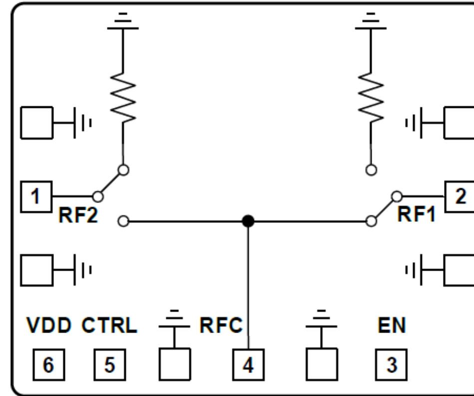
Features

- Isolation: 48dB@ 5GHz
- Insertion Loss: 1.3dB@ 5GHz
- Input/Output: 50 Ohm
- Absorptive design
- Die Size: 1.7x1.5x 0.1 mm

Functional Block Diagram



Typical Applications

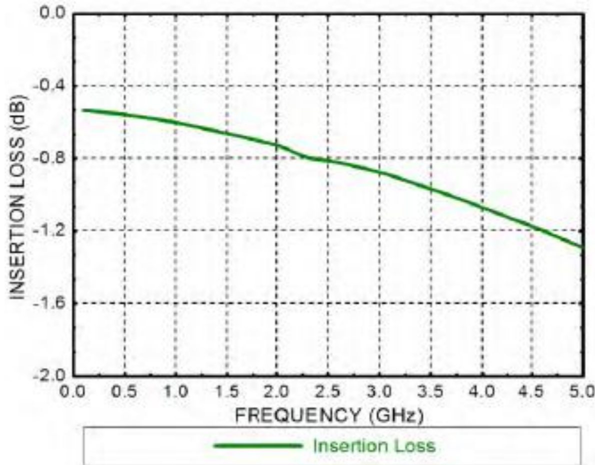
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Electrical Specifications

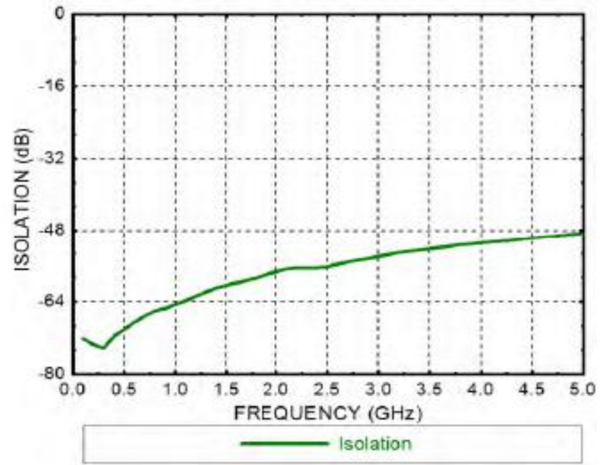
TA = +25°C, Vctl = 0/+3.3V

Parameters	Min.	Typ.	Max.	Units
Frequency		DC-5		GHz
Insertion Loss		1.0		dB
Isolation		50		dB
Return Loss (ON State)		20		dB
Input 1dB Compression (P1dB)		25		dBm
Switching Speed		30		ns

