

Performance

- Input Frequency: 3GHz~10GHz
- Output Frequency: 6GHz~20GHz
- Input Power: 15dBm
- Output Power: 2dBm
- Rf1: >35dBc
- Rf3: >38dBc
- Rf4: >14dBc
- VSWRin: 2
- Chip size: 1.3*1.0*0.08mm

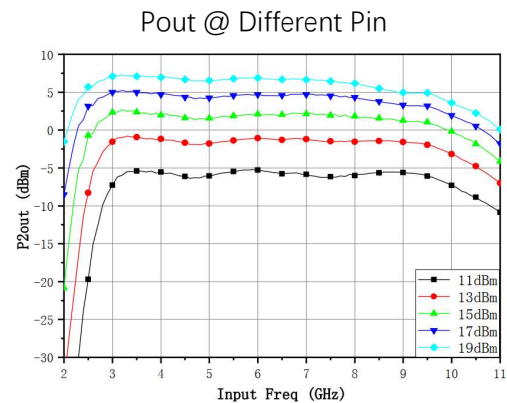
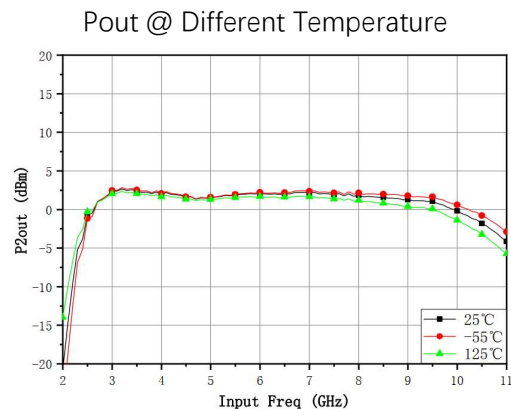
Function Diagram



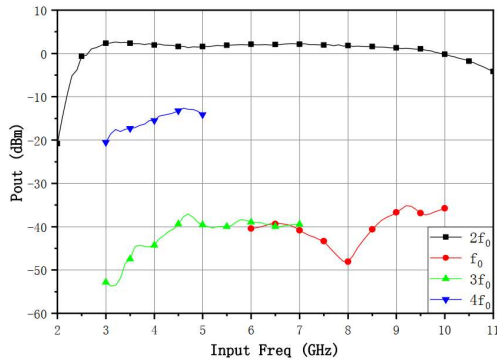
Electrical specifications (TA=+25°C)

Symbol	Parameter	Test Condition	Min	Typical	Max	Unit
Fin	Input Frequency	Pin=15dBm	3~10			GHz
Fout	Output Frequency		6~20			GHz
Pout	Output Power		-	2	-	dBm
Rf1	F1 rejection		35			dBc
Rf3	F3 rejection		38			dBc
Rf4	F4 Rejection		14		-	dBc
VSWRin	Input VSWR			2		
VSWRout	Output VSWR	Fin=3GHz, Pin=15dBm, Fout=6~20GHz		2		
		Fin=6GHz, Pin=15dBm, Fout=6~20GHz		2		
		Fin=10GHz, Pin=15dBm, Fout=6~20GHz		1.3		

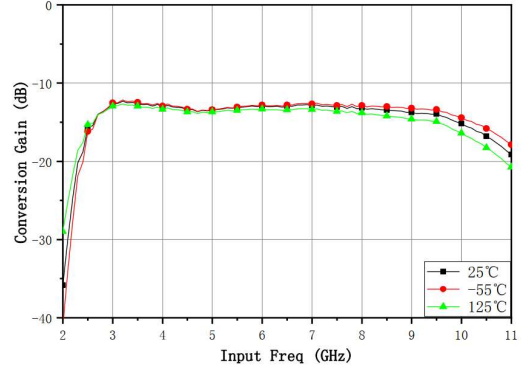
Test Curves (Pin=15dBm)



