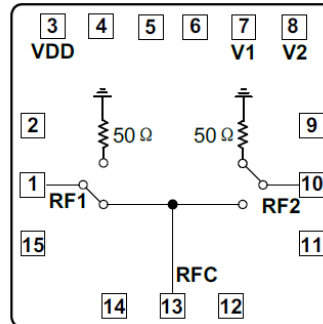


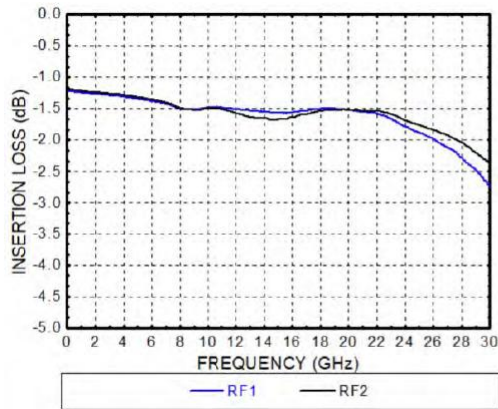
Features

- Isolation: 35dB
- Insertion Loss: 1.5dB
- P-1.0: 34dBm
- IIP3: 54dBm
- Maximum Power: +34dBm(common port)
+29dBm(load port)
- ESD: 2k V(HBM)
- Die Size: 1.0x1.4x 0.15 mm

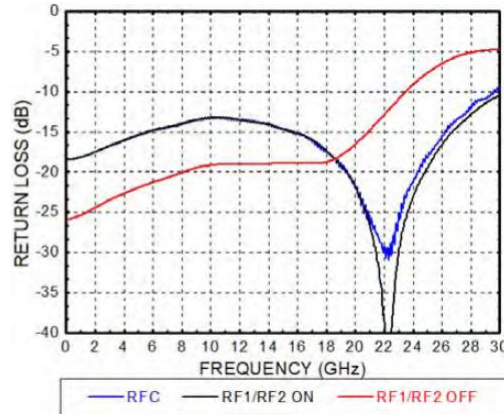
Functional Block Diagram

Electrical Specifications
TA = +25°C, VDD = 2.5V~5V, VCTL=0V/ VDD, 50Ω

Parameters	Condition		Min.	Typ.	Max.	Units
Insertion Loss	0.1GHz-6.0GHz			1.3	1.7	dB
	6.0GHz-18.0GHz			1.5	1.9	dB
	18.0GHz-26.5GHz			2.0	2.5	dB
Isolation	RFC~RF1/RF2	0.1GHz-6.0GHz	53	60		dB
		6.0GHz-18.0GHz	35	40		dB
		18.0GHz-26.5GHz	20	30		dB
Isolation	RF1~RF2	0.1GHz-6.0GHz	47	55		dB
		6.0GHz-18.0GHz	32	40		dB
		18.0GHz-26.5GHz	20	30		dB
Return Loss	ON	0.1GHz-6.0GHz		15		dB
		6.0GHz-18.0GHz		15		dB
		18.0GHz-26.5GHz		15		dB
	OFF	0.1GHz-6.0GHz		20		dB
		6.0GHz-18.0GHz		20		dB
		18.0GHz-26.5GHz		10		dB
Switching Speed	ON	50% VCTL to 90% RF		270		ns
	OFF	50% VCTL to 10% RF		100		ns
Input Power Compression	P-0.1	VDD=5V		34		dBm
	P-1	VDD=5V		34		dBm
IIP3	Pout=12dBm/tone			54		dBm
Operating Voltage	VDD		2.5	3	5	V
Control Voltage Range	VCTL, EN		0		VDD	V
Control Voltage Input Level Range	VDD=+5V	Low level (VIL)	0		0.6	V
	VDD=+5V	High level (VIH)	1.1		VDD	V
	VDD=+3V	Low level (VIL)	0		0.6	V
	VDD=+3V	High level (VIH)	1.1		VDD	V
Power Consumption	VDD=+5V			60		uA
	VDD=+3V			55		uA

