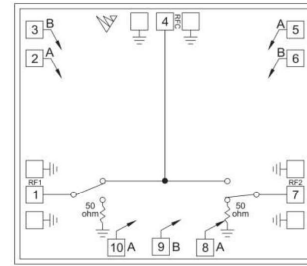


Performance

- Frequency: DC-20GHz
- Isolation: >45dB@20GHz
- Insertion loss: 1.8dB@20GHz
- Chip size: 1.3*0.85*0.1mm

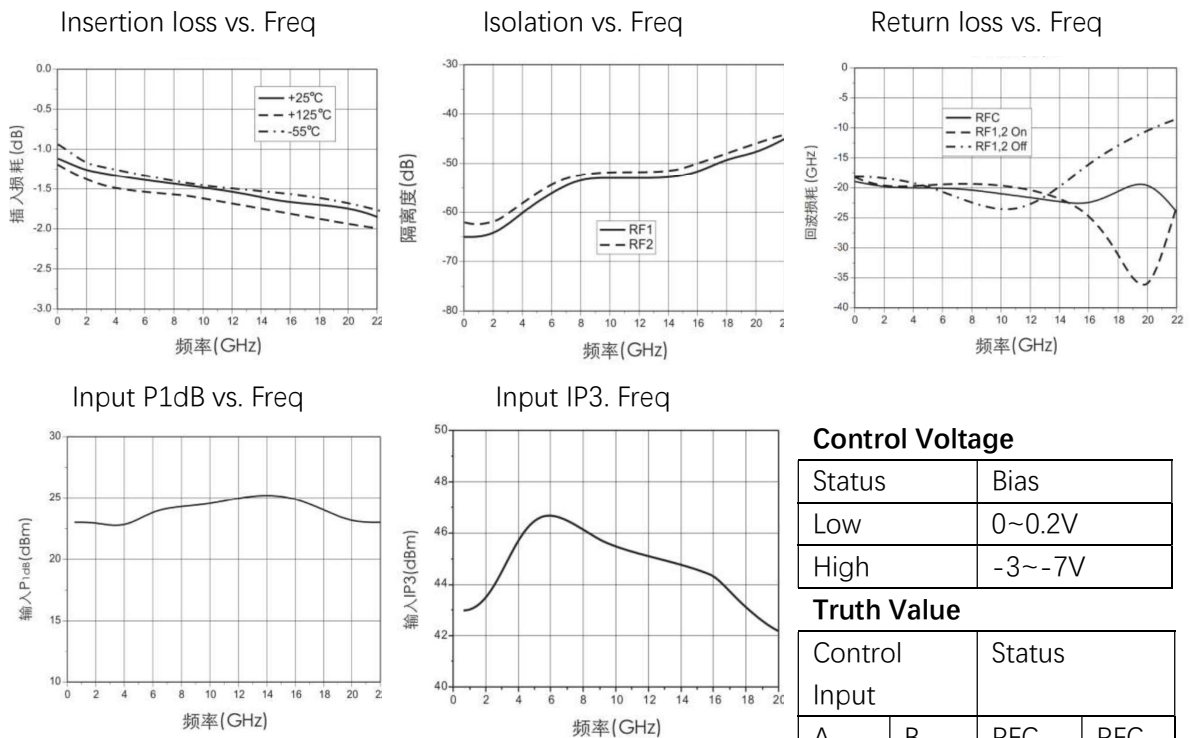
Function Diagram



Electrical Specifications (Ta=+25°C, 0/-5V control, 50Ω system)

Parameter	Test Freq	Min	Typical	Max	Unit
Insertion Loss	DC-20GHz	-	1.6	2.0	dB
Isolation	DC-20GHz	40	45	-	dB
RFC (ON)	DC-20GHz	-	18	-	dB
RF1,RF2(OFF)	DC-20GHz	-	15	-	dB
Input P1dB	0.5-20GHz	20	25	-	dBm
Input IP3	0.5-20GHz	40	45	-	dBm
Switch time	-	-	5	-	ns

Test Curves (Two pieces of Φ25um, 300um length bonding lines applied)



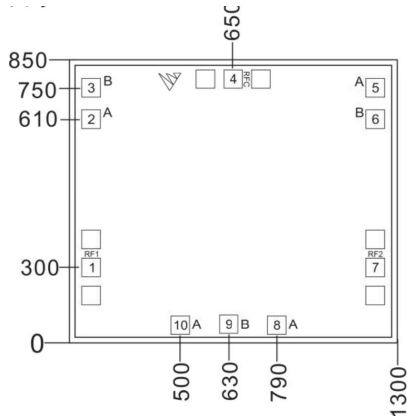
Control Voltage

Status	Bias
Low	0~0.2V
High	-3~-7V

Truth Value

Control		Status	
Input			
A	B	RFC-	RFC-
		RF1	RF2
High	Low	ON	OFF
Low	High	OFF	ON

Outline Size



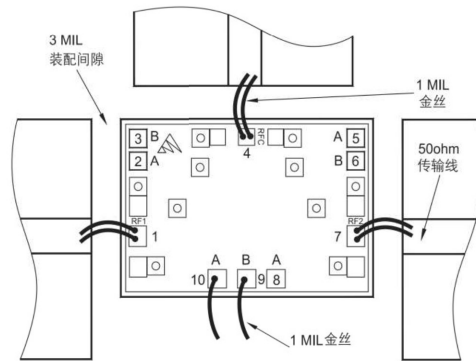
Note:

1. Unit: um
2. Bottom side is gold plated
3. Bottom side is GND
4. Bonding pads is gold plated, size:
1,4,7: 80um*100um
2,3,5,6: 90um*90um; 8-10: 100um*90um
5. Don't bonding on thru holds
6. