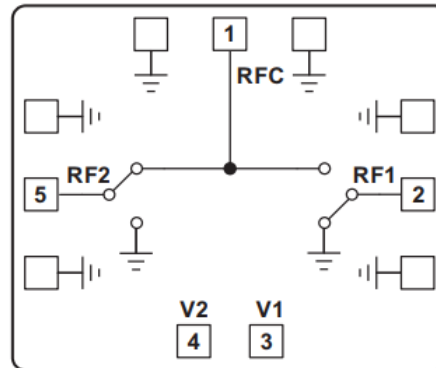


**Features**

- Isolation: >30dB @ 8GHz
- Insertion Loss: 0.75dB @ 8GHz
- Reflective design
- Die Size: 0.75x 0.7x 0.1 mm

**Typical Applications**

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

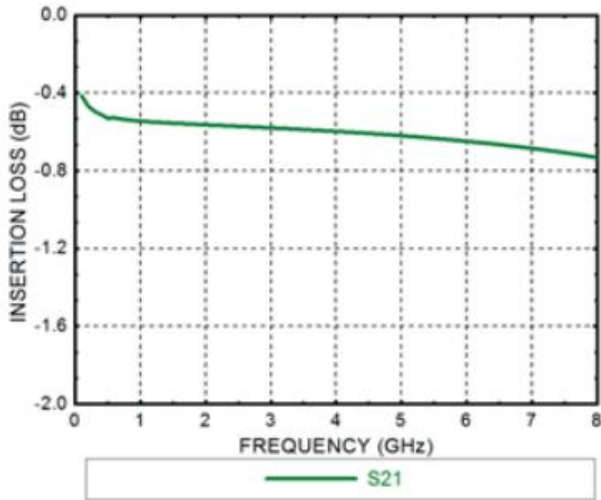
**Functional Block Diagram**

**Electrical Specifications**

TA = +25°C, Vctl = 0/-5V

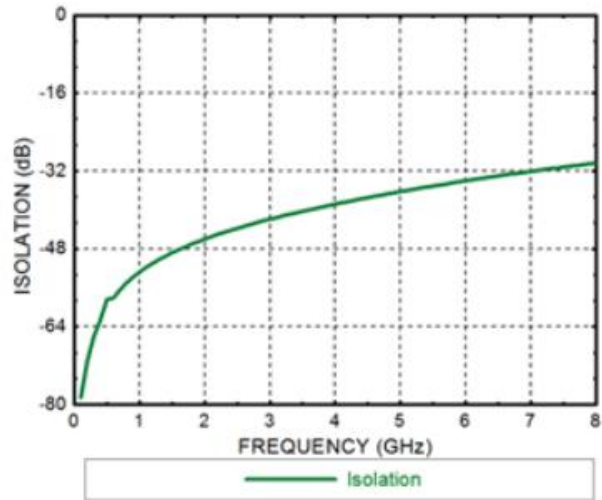
| Parameters                   | Min.   | Typ. | Max. | Units |
|------------------------------|--------|------|------|-------|
| Frequency                    | DC - 8 |      |      | GHz   |
| Insertion Loss               |        | 0.65 |      | dB    |
| Isolation                    |        | 35   |      | dB    |
| Return Loss (ON State)       |        | 25   |      | dB    |
| Input 1dB Compression (P1dB) |        | 25   |      | dBm   |
| Switching Speed              |        | 15   |      | ns    |