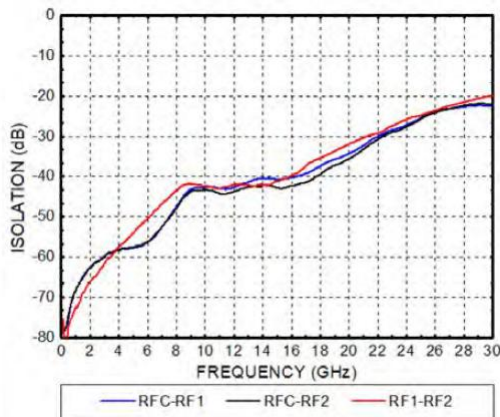
Insertion Loss



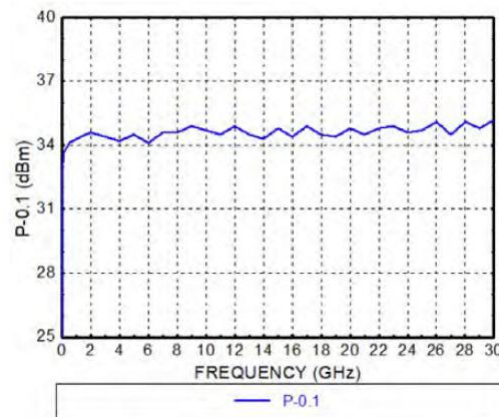
Return Loss



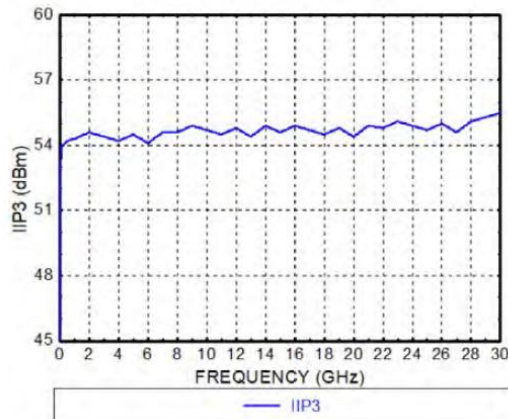
Isolation



Input P-0.1(10MHz~30GHz)



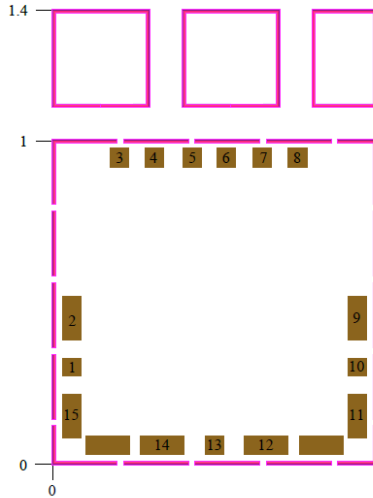
IIP3(10MHz~30GHz)





Outline Drawing:

All Dimensions in mm



Pad Description

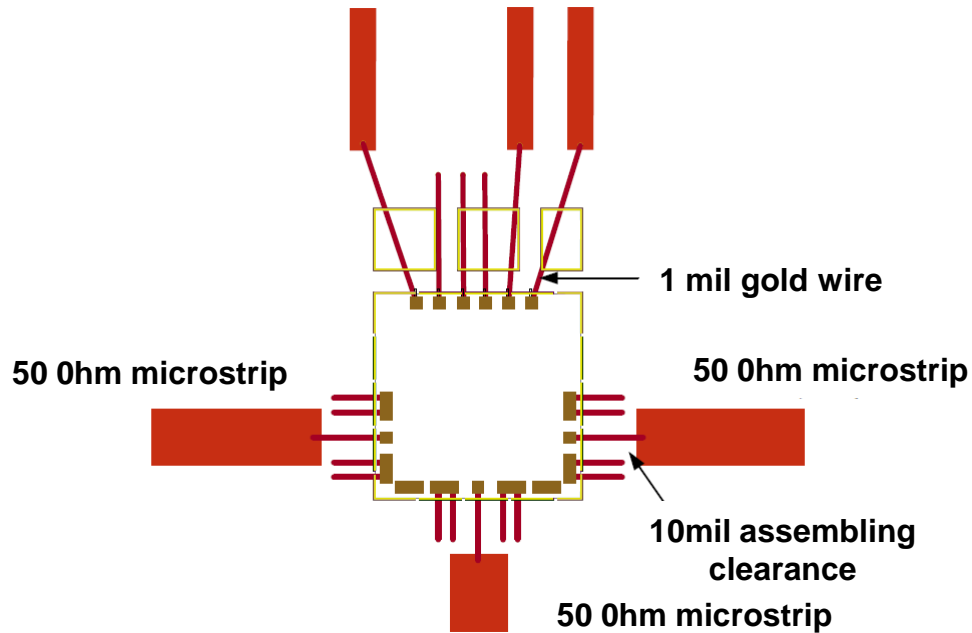
PAD	Function	Description
1	RF1	The pad is DC coupling and matched to 50Ω. If RF voltage is not 0V, then blocking capacitor is required externally.
2,4,5,6,9 11,12,14,15	GND	These pads are GND ports, should be connected to RF ground.
3	VDD	Power supply port, connected to +2.5V~+5V voltage.
7,8	V1,V2	Control signal input port.
10	RF2	The pad is DC coupling and matched to 50Ω. If RF voltage is not 0V, then blocking capacitor is required externally.
11	RFC	The pad is DC coupling and matched to 50Ω. If RF voltage is not 0V, then blocking capacitor is required externally.
Die Bottom	GND	Die bottom must be connected to RF/DC ground.

True Table

V1	V2	RFC-RF1	RFC-RF2
0	0	OFF	ON
0	1	ON	OFF
1	0	ON	OFF
1	1	OFF	ON



Assembly Drawing



Maximum Ratings:

1. Operating Voltage VDD: +5.5V
2. Control Voltage V1, V2: +5.5V
3. RF input power: PASS +34dBm, LOAD +29dBm
4. Storage temperature: -65°C to +150°C
5. Operating temperature: -55°C to +85°C
6. ESD: HBM 2kV