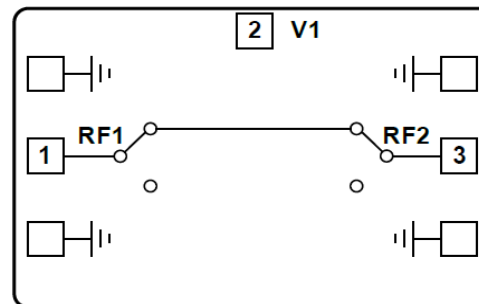


**Features**

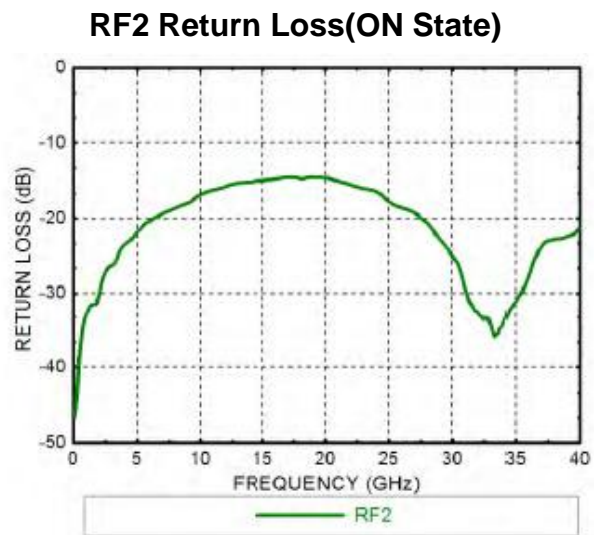
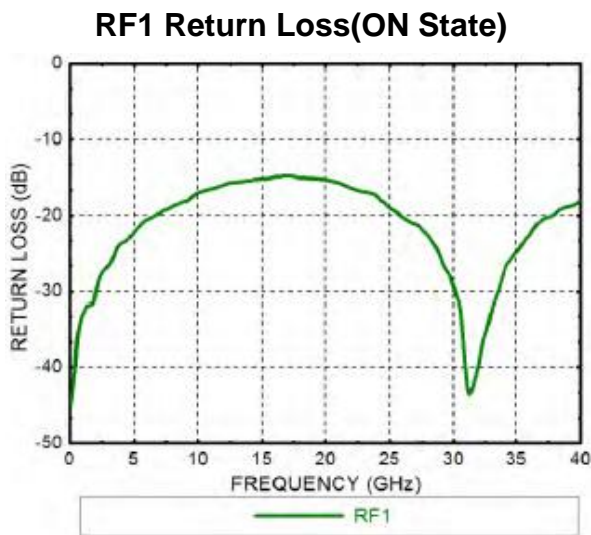
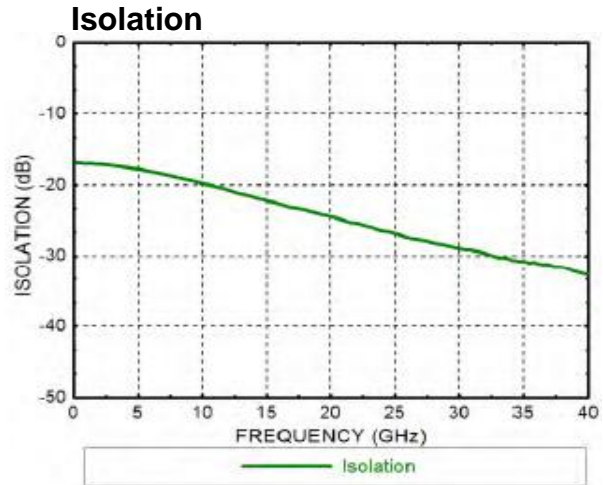
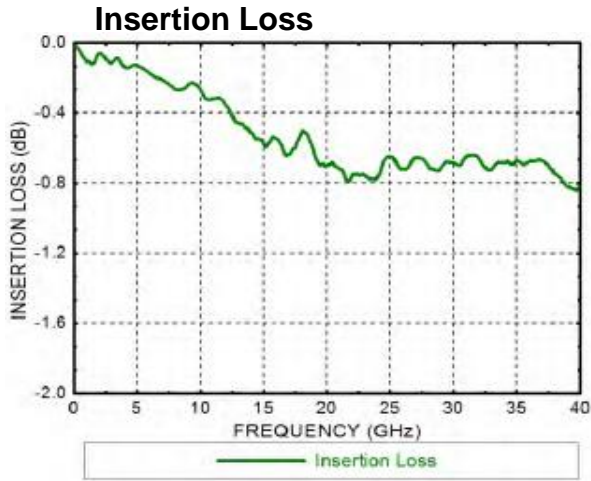
- Isolation: 32dB@ 40GHz
- Insertion Loss: 0.8dB@ 40GHz
- Reflective design
- Input/Output: 50 Ohm
- Die Size: 1x0.68x 0.1 mm

