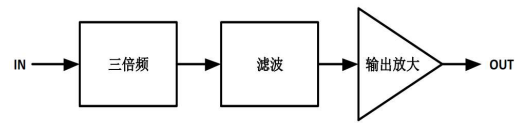


### Performance

- Input Frequency: 25GHz~36.67GHz
- Output Frequency: 75GHz~110GHz
- Input Power: 10dBm
- Output Power: 12dBm
- Consumption: 5V/50mA
- Rf4: 50dBc
- Chip size: 1.3\*1.2\*0.1mm

### Function Diagram

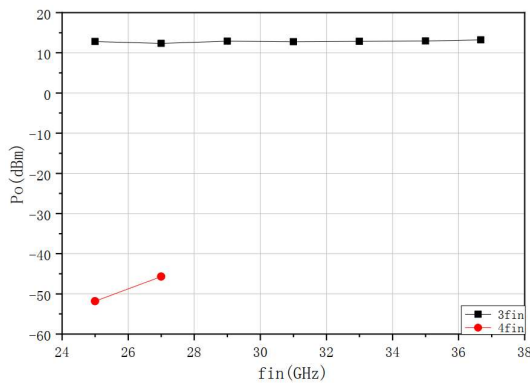


### Electrical specifications (TA=+25°C, Pin=10dBm, Vcc=5V)

Symbol	Parameter	Min	Typical	Max	Unit
Fin	Input Frequency	25~36.67			GHz
Fout	Output Frequency	75~110			GHz
Pout	Output Power	-	12	-	dBm
Rf4	F4 Rejection	-	50	-	dBc

### Test Curves (TA=+25°C, Pin=10dBm, Vcc=5V)

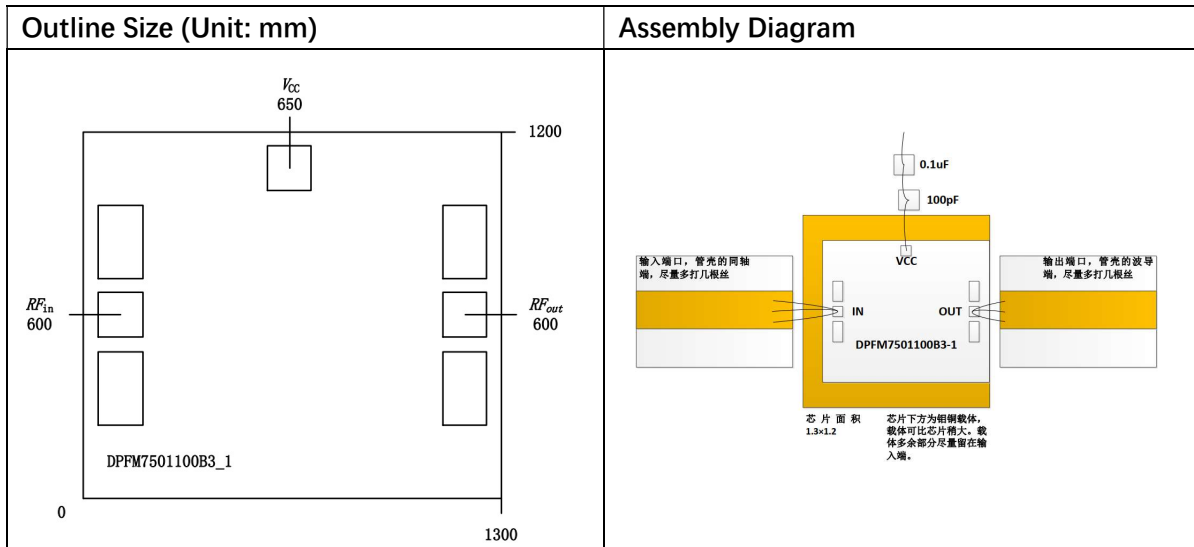
Po vs. Fin





### Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Note
Vcc	Voltage	6V	
Pin	Input Power	16dBm	
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.



### 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.	
Vcc	Collector bias, external 100pF and 0.1uF capacitor is needed.	