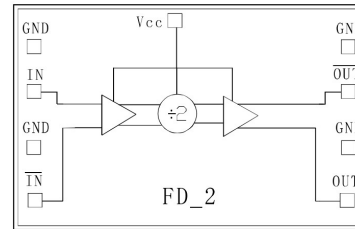
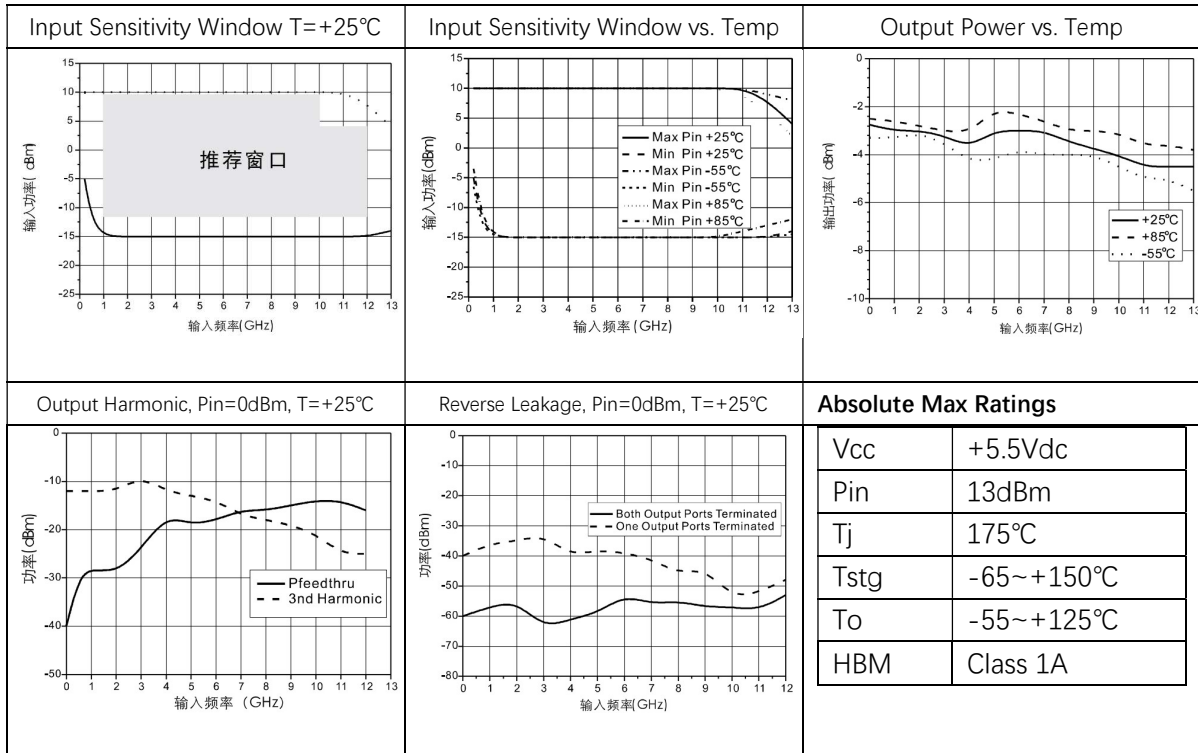


**Performance**

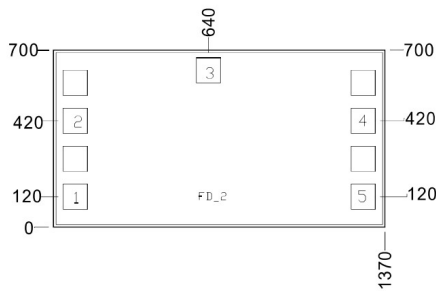
- Frequency: DC-12GHz
- Operating Voltage: +5V
- Output Power: -3dBm
- Chip size: 1.37\*0.7\*0.1mm

**Function Diagram**

**Electrical Specifications (Ta=+25°C, Vcc=+5V)**

Parameter	Operating Condition	Min	Typical	Max	Unit
Max Input Frequency		12	13	-	GHz
Min Input Frequency	Sin-wave input	-	0.2	0.5	GHz
Input Power Range	Fin=1~10GHz	-10	> -12	+10	dBm
	Fin=10~12GHz	-15	> -12	+6	dBm
Output Power	Fin=5GHz	-5	-3	-	dBm
	Fin=12GHz	-7	-4	-	dBm
Reverse Leakage	OUT, $\overline{\text{OUT}}$ , Terminated	-	55	-	dB
SSB Phase noise (100KHz offset)	Pin=0dBm, Fin=4.8GHz	-	-146	-	dBc/Hz
Operating Current		65	80	95	mA

**Test Curves (Die chip testing)**


### Outline Size







### Note:

1. Unit:  $\mu\text{m}$
2. Bottom side is gold plated
3. Bottom side is GND
4. Bonding pads is gold plated, size:  $100 \times 100 (\mu\text{m})$
5. Don't bonding on thru holes
6. Tolerance:  $\pm 50 \mu\text{m}$

### Typical Operating Current

Vcc (V)	Icc (mA)
4.75	70
5.0	80
5.25	90

### Bonding Pads Definition

Number	Symbol	Description	Equivalent Circuits
1	$\overline{\text{IN}}$	RF input (external block capacitor needed) 180° phase different with Pad 2.	
2	IN	RF input (external block capacitor needed)	
3	Vcc	Current +5V	-
4	$\overline{\text{OUT}}$	Frequency divider signal output (external block capacitor needed) 180° phase different with Pad 5.	
5	OUT	Frequency divider signal output (external block capacitor needed)	

### Assembly

