

Features

- Frequency: DC-18GHz
- Insertion Loss: 1.9dB
- Isolation: 60dB
- SWR at On/Off State: 1.4/1.3
- Input/Output: 50Ω
- Die Size: 1.68 x 1.65 x 0.1 mm

Typical Applications

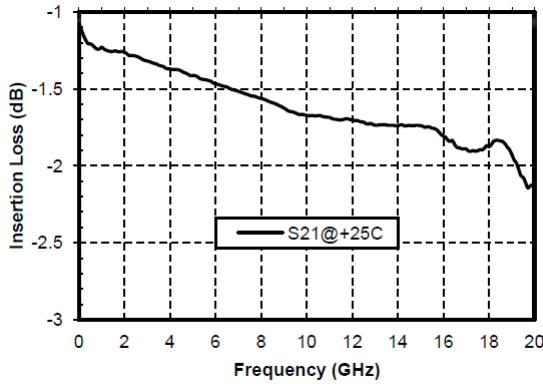
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

Electrical Specifications

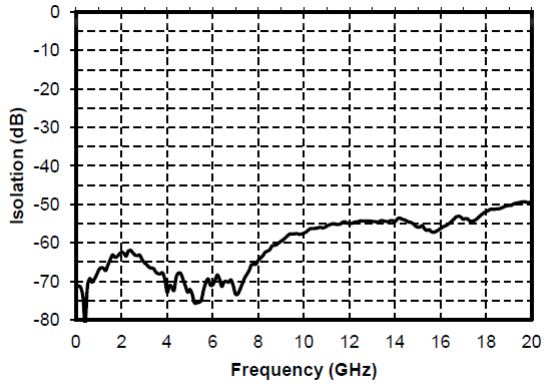
TA = +25°C

Parameters	Min.	Typ.	Max.	Units
Frequency	DC-18			GHz
Insertion Loss	-	-	2.0	dB
Isolation	51	60	-	dB
Input/Output Return Loss at On State (ON)	18/16	20/17	-	dB
Input/Output Return Loss at Off State (OFF)	18/20	21/21	-	dB
Output 1dB Compression (P1dB)	-	23	-	dBm
Switching Speed	-	20	-	dB

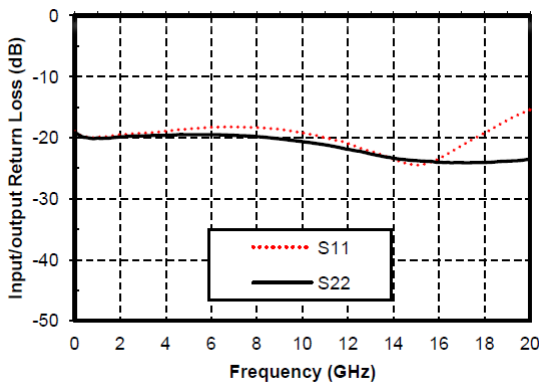
Insertion Loss vs. Operating Frequency



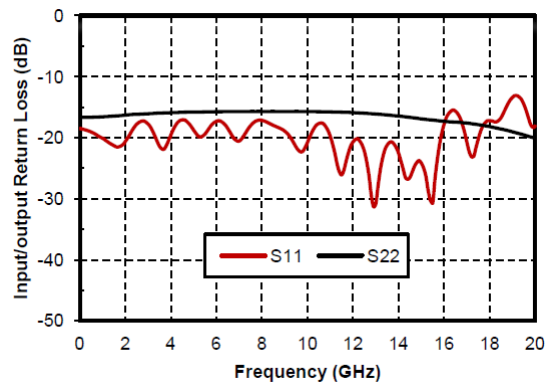
Isolation vs. Operating Frequency



Input/Output Return Loss vs. Operating Frequency (OFF)

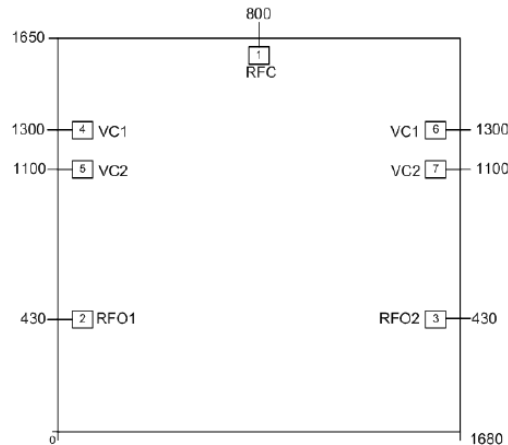


Input/Output Return Loss vs. Operating Frequency (ON)





Outline Drawing:
All Dimensions in μm



Pad Description

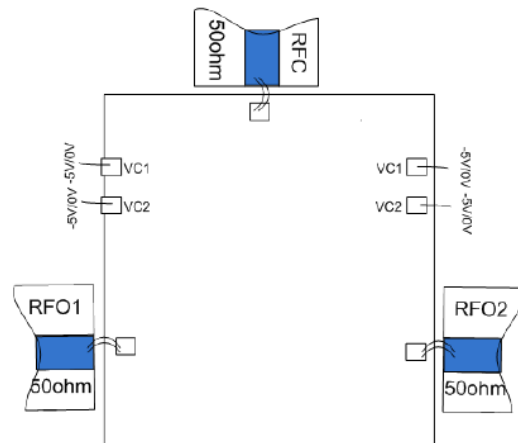
Pad	Function	Description
1	RF COMM	RF signal input terminal.
2,3	RF OUTPUT	RF signal output terminal.
4,5,6,7	Voltage Control	On/Off control.
Die bottom	GND	Die bottom must be connected to RF/DC ground.



Truth Table

VC1	VC2	RFC-RFO1	RFC-RFO2
-5V	0V	OFF	ON
0V	-5V	ON	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