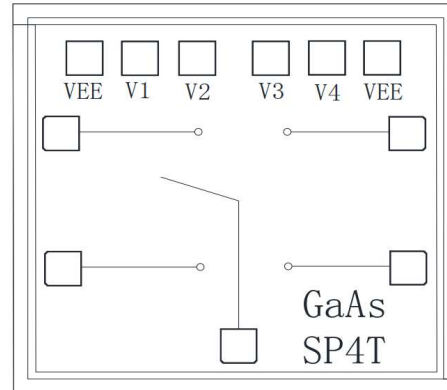


### Performance

- Frequency: DC~35GHz
- Insertion Loss: 2.4dB
- Isolation: 45dB
- Input VSWR: 1.4:1
- Output VSWR: 1.2:1
- Switch time: 20ns
- Power supply: -5V (1mA)
- Control method: LVTTL
- Type: Voltage control reflective
- Chip size: 1.45\*1.2\*0.08mm

### Schematic Diagram

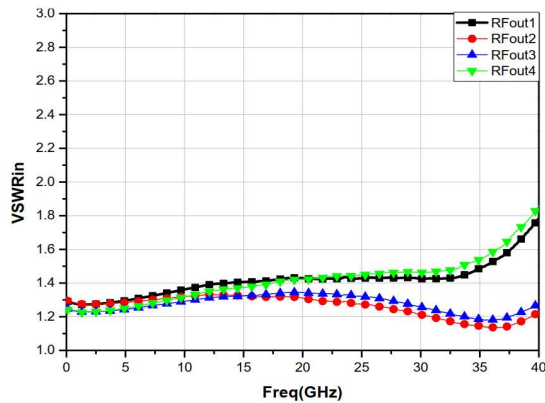


### Electrical Specifications (Ta=+25°C, VEE= -5V, Freq: DC~35GHz)

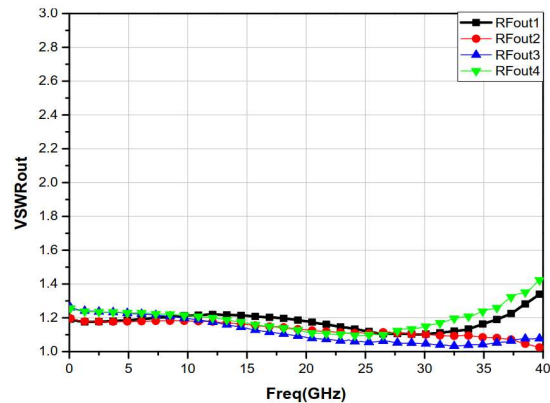
Symbol	Parameter	Min	Typical	Max	Unit
Li	Insertion Loss	-	2.4	2.7	dB
ISO	Isolation	-	-45	-40	dB
VSWRin	Input VSWR	-	1.4	1.6	-
VSWRout	Output VSWR	-	1.2	1.3	-

