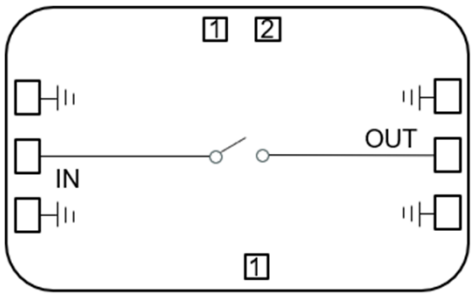
V1.0.0

GaAs pHEMT MMIC
SPST Absorptive *Switch*
DC-20GHz

Features

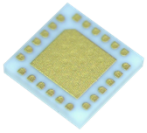
- SPST Absorptive design
- Frequency:DC-20GHz
- Isolation: 55dB
- Insertion Loss: 1.5dB
- Return Loss (ON):20dB
- Control Voltage:0/-5V
- Switching Speed:15ns
- Die Size: 1.54x0.69x 0.1 mm
- QFN package available 4x4 mm



Typical Applications

- Voltage control no current
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

- QFN package available 4x4 mm

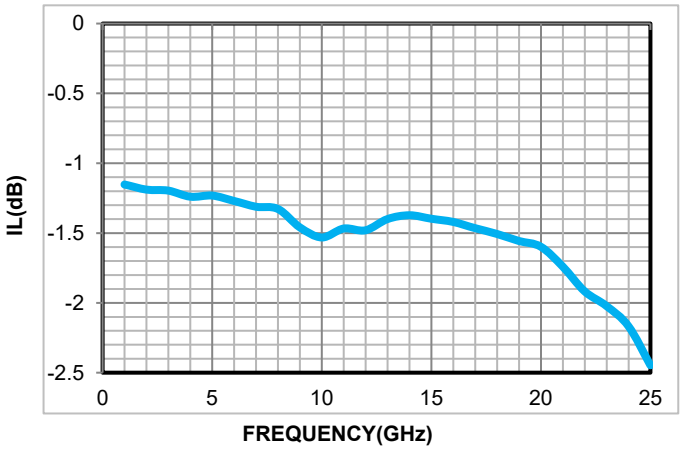


Electrical Specifications

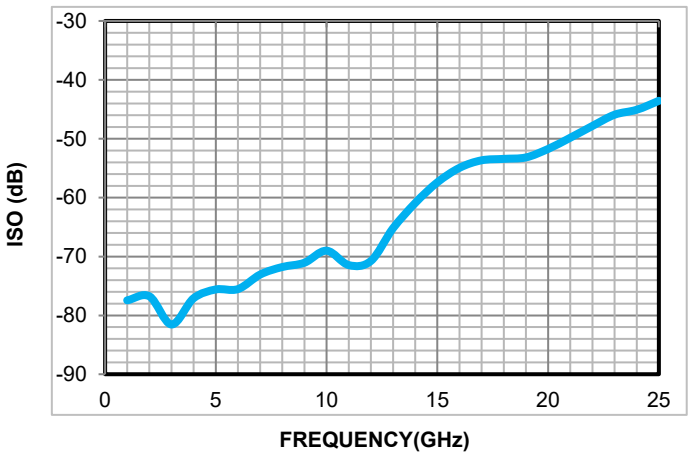
TA = +25°C, VCTL=0/-5V

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency	DC - 6			6 - 20			GHz
Insertion Loss		1.25	1.5		1.7	2.0	dB
Isolation	60	65		45	50		dB
Return Loss (ON State)	18	20		18	22		dB
Return Loss (OFF State)	14	15		12	14		dB
Input P-1		18			18		dBm
RF Input power			30			30	dBm
IIP3		28			28		dBm
Switching Speed	15						ns

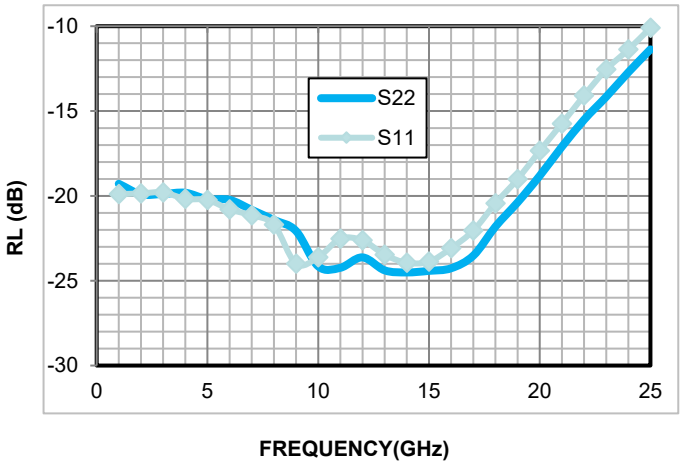
Insertion Loss vs. Frequency



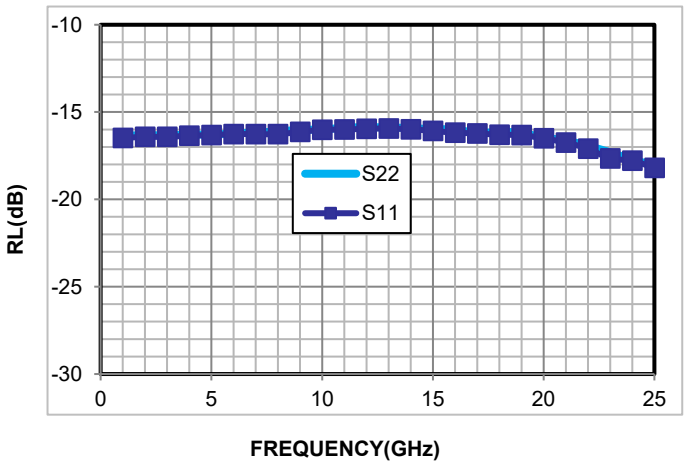
Isolation vs. Fequency



RL-On vs. Frequency

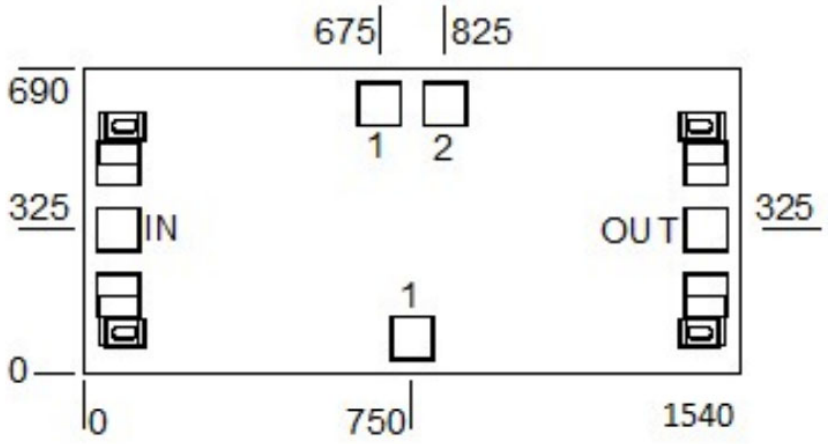


RL-Off vs. Frequency



Outline Drawing:

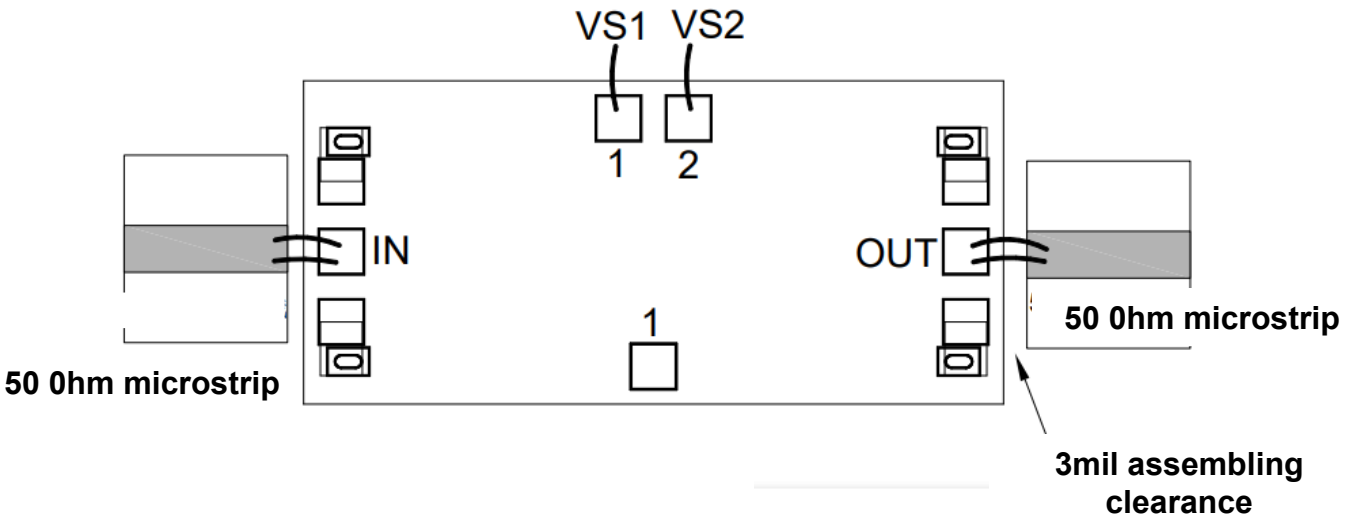
All Dimensions in mm



True Table

Control Voltage		State
1	2	IN-OUT
0	-5	OFF
-5	0	ON

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: +30dBm
2. Control Voltage: -8~+1V
3. Storage temperature: -65℃ to +150℃
3. Operating temperature: -55℃ to 125℃