

### Performance

- Input Frequency: 3GHz~11GHz
- Output Frequency: 6GHz~22GHz
- Input Power: 10dBm
- Output Power: -2.5dBm
- Rf1: >20dBc
- Rf3: >30dBc
- Rf4: >12dBc
- VSWRin: 1.8
- Chip size: 0.8\*0.8\*0.08mm

### Function Diagram

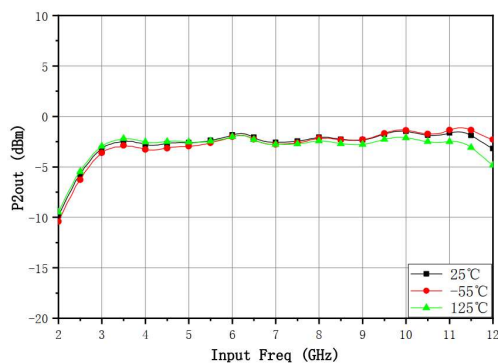


### Electrical specifications (TA=+25°C)

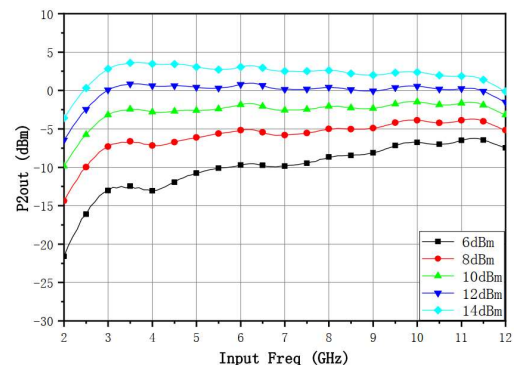
Symbol	Parameter	Test Condition	Min	Typical	Max	Unit
Fin	Input Frequency	Pin=15dBm	3~11			GHz
Fout	Output Frequency		6~22			GHz
Pout	Output Power		-	2	-	dBm
Rf1	F1 rejection		20			dBc
Rf3	F3 rejection		30			dBc
Rf4	F4 Rejection		12		-	dBc
VSWRin	Input VSWR				1.8	
VSWRout	Output VSWR	Fin=3GHz, Pin=10dBm, Fout=6~22GHz		4.5		
		Fin=7GHz, Pin=10dBm, Fout=6~22GHz		3.5		
		Fin=11GHz, Pin=10dBm, Fout=6~22GHz		2.8		

