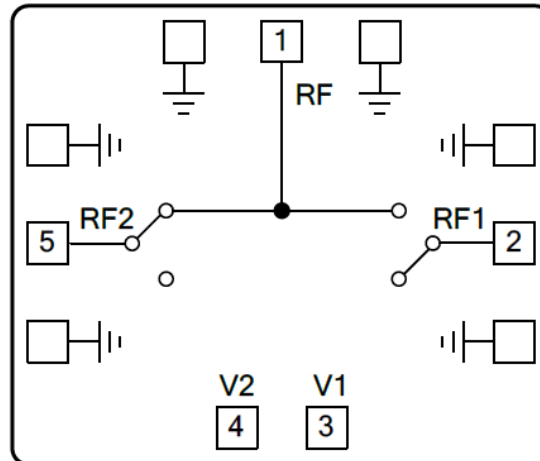


**Features**

- Isolation: 25dB@ 40GHz
- Insertion Loss: 2.5dB@ 40GHz
- Reflective design
- Die Size: 1.1x1.0x 0.1 mm

**Typical Applications**

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

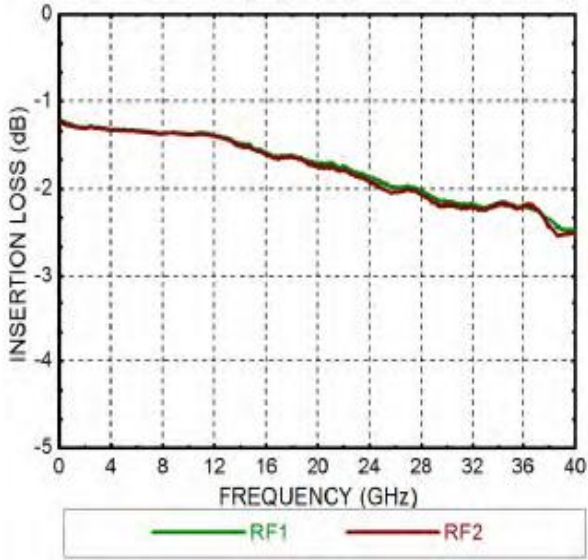
**Functional Block Diagram**

**Electrical Specifications**

TA = +25°C, Vctl = 0/-5V

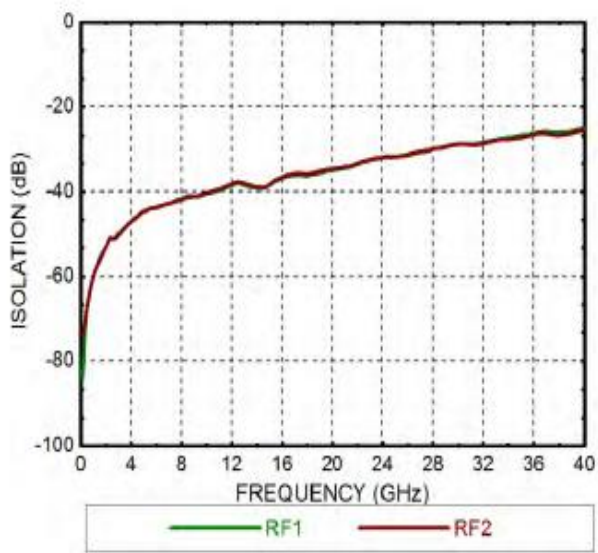
Parameters	Min.	Typ.	Max.	Units
Frequency	DC-40			GHz
Insertion Loss		2		dB
Isolation		35		dB
Return Loss (ON State)		15		dB
Input 1dB Compression (P1dB)		22		dBm
Switching Speed		12		ns



