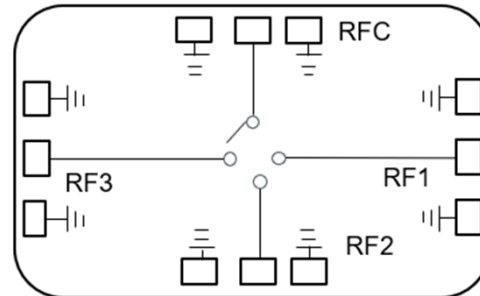


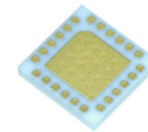
Features

- SP3T Reflective design
- Frequency:DC~18GHz
- Isolation: 50dB
- Insertion Loss: 1.5dB
- Return Loss (ON):17dB
- Control Voltage:0/-5V
- Switching Speed:15ns
- Die Size: 1.38x1.4x 0.1 mm


Typical Applications

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

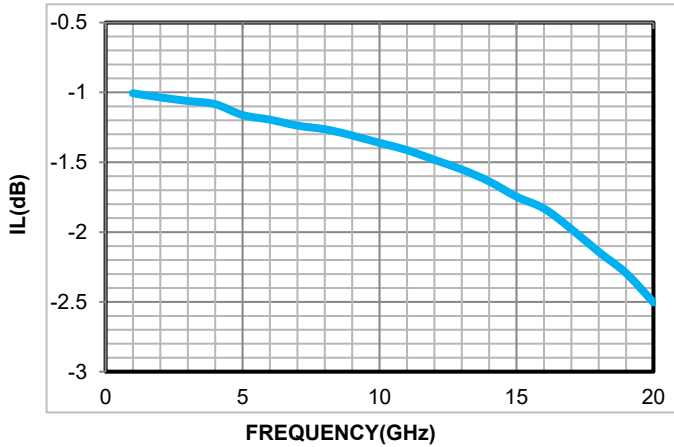
- QFN package available 4x4 mm


Electrical Specifications

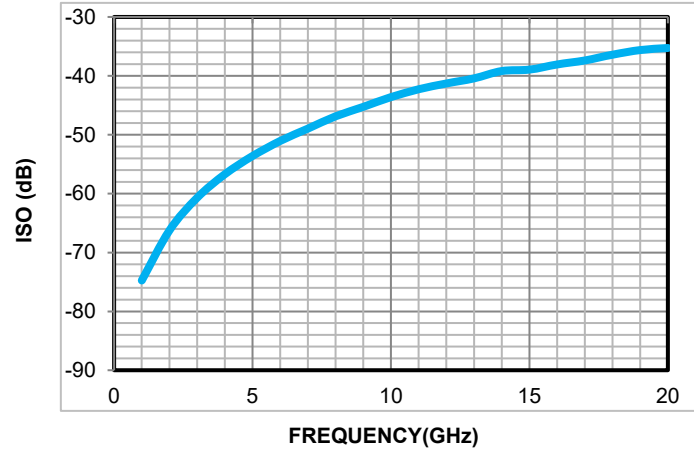
TA = +25°C, VCTL=0/-5V

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency	DC~6			6-18			GHz
Insertion Loss		1.25	1.5		1.5	2.2	dB
Isolation	55	60		35	45		dB
Return Loss (ON State)	17	18		15	17		dB
Input P-1		20			20		dBm
RF Input power			30			30	dBm
IIP3		30			30		dBm
Switching Speed	15						ns

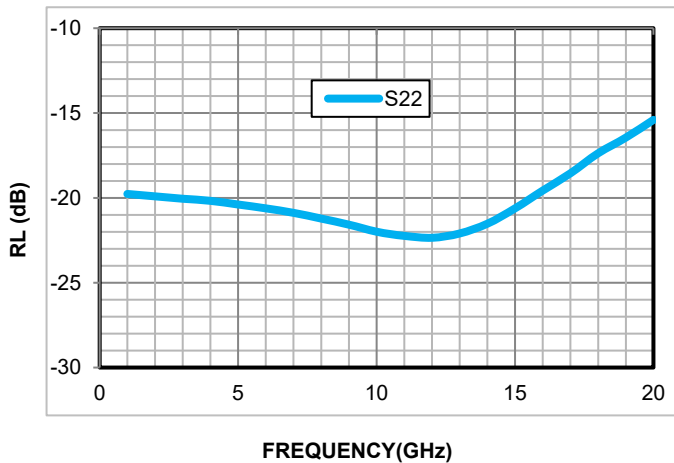
Insertion Loss vs. Frequency



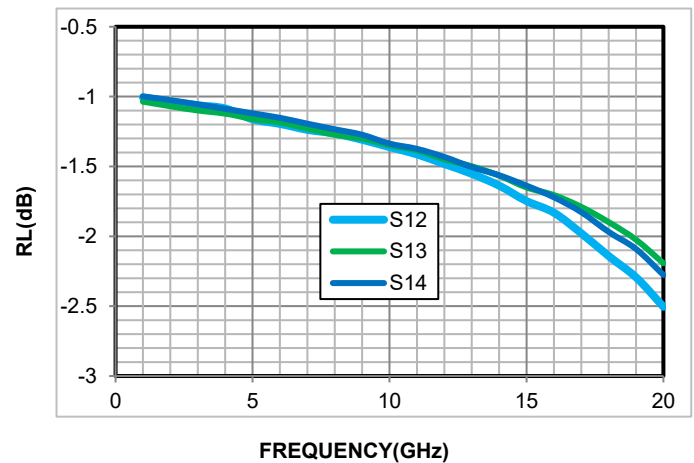
Isolation vs. Frequency



RL-On vs. Frequency



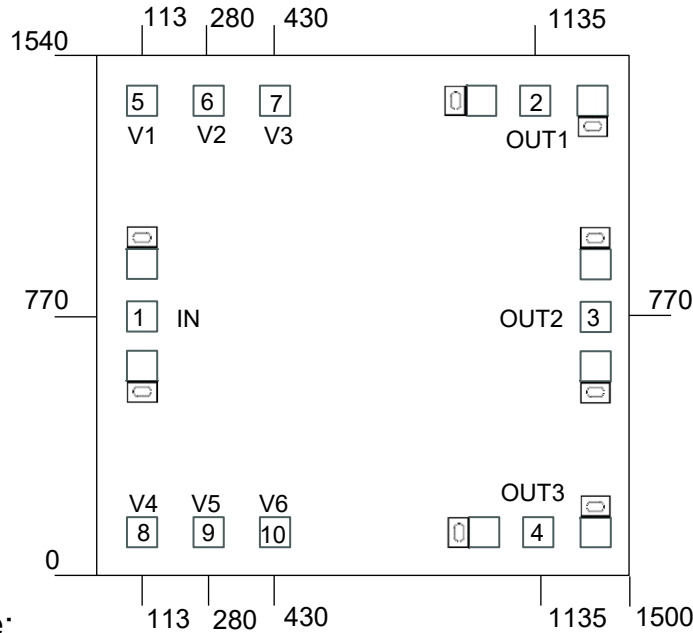
RL-Off vs. Frequency





Outline Drawing:

All Dimensions in um



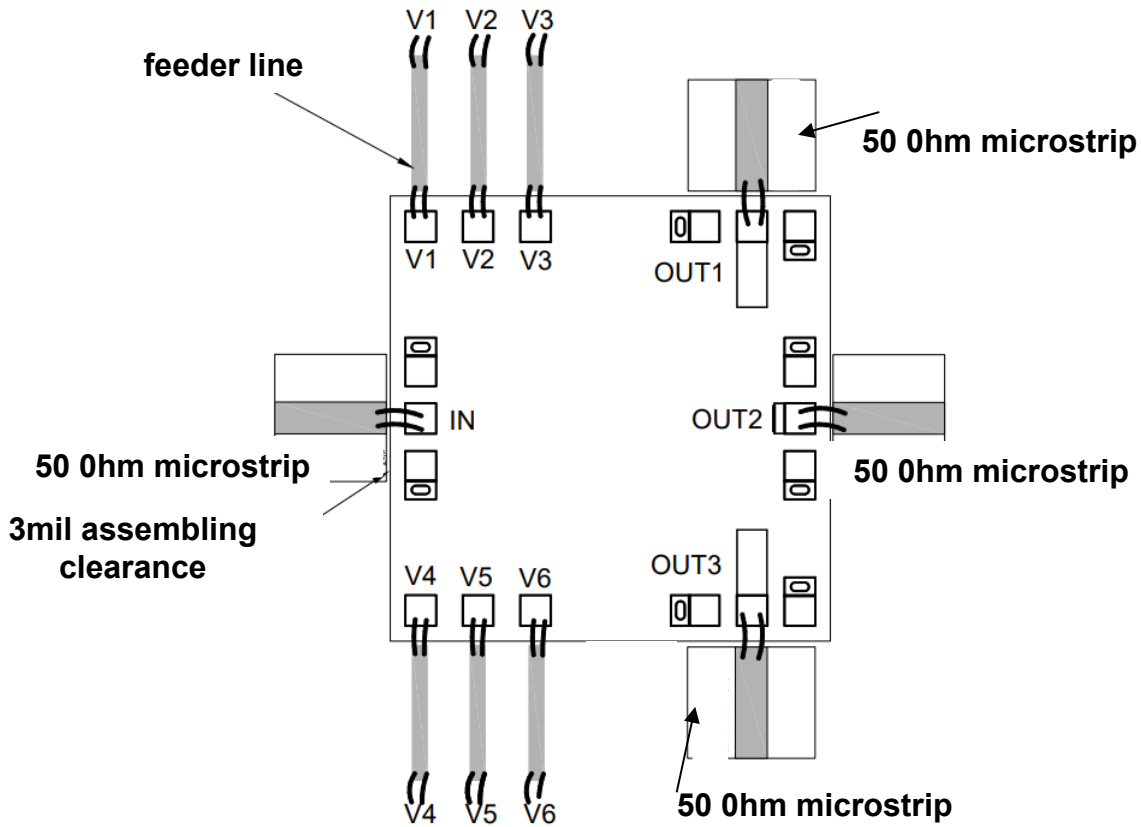
True Table:

Ctrl (V)						Status		
V1	V2	V3	V4	V5	V6	IN-OUT1	IN-OUT2	IN-OUT3
0	-5	-5	-5	0	0	ON	OFF	OFF
-5	0	0	-5	-5	0	OFF	ON	OFF
-5	-5	0	0	0	-5	OFF	OFF	ON

Pad	Function	Description
1,2,3,4	IN, OUT	50 ohm circuit matched, and there is no blocking capacitor integrated inside the chip
5,6,7,8,9,10	Vctrl	Control Voltage
Bottom of chip	GND	The bottom of the chip should be in good contact with the RF and DC ground



Assembly Drawing



Notes:

1. Die thickness: 100um
2. Typical bond pad is 100*100 μm^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: +30dBm
2. Control Voltage: -8~+1V
3. Storage temperature: -65°C to +150°C
4. Operating temperature: -55°C to 125°C