### Test Curves (Pin=10dBm)

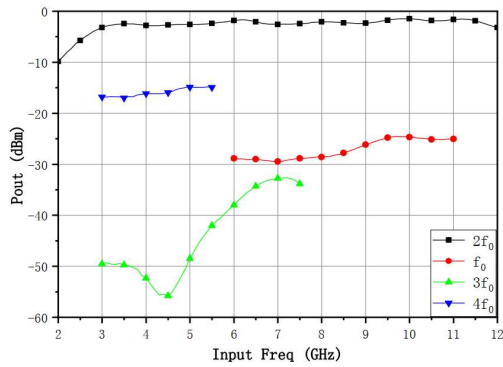
Pout @ Different Temperature



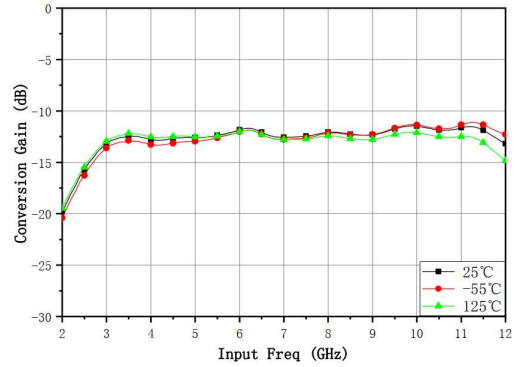
Pout @ Different Pin



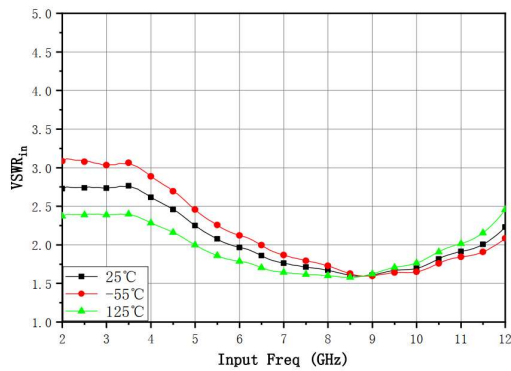
Rejection



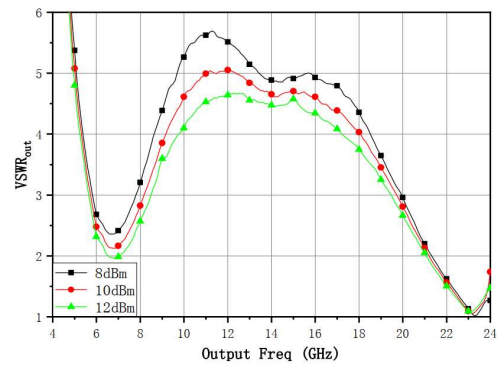
Conversion Gain @ Different temperature



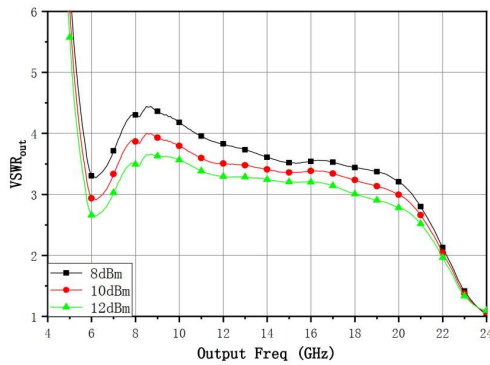
VSWRin @ Different Temperature



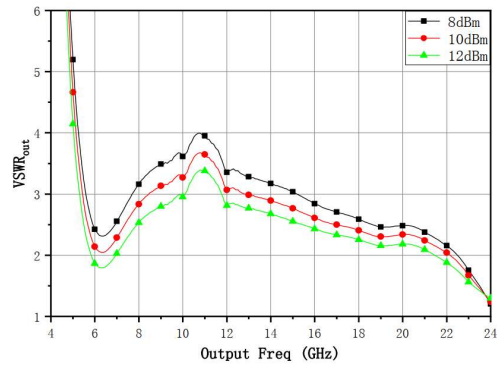
Fin=3GHz VSWRout @ Different Pin



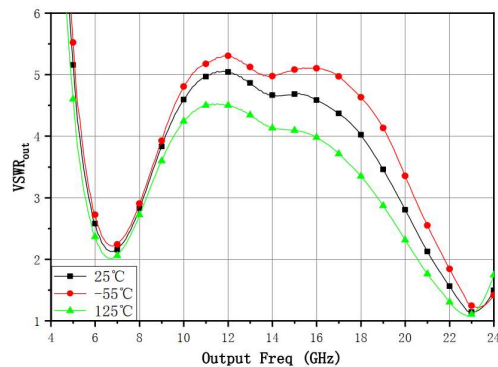
Fin=7GHz VSWRout @ Different Pin



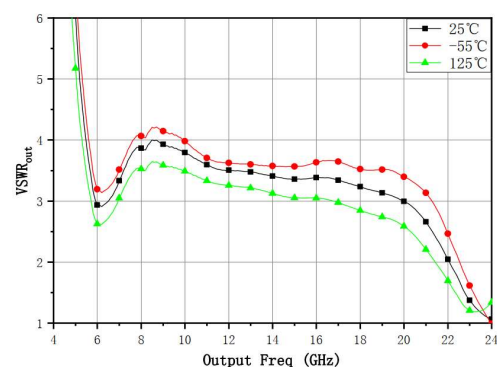
Fin=11GHz VSWRout @ Different Pin



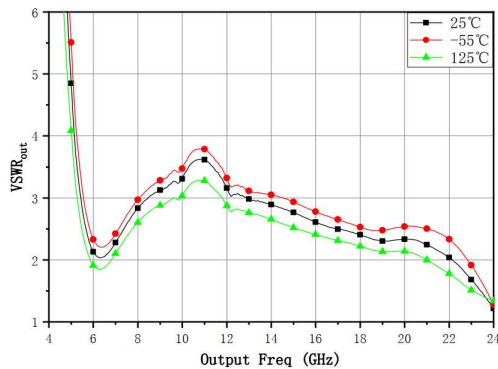
Fin=3GHz VSWRout @ Different Temperature



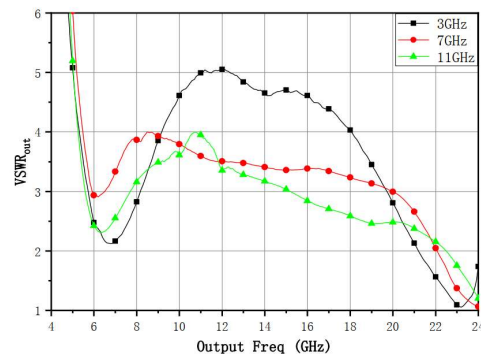