**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**

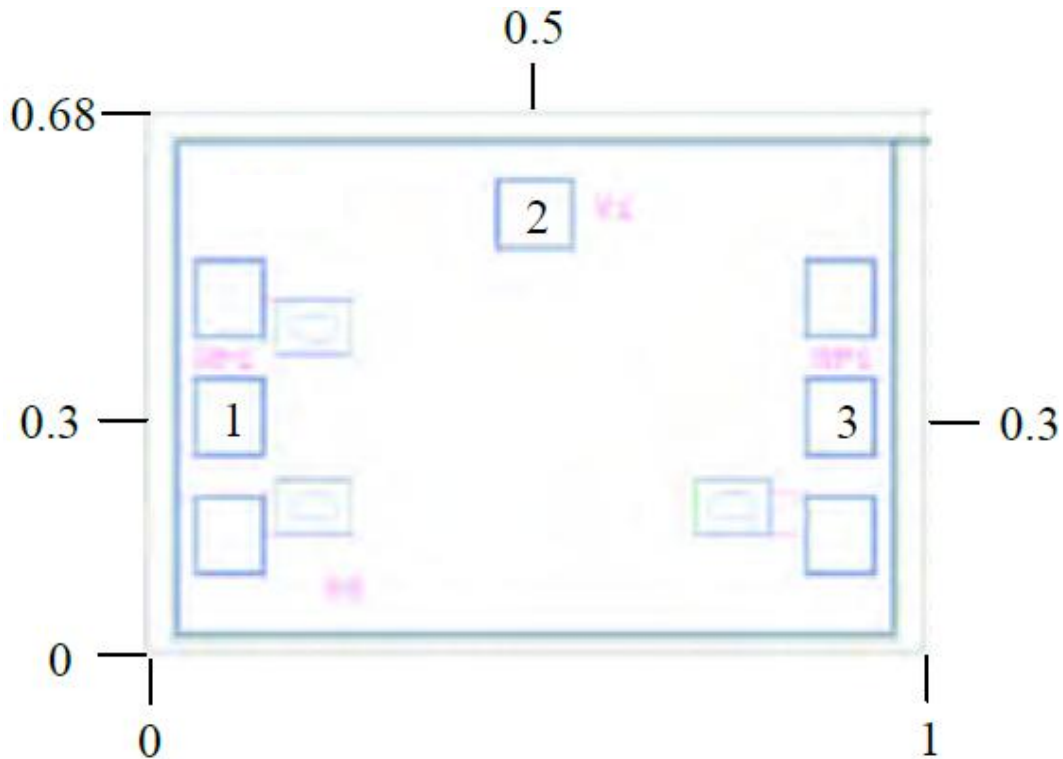
Parameters	Min.	Typ.	Max.	Units
Frequency	DC-40			GHz
Insertion Loss		0.8		dB
Isolation		25		dB
Return Loss (ON State)		20		dB
Input 1dB Compression (P1dB)		25		dBm
Switching Speed		15		ns





