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

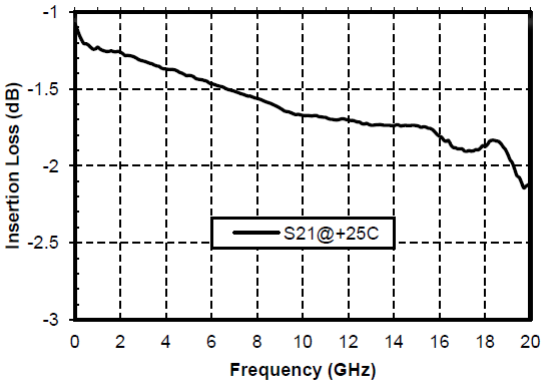
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

Electrical Specifications

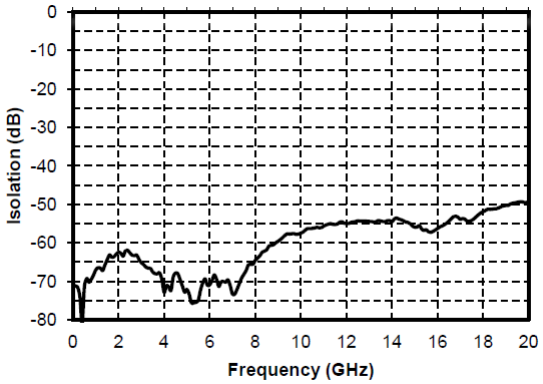
TA = +25°C

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/Ouput Return Loss at Off State (OFF)	**18/20**	**21/21**	**-**	**dB**
Output 1dB Compression (P1dB)	**-**	**23**	**-**	**dBm**
Switching Speed	**-**	**20**	**-**	**dB**

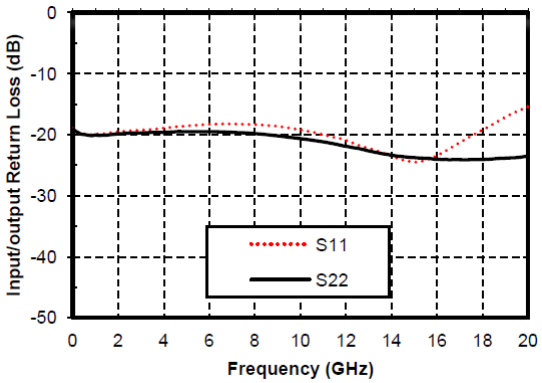
Insertion Loss vs. Operating Frequency



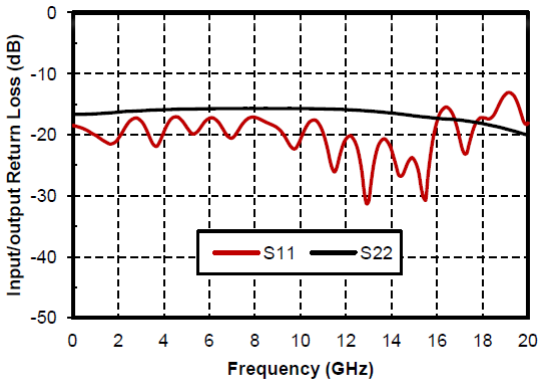
Isolation vs. Operating Frerquency



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

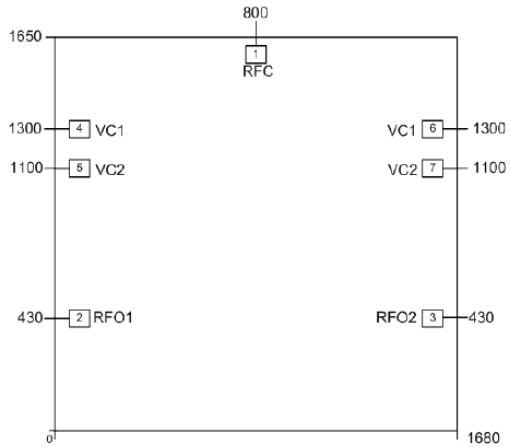


Input/Output Return Loss vs. Operating Frequency (ON)



Outline Drawing:

All Dimensions in µm



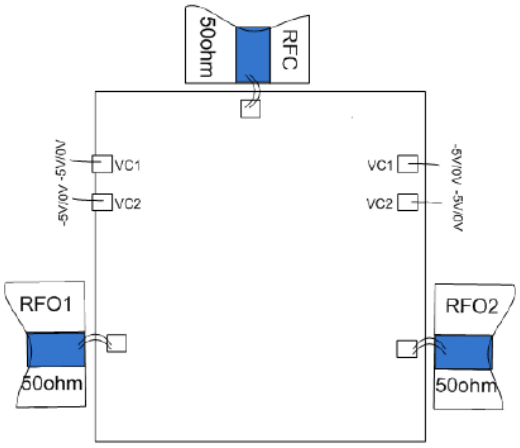
Pad Description

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 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. Control voltage: -8V-+0.5V
2. Maximum input power: +30dBm
3. Operating temperature: -55℃ to +85℃
4. Storage temperature: -65℃ to +150℃