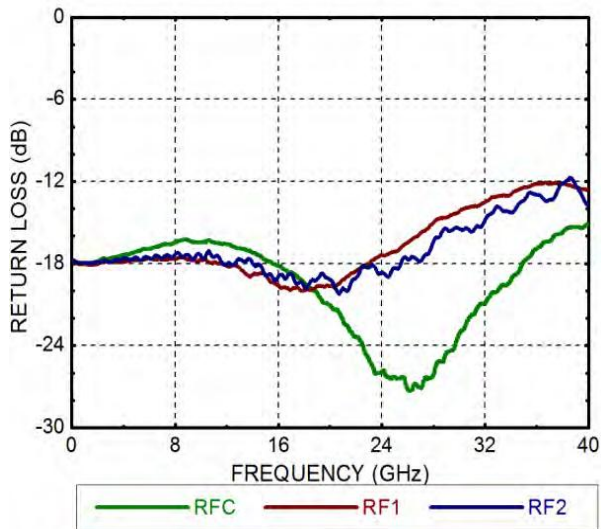
### Insertion Loss



### Isolation



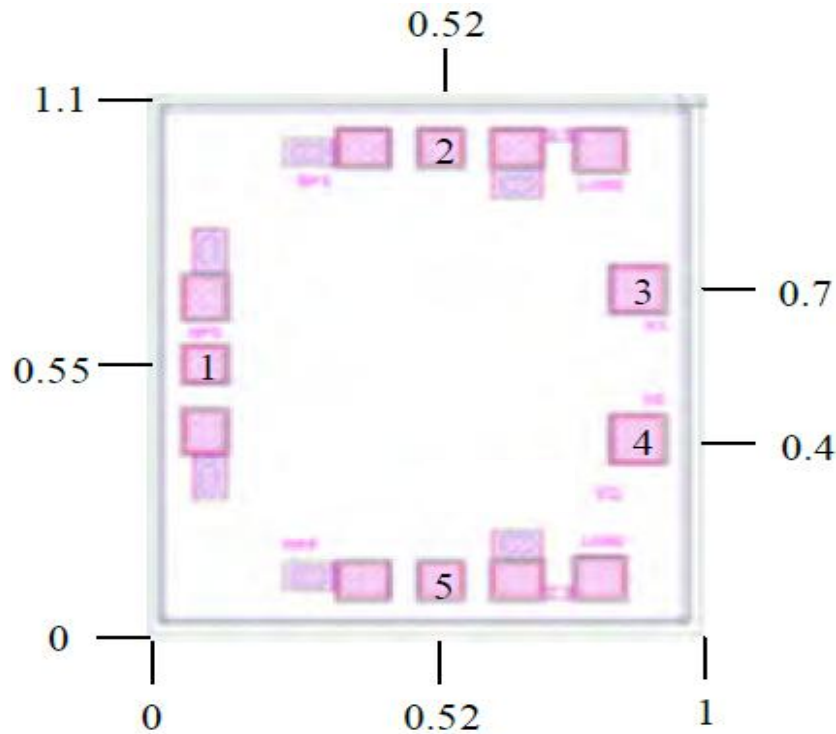
### Return Loss





### Outline Drawing:

All Dimensions in mm

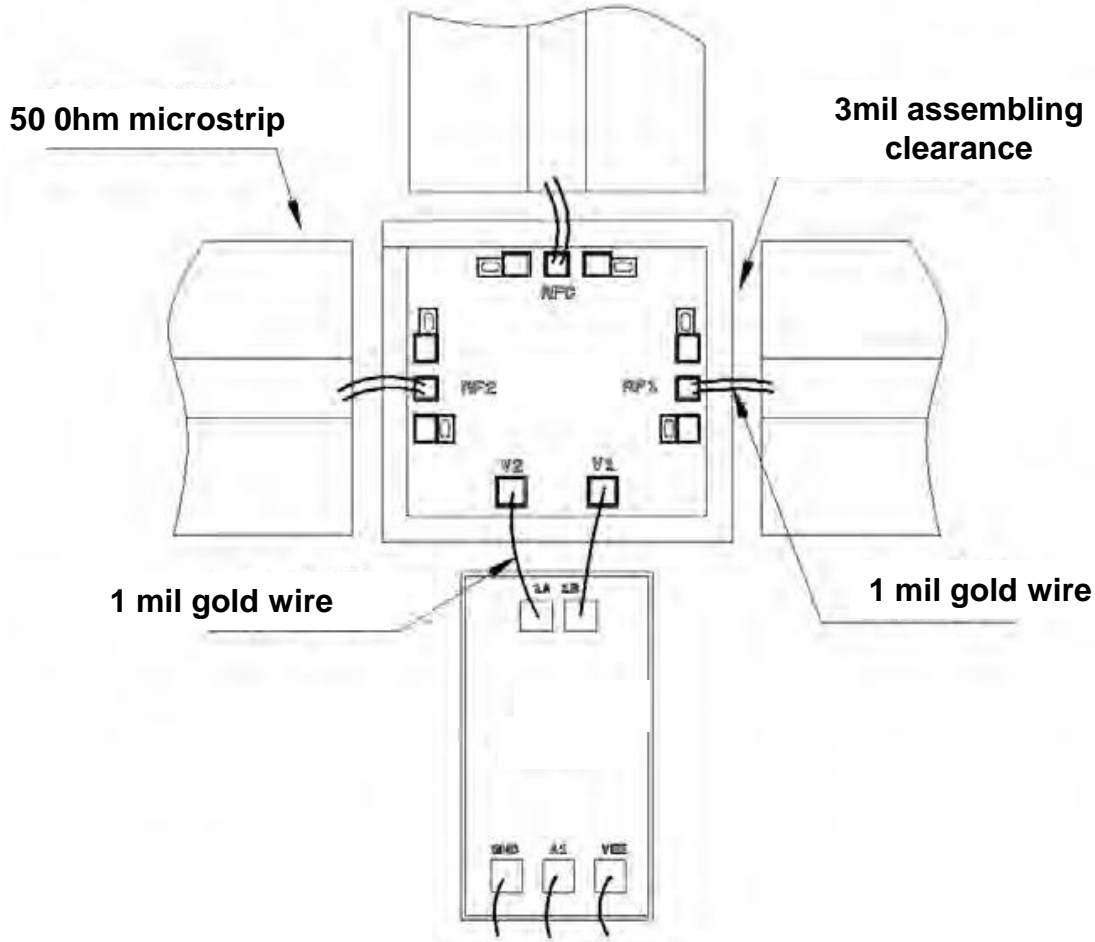


### Pad Description

PAD	Function	Description
1	RFC	DC coupling 50Ω Impedance. IF RF voltage is not 0V, blocking capacitor is required externally.
2, 5	RF1, RF2	DC coupling 50Ω Impedance. IF RF voltage is not 0V, blocking capacitor is required externally.
3, 4	V1, V2	When V1=-5V and V2=0V, then RF1 is "ON" state and RF2 is "OFF" state. When V1=0V and V2=-5V, then RF1 is "OFF" state and RF2 is "ON" state.
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