### Test Curves (Two pieces of $\Phi 25\mu\text{m}$ , 300 $\mu\text{m}$ length bonding lines applied)

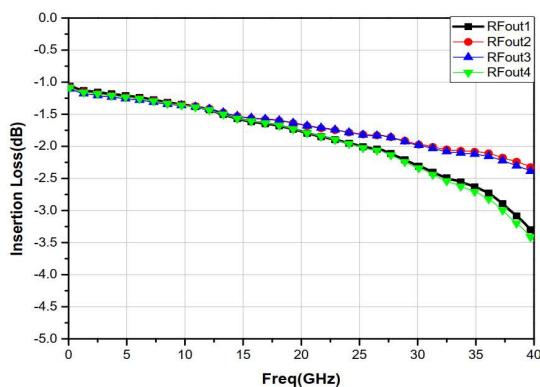
Input VSWR vs. Freq



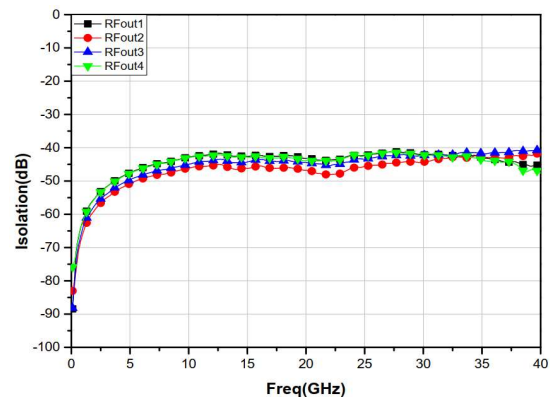
Output VSWR vs. Freq



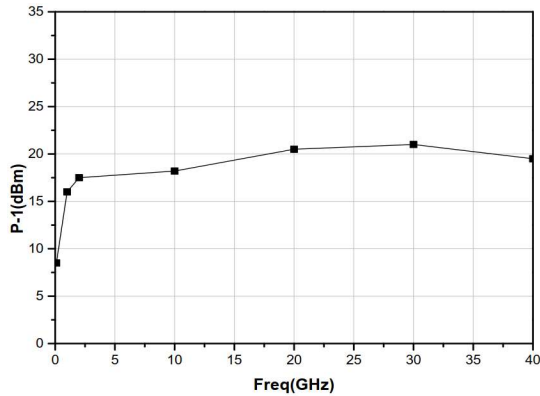
Insertion Loss vs. Freq



Isolation vs. Freq



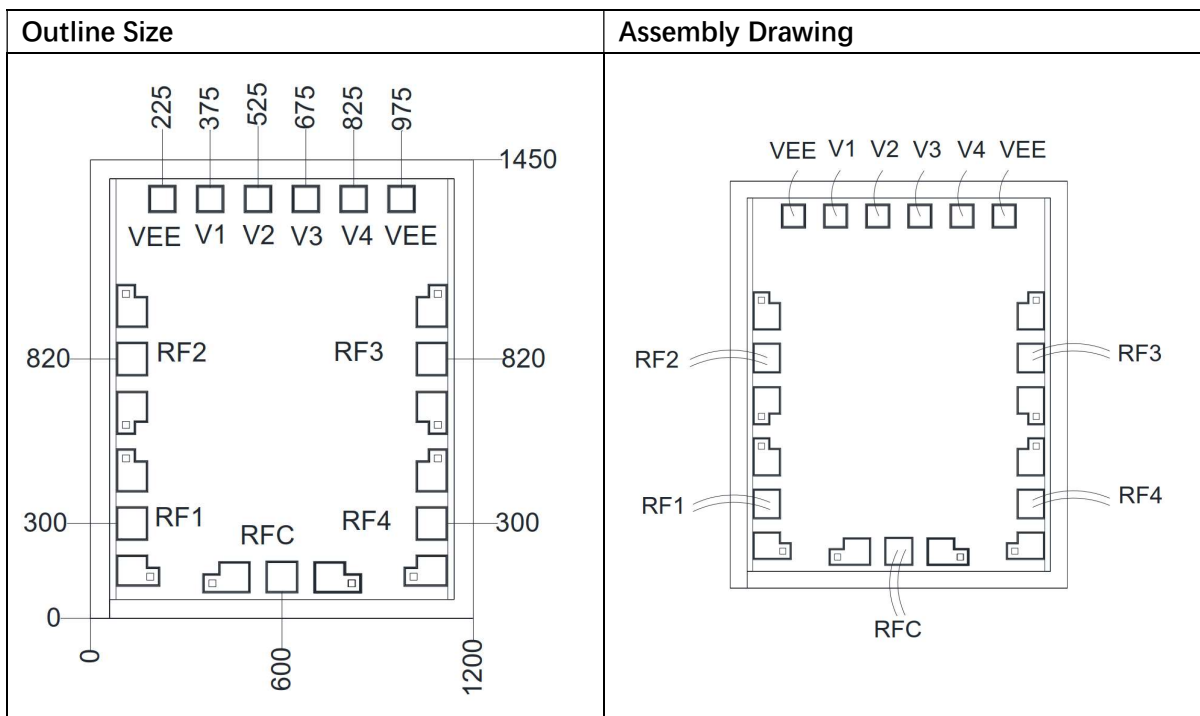
P-1



**Absolute Ratings (TA=25°C)**

Symbol	Parameter	Value	Note
VEE	Power Voltage	-6V	
Pcw	Input signal Power (cw)	22dBm	
Tch	Channel Temperature	175°C	
T	Sintering Temperature	310°C	30s, N2 protection
Tstg	Storage Temperature	-65°C~150°C	

Exceed any of above condition may cause permanent damage.



**Truth Table**

VEE	V1	V2	V3	V4	RF1	RF2	RF3	RF4
-5V	1	0	0	0	ON	OFF	OFF	OFF
-5V	0	1	0	0	OFF	ON	OFF	OFF
-5V	0	0	1	0	OFF	OFF	ON	OFF
-5V	0	0	0	1	OFF	OFF	OFF	ON

**Logic control**

Logic control	Control Level V1~V4
1	3.3V~5V
0	0V

**Pad Definition**

Number	Description
VEE	Drive control voltage, -5V
V1	Drive control level
V2	Drive control level
V3	Drive control level
V4	Drive control level