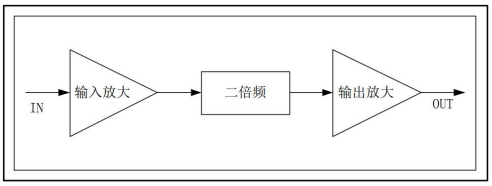
Performance

- Input Frequency: 11GHz~22GHz
- Output Frequency: 22GHz~44GHz
- Input Power: 5dBm
- Output Power: 17dBm
- Consumption: 5V/150mA, -0.8V/0mA
- Rf1: 25dBc
- Rf3: 15dBc
- Chip size: 1.8*1.15*0.08mm

Function Diagram

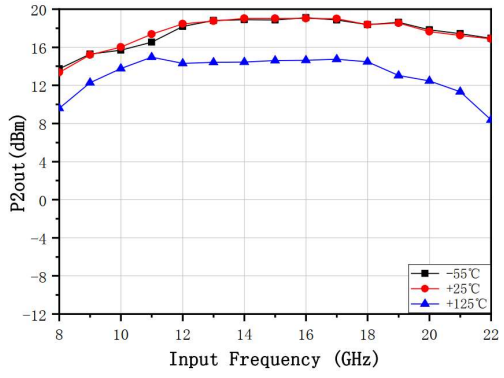


Electrical specifications (T_A=+25℃, Pin=5dBm, Vd=5V, Vg=-0.8V)

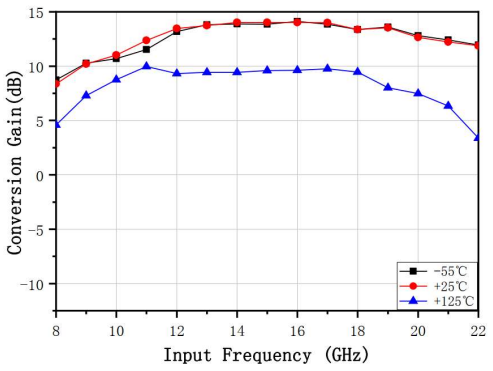
Symbol	Parameter	Min	Typical	Max	Unit
Fin	Input Frequency		11~22		GHz
Fout	Output Frequency		22~44		GHz
Pout	Output Power	-	17.5	-	dBm
Rf1	F1 rejection		25		dBc
Rf3	F3 Rejection	-	15	-	dBc
VSWRin	Input VSWR		1.5		
VSWRout	Output VSWR		2		

Test Curves (Pin=5dBm, Vd=5V, Vg=-0.8V)

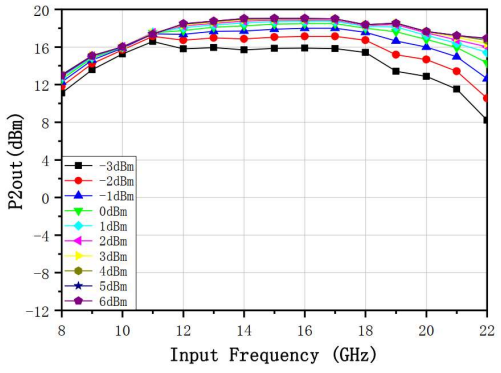
Pout @ Different Temperature



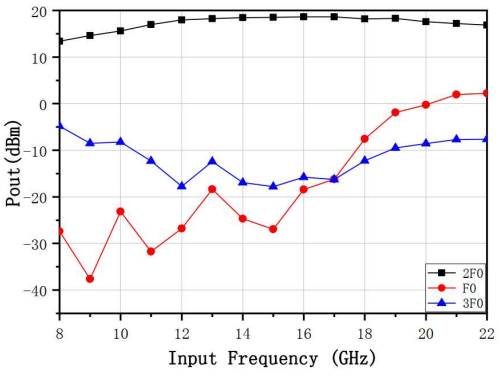
Conversion Gain @ Different Temperature



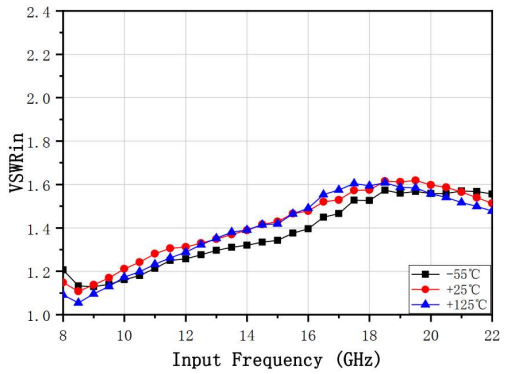
Pout @ Different Pin



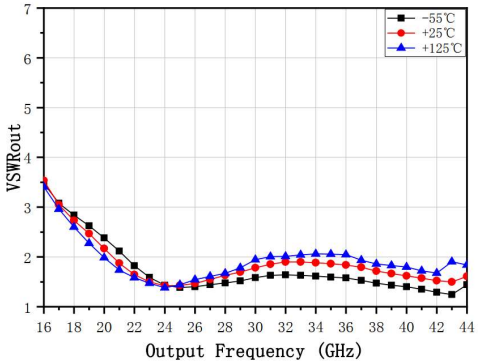
Rejection



VSWRin @ Different Temperature



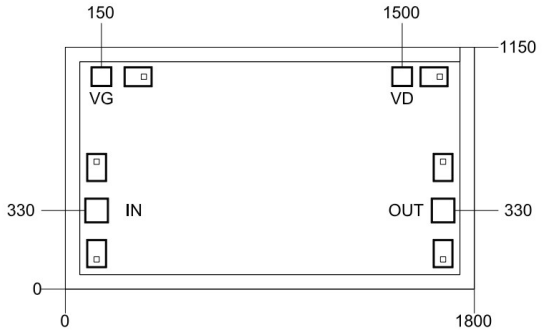
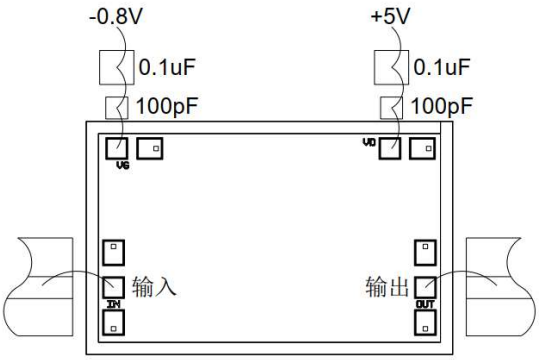
VSWRout @ Different Temperature



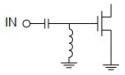
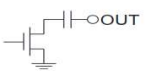
Absolute Max Ratings (TA=25℃)

Symbol	Parameter	Value	Note
Vd	Drain Voltage	6V	
Pin	Input Power	20dBm	
Tch	Channel Temperature	175℃	
Tm	Mounting Temperature	310℃	1min, N2 protection
Tstg	Storage Temperature	-65~150℃	

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.	
VG	Grid bias, external 100pF and 0.1uF capacitor is needed.	
VD	Gate bias, external 100pF and 0.1uF capacitor is needed.