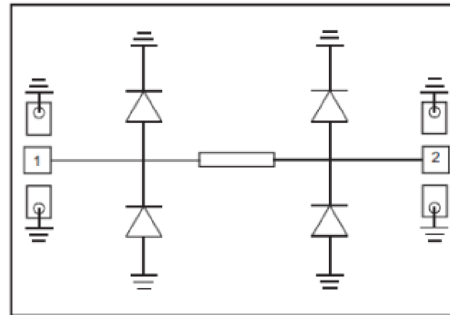
Features

- Frequency:8-12GHz
- Insertion Loss: 0.45dB
- Limit Power:14dBm
- Tolerance Power:43dBm(CW)
- Input/Output: 50Ω
- Die Size: 1.72x0.82x 0.1 mm

Functional Block Diagram



Typical Applications

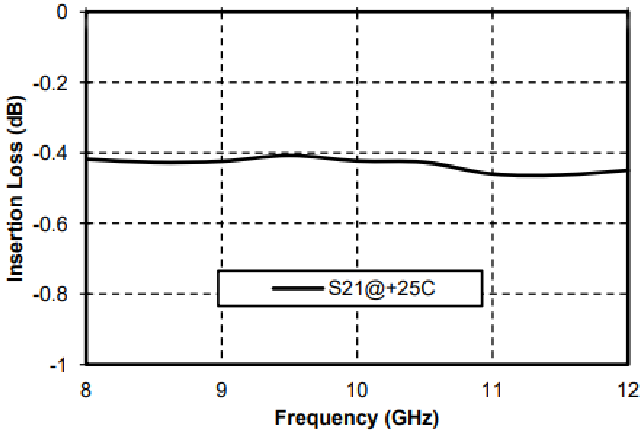
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

Electrical Specifications

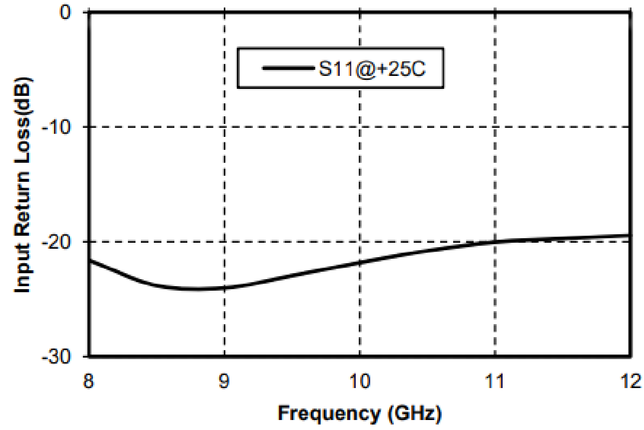
TA = +25°C

Parameters	Min.	Typ.	Max.	Units
Frequency		8-12		GHz
Insertion Loss	-	0.4	-	dB
Input Return Loss	-	21	-	dB
Output Return Loss	-	20	-	dB
Limit Power	-	14	-	dBm
Tolerance Power		43		dBm

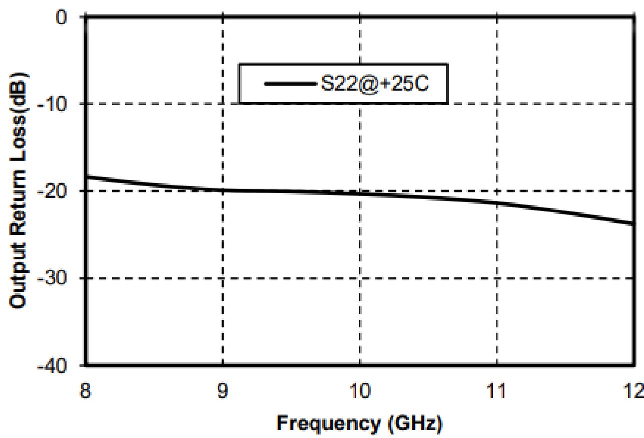
Insertion Loss Vs. Frequency



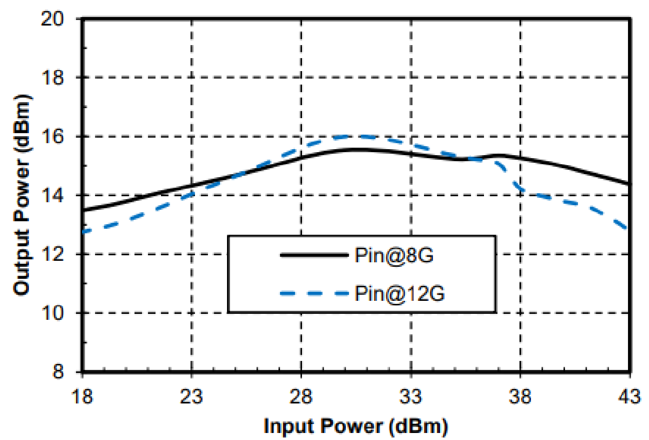
Input Return Loss Vs. Frequency



Output Return Loss Vs. Frequency



Limit Power @12G



Outline Drawing:

All Dimensions in um, tolerance range ±50um

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 OUT	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 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.RF input power：+43dBm
2.Storage temperature: -65℃ to +150℃
3. Operating temperature: -55℃ to 125℃