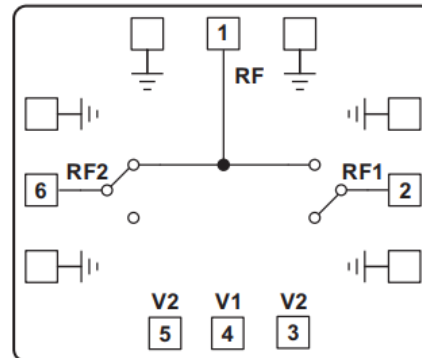


**Features**

- Isolation: >40dB @ 40GHz
- Insertion Loss: 3.5dB @ 40GHz
- Reflective Design
- Die Size: 1.1x 1.0x 0.1 mm

**Typical Applications**

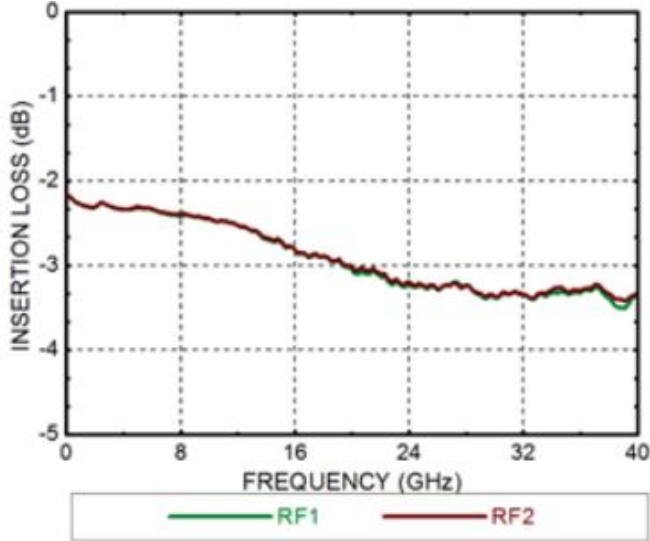
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

**Functional Block Diagram**

**Electrical Specifications**

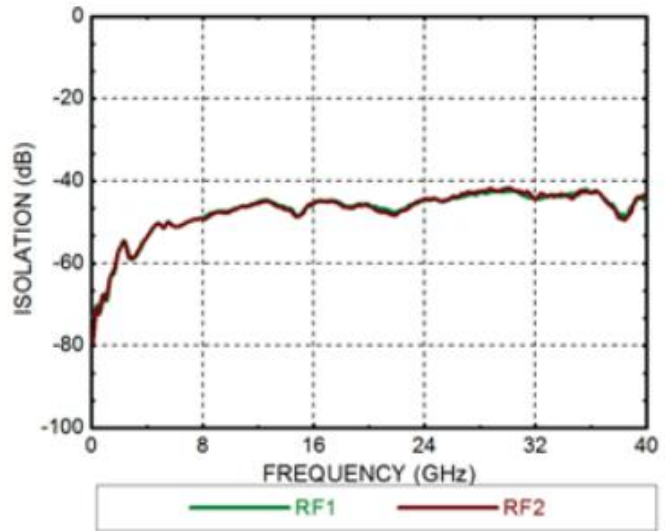
TA = +25°C, Vctl = 0/-5V

Parameters	Min.	Typ.	Max.	Units
Frequency	DC - 40			GHz
Insertion Loss		3		dB
Isolation		45		dB
Return Loss (ON State)		13		dB
Input 1dB Compression (P1dB)		22		dBm
Switching Speed		30		ns