### Outline Drawing:

All Dimensions in mm



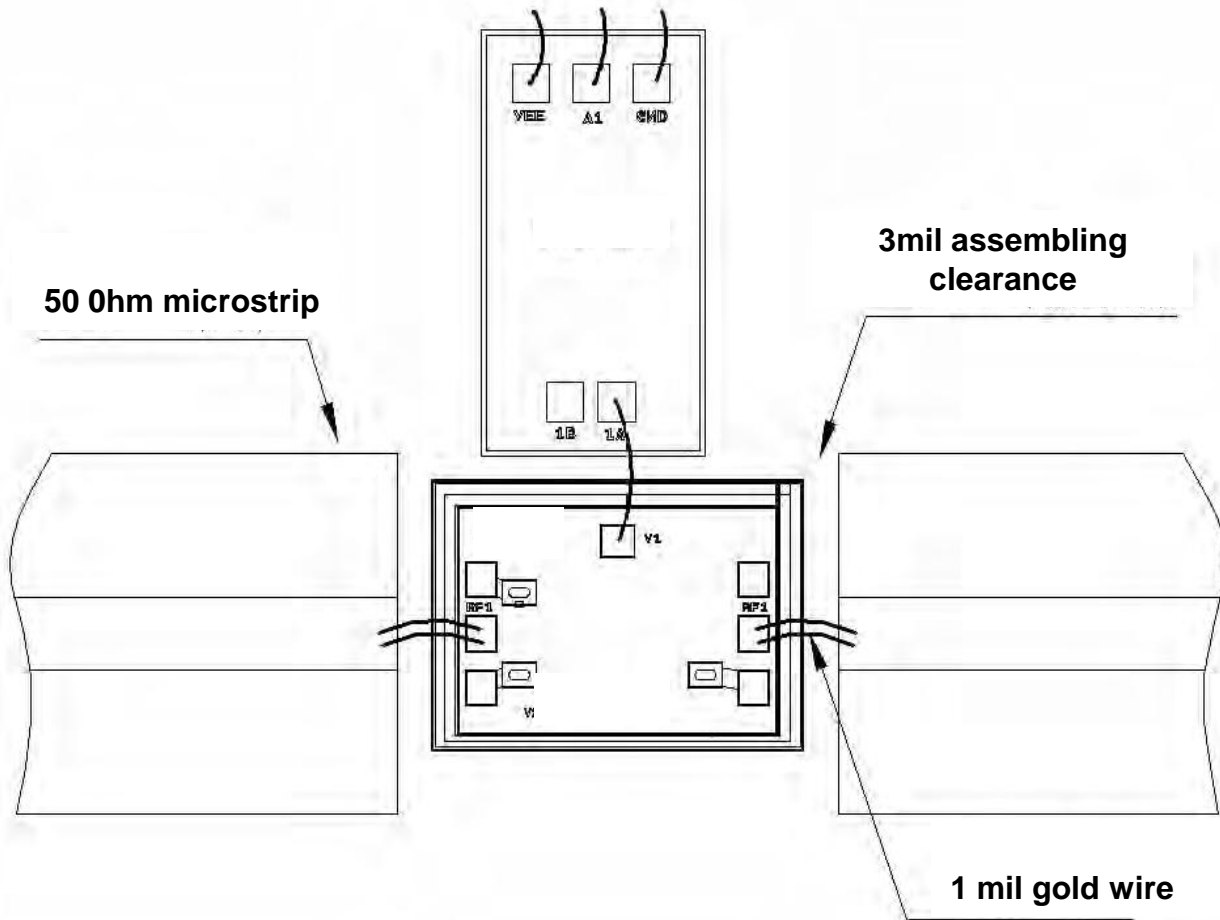
### Pad Description

PAD	Function	Description
1, 3	RF1, RF2	DC coupling 50Ω Impedance. IF RF voltage is not 0V, blocking capacitor is required externally.
2	V1	When V1=-5V, then RF1 and RF2 are "ON" state; When V1=0V, then "OFF" state.
Die Bottom	GND	Die bottom must be connected to RF/DC ground



GaAs pHEMT MMIC  
Reflective Single-pole Single-throw Switch  
DC-40GHz

### 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