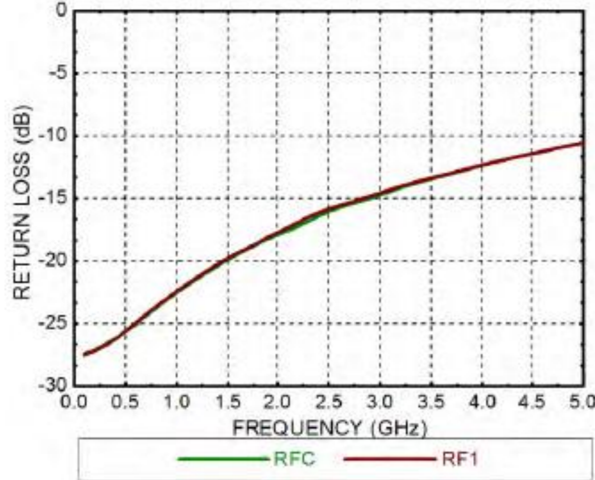
Insertion Loss



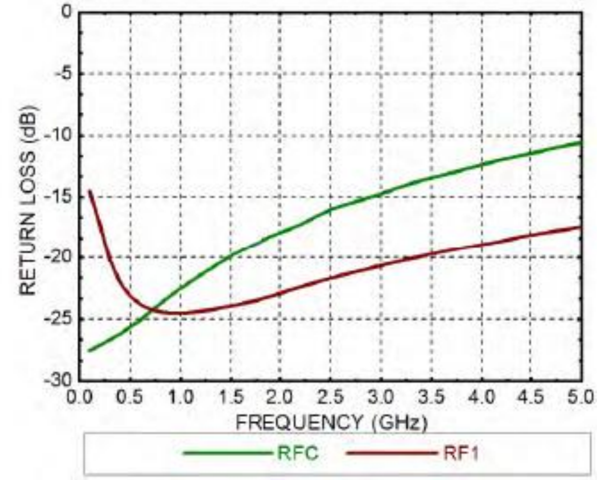
Isolation



On State Return Loss

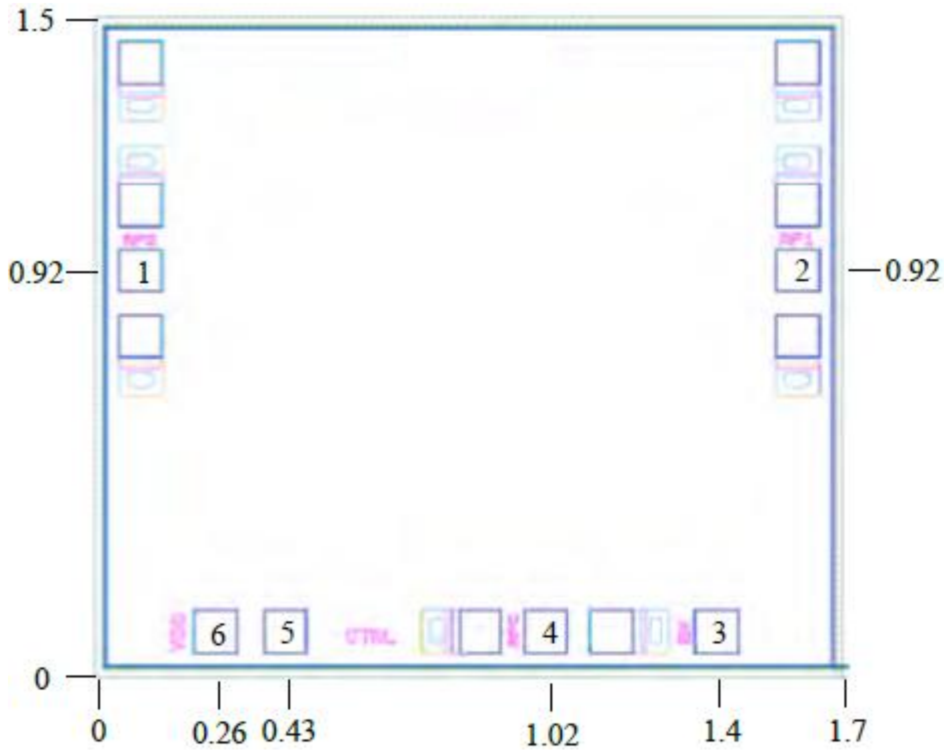


Off State Return Loss



Outline Drawing:

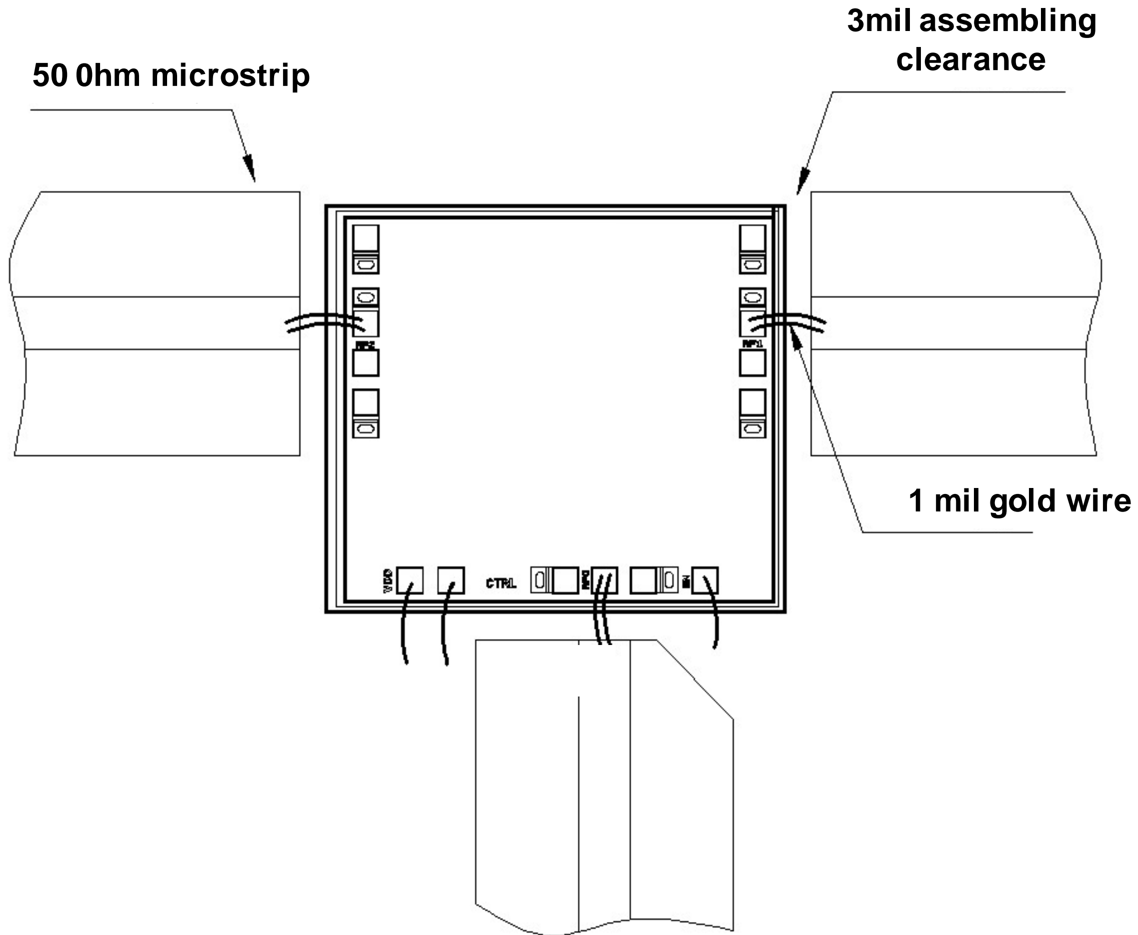
All Dimensions in mm



Pad Description

PAD	Function	Description
1, 2	RF2, RF1	The pad is RF branch port; blocking capacitor is required externally.
4	RFC	The pad is RF common port; blocking capacitor is required externally.
3, 5	EN, CTRL	When EN=0V and CTRL=+3.3V, then RF1 is “ON” state and RF2 is “OFF” state. When EN=0V and CTRL=0V, then RF1 is “OFF” state and RF2 is “ON” state. When EN=+3.3V, then RF1 is “OFF” state and RF2 is “OFF” state.
6	VDD	This pad is digital circuit power supply port and connects to +5V supply voltage.
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 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. RF input power: +27dBm
2. Storage temperature: -65℃ to +175℃
3. Operating temperature: -55℃ to +85℃