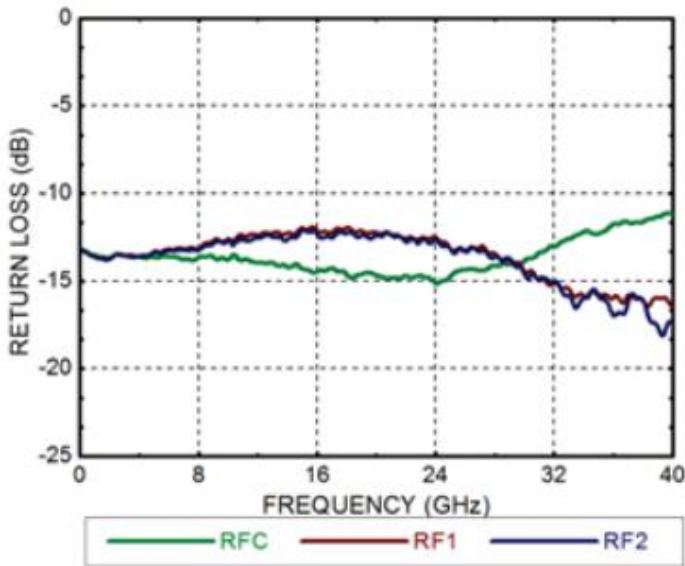
**Insertion Loss**



**Isolation**



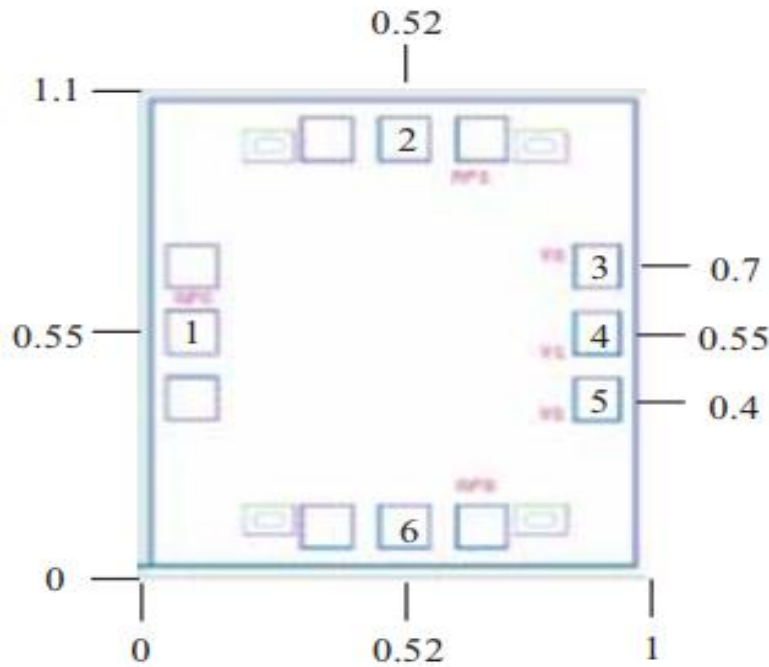
**Return Loss**





### Outline Drawing:

All Dimensions in mm

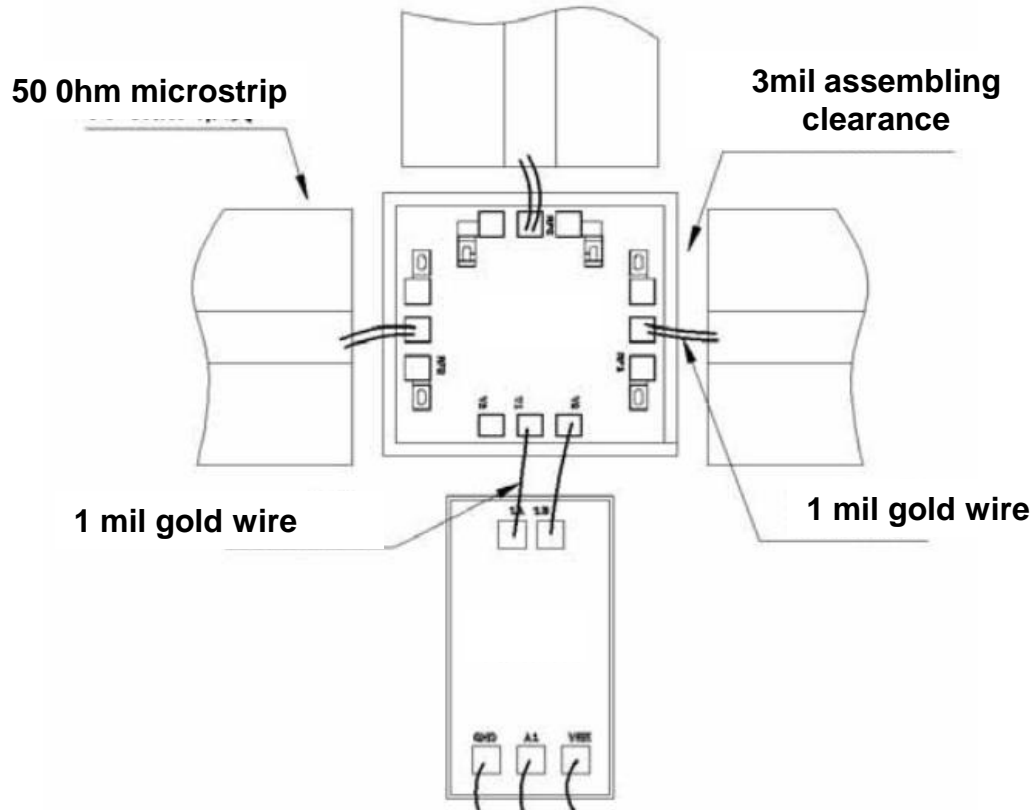


### Pad Description

PAD	Function	Description
1	RFC	The pad is DC coupled to 50 ohms. If the RF level is not 0V, then the blocking capacitor is required externally.
2, 6	RF1, RF2	The pad is DC coupled to 50 ohms. If the RF level is not 0V, then the blocking capacitor is required externally.
3, 4, 5	V2, V1, V2	When V1=-5V, V2=0, The RF1 is "ON" state; RF2 is "OFF" state When V1=0V, V2=-5V, The RF1 is "OFF" state; RF2 is "ON" state When used, the pad 3 and 5 of the pad are drawn out.
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  $\mu\text{m}^2$
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. RF input power: +24dBm
2. Storage temperature: -65°C to +175°C
3. Operating temperature: -55°C to +85°C