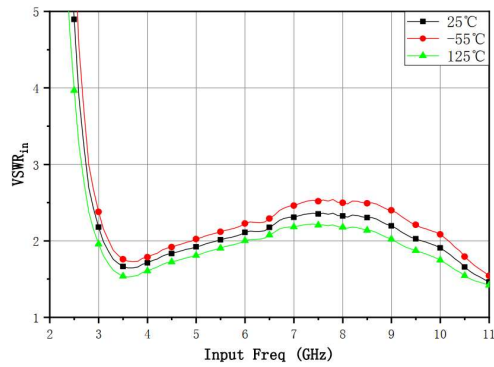
Rejection



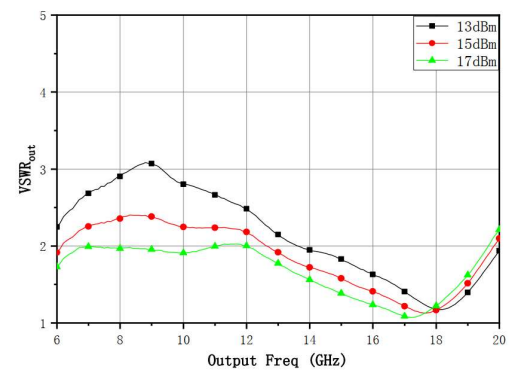
Conversion Gain @ Different temperature



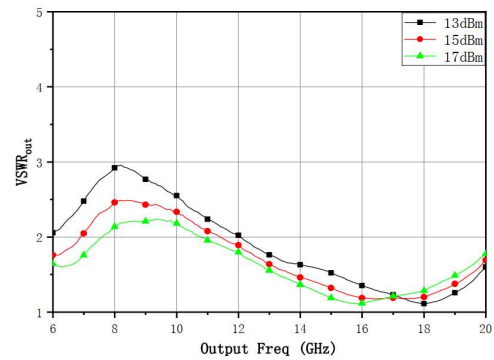
VSWRin @ Different Temperature



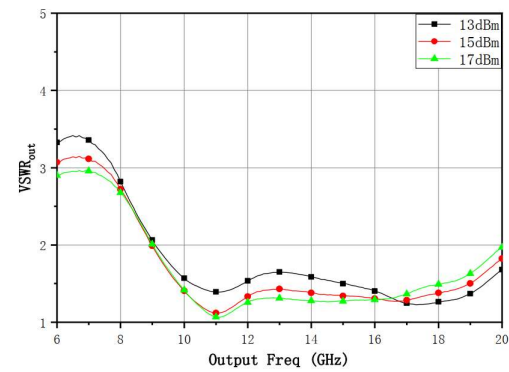
Fin=3GHz VSWRout @ Different Pin



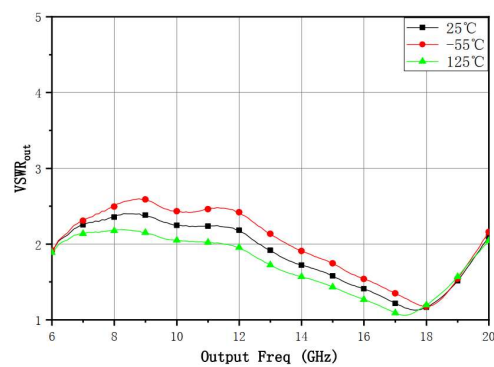
Fin=6GHz VSWRout @ Different Pin



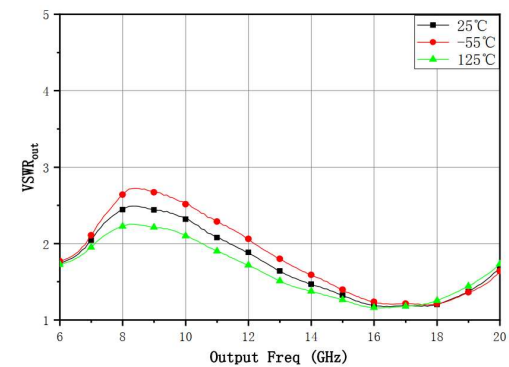
Fin=10GHz VSWRout @ Different Pin



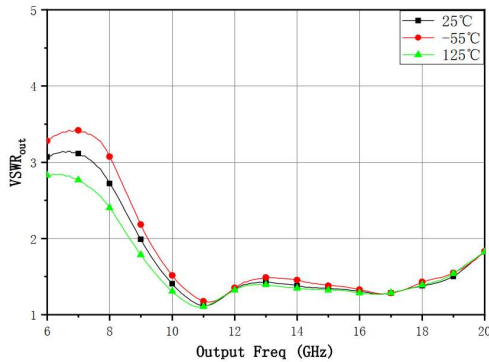
Fin=3GHz VSWRout @ Different Temperature



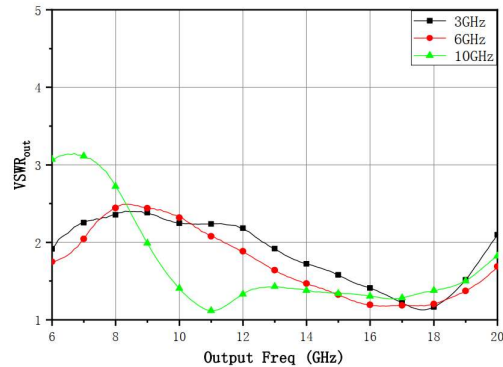
Fin=6GHz VSWRout @ Different Temperature



Fin=10GHz VSWRout @ Different Temperature



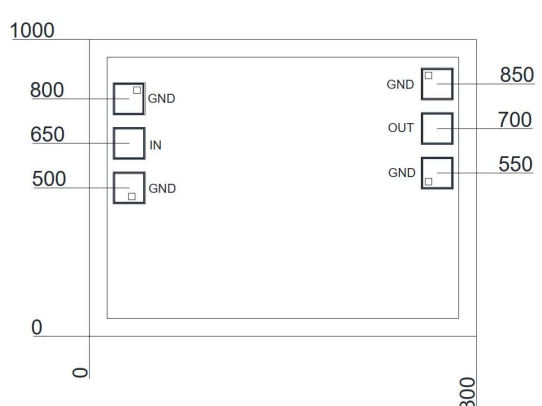
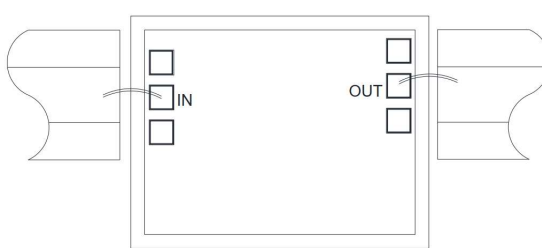
VSWRout @ Different Fin



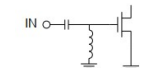
Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Note
Pin	Input Power	33dBm	
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.	