Fin=7GHz VSWRout @ Different Temperature



Fin=11GHz VSWRout @ Different Temperature



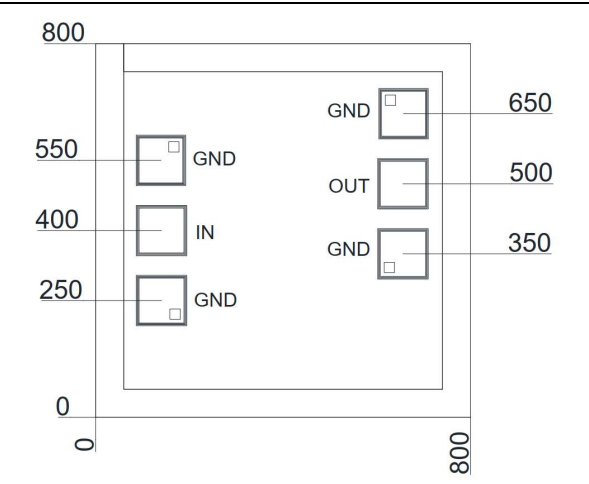
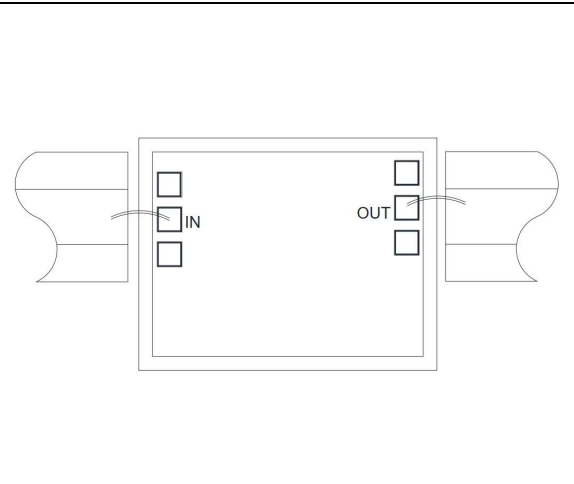
VSWRout @ Different Fin



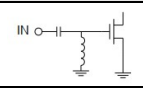
**Absolute Max Ratings (TA=25°C)**

Symbol	Parameter	Value	Note
Pin	Input Power	26dBm	
Tch	Channel Temperature	175°C	
Tm	Mounting Temperature	310°C	1min, N2 protection
Tstg	Storage Temperature	-65~150°C	

Exceeding any one or combination of these limits may cause permanent damage.

Outline Size (Unit: mm)	Assembly Diagram
	

**Pads Definition**

Pad	Description	Equivalent
IN	RF signal input, connect to 50ohm system, no block capacitor needed.	
OUT	RF signal output, connect to 50ohm system, no block capacitor needed.	