

Features

- Frequency: DC-20GHz
- Insertion Loss: 2.0dB
- Isolation: 45dB
- SWR at On/Off State: 1.3/1.4
- Input/Output: 50Ω
- Die Size: 1.4 x 0.76 x 0.1 mm

Typical Applications

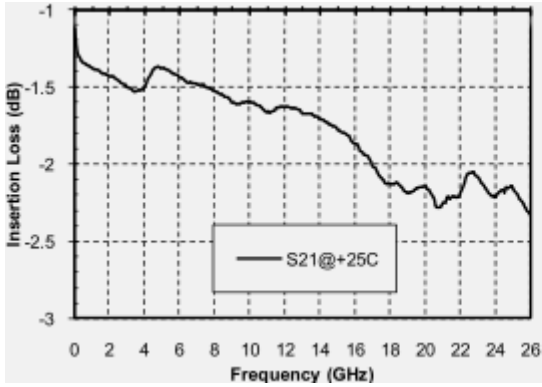
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

Electrical Specifications
TA = +25°C

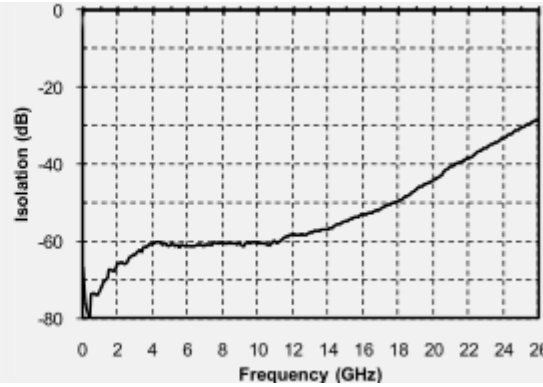
Parameters	Min.	Typ.	Max.	Units
Frequency	DC-20			GHz
Insertion Loss	-	-	2.1	dB
Isolation	-	45	-	dB
Input/Output Return Loss at On State (ON)	-	20/20	-	dB
Input/Output Return Loss at Off State (Off)	-	17/17	-	dB
Output 1dB Compression (P1dB)		26		dBm
Switching Speed		10		ns



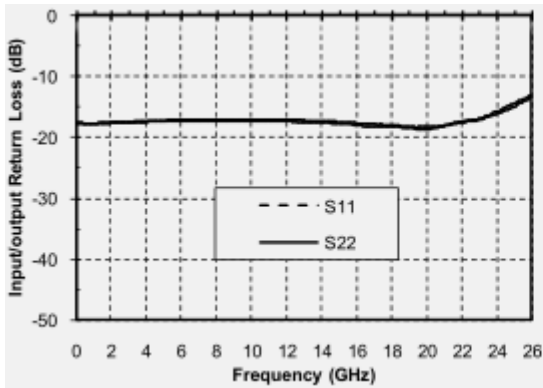
Insertion Loss vs. Operating Frequency



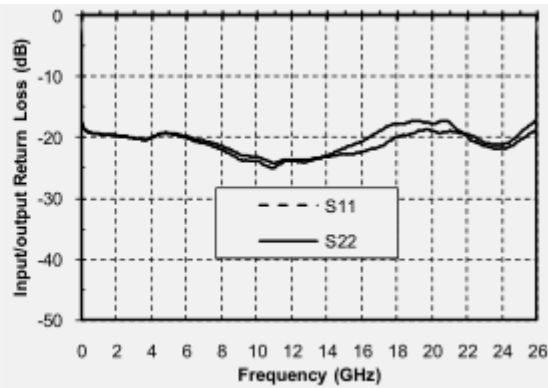
Isolation vs. Operating Frequency



Return Loss vs. Operating Frequency (Off)

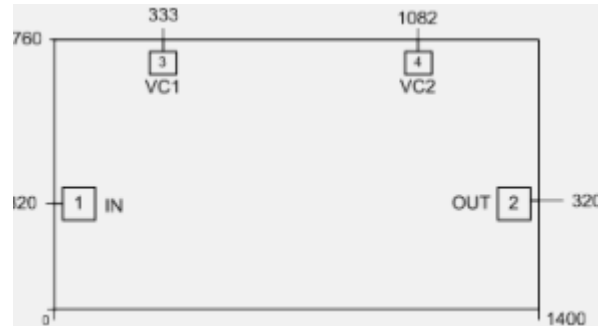


Return Loss vs. Operating Frequency (On)





Outline Drawing:
All Dimensions in μm



Pad Description

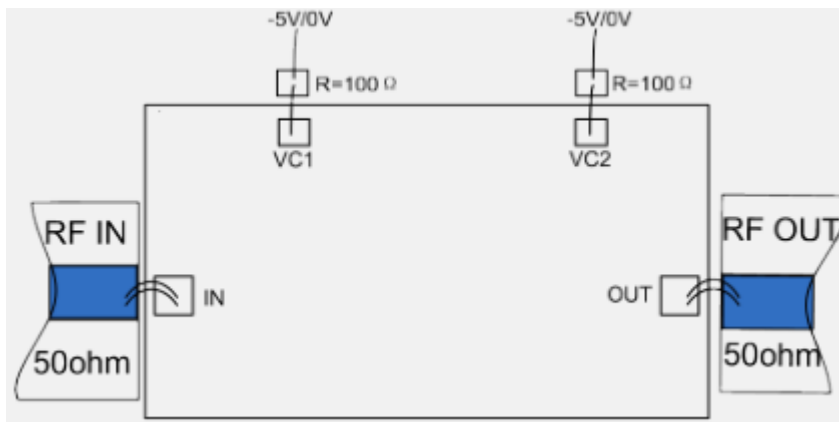
Pad	Function	Description
1	RF IN	RF signal input terminal.
2	RF OUT	RF signal output terminal.
3, 4	Voltage Control	On/Off control.
Die bottom	GND	Die bottom must be connected to RF/DC ground.



Truth Table

VC1	VC2	IN-OUT
0V	-5V	ON
-5V	0V	OFF

Assembly Drawing



Notes:

1. Die thickness: 100um
2. Typical bond pad is 100*100 μm²
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. Control voltage: -8V-+0.5V
2. Maximum input power: +30dBm
3. Operating temperature: -55°C to +85°C
4. Storage temperature: -65°C to +150°C