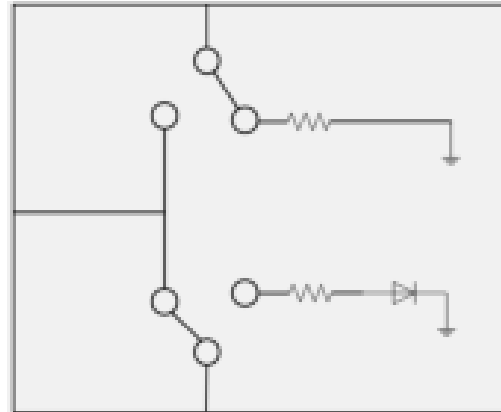


**Features**

- Frequency: 14-18GHz
- Insertion Loss: 1.3dB
- Limiting Amplitude: 12dbm
- P-0.2dB: 34dBm
- Isolation: 38dB
- Input/Output: 50Ω
- Die Size: 2.0 x 1.6 x 0.1 mm

**Typical Applications**

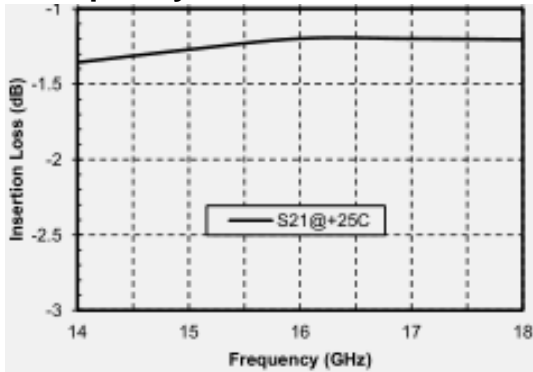
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

**Functional Block Diagram**

**Electrical Specifications**
**TA = +25°C**

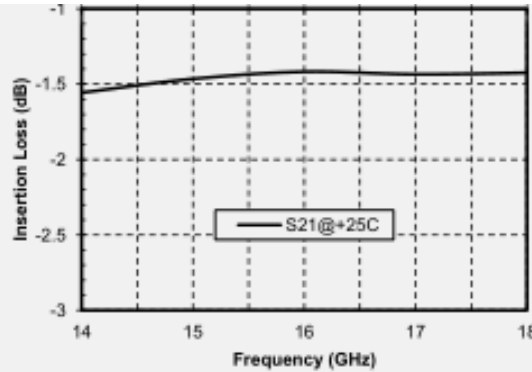
Parameters	Min.	Typ.	Max.	Units
Frequency	14-18			GHz
Insertion Loss (Without Limiting Channel)	-	-	1.3	dB
Insertion Loss (With Limiting Channel)	-	-	1.5	dB
Isolation	38	-	-	dB
Input Return Loss (Without Limiting Channel, On State)	14	17	-	dB
Output Return Loss (Without Limiting Channel, On State)	14	16	-	dB
Input Return Loss (With Limiting Channel, On State)	12	15	-	dB
Output Return Loss (With Limiting Channel, On State)	11	12	-	dB
P-0.2dB	-	34	-	dBm
Limiting Amplitude	-	12	-	dBm
Switching Speed	-	10	-	ns



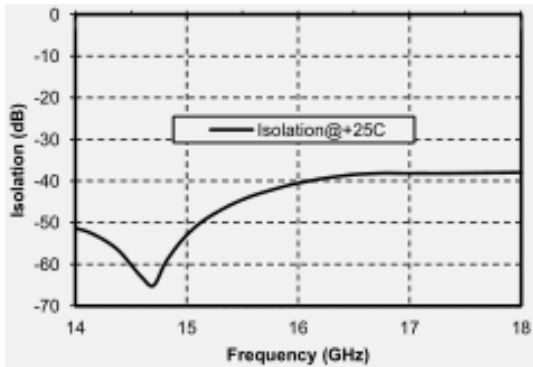
**Without Limiting Channel Insertion Loss vs. Operating Frequency**



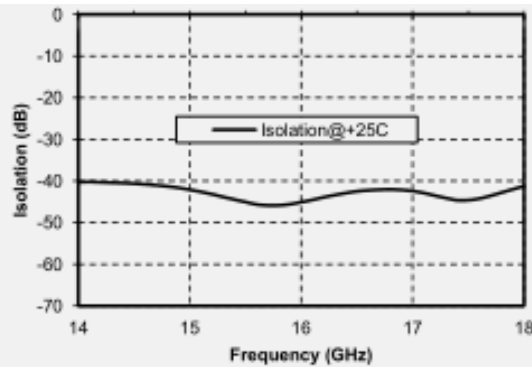
**With Limiting Channel Insertion Loss vs. Operating Frequency**



**Isolation (Without Limiting Channel, On State) vs. Operating Frequency**

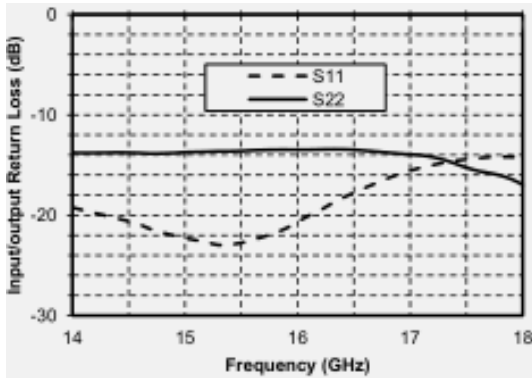


**Isolation (With Limiting Channel, On State) vs. Operating Frequency**

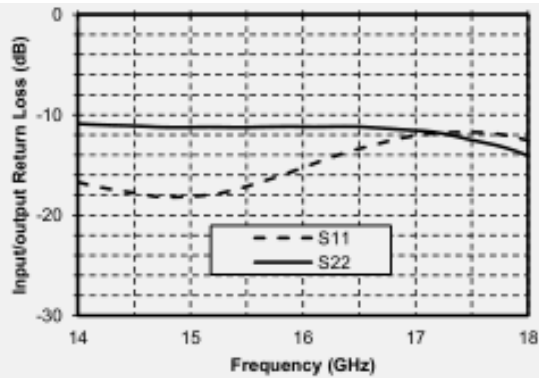




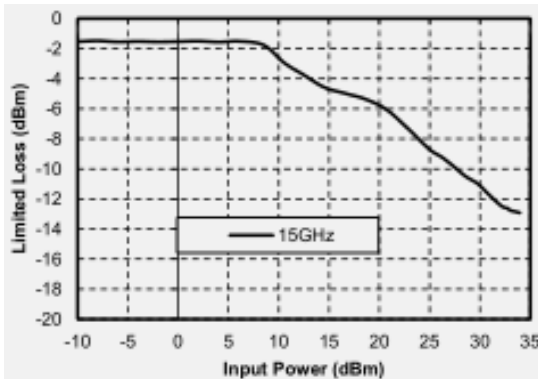
Return Loss (Without Limiting Channel, On State) vs. Frequency



Return Loss (With Limiting Channel, On State) vs. Frequency

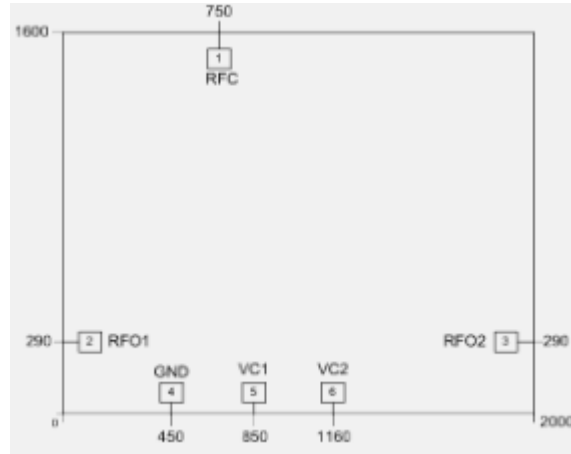


Limit Loss





**Outline Drawing:**  
All Dimensions in  $\mu\text{m}$



**Pad Description**

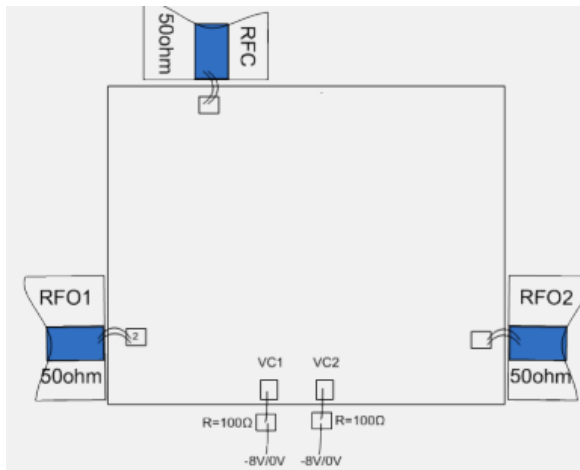
Pad	Function	Description
1	RF COMM	RF signal input terminal.
2,3	RF OUTPUT	RF signal output terminal.
5, 6	Voltage Control	On/Off control.
Die bottom	GND	Die bottom must be connected to RF/DC ground.



### Truth Table

VC1	VC2	RFC-RFO1	RFC-RFO2
-8V	0V	OFF	ON
0V	-8V	ON	Off

### Assembly Drawing



#### Notes:

1. Die thickness: 100um
2. Typical bond pad is 100\*100 μm<sup>2</sup>
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: -10V-+0.5V
2. Maximum input power: +37dBm
3. Operating temperature: -55°C to +85°C
4. Storage temperature: -65°C to +150°C