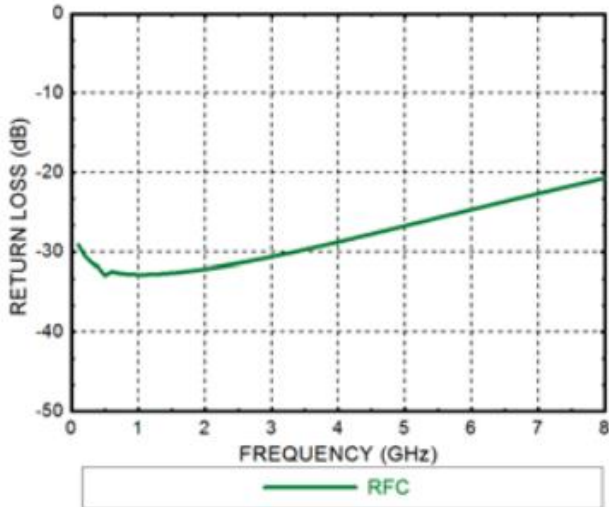
### Insertion Loss



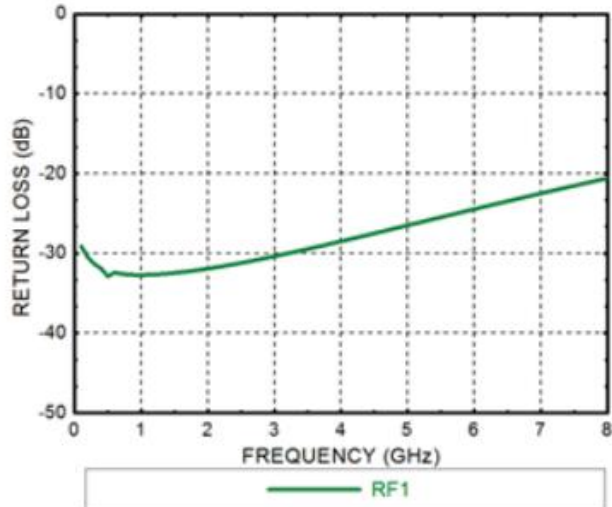
### Isolation



### RFC Return Loss(ON State)



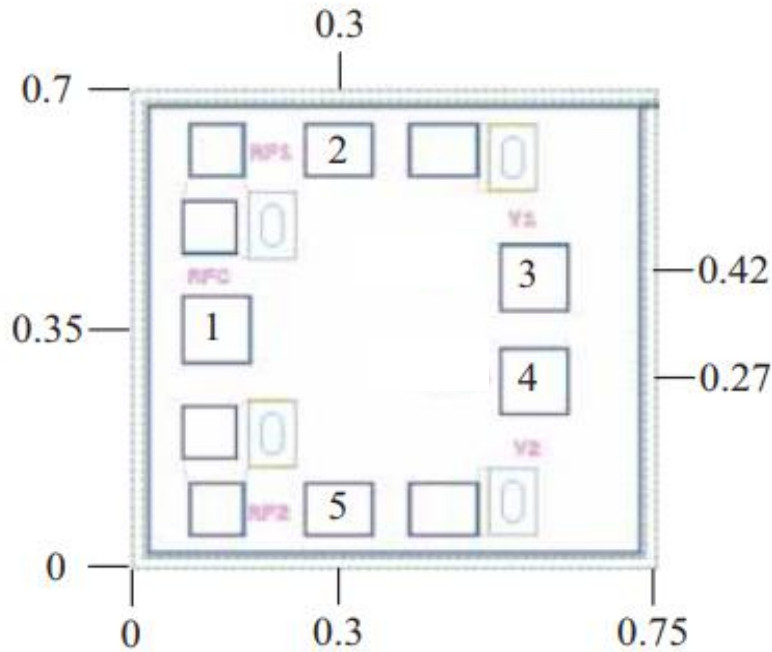
### RF1 Return Loss(ON State)





### Outline Drawing:

All Dimensions in mm

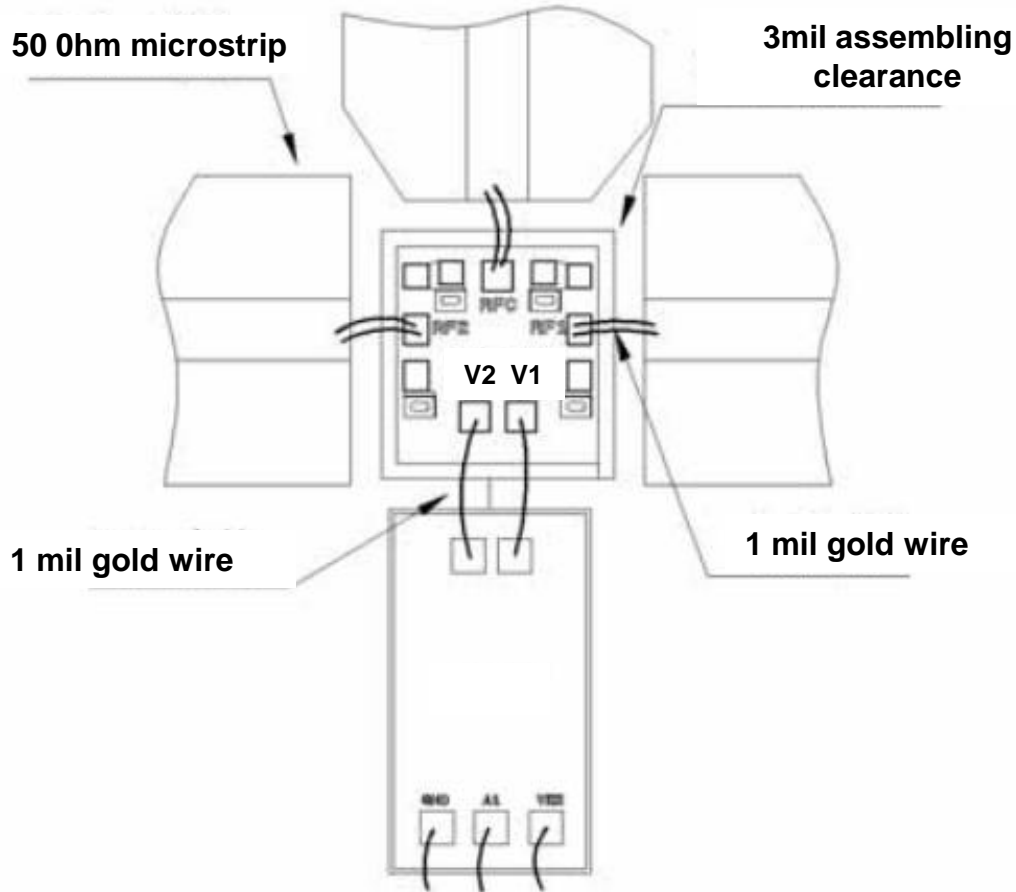


### Pad Description

| 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, 5       | 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       | V1, V2   | When V1=-5V,V2=0V, the RF1 is "ON" state; RF2 is "OFF" state<br>When V1=0V, V2=-5V, the RF1 is "OFF" state; 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: +27dBm
2. Storage temperature: -65°C to +175°C
3. Operating temperature: -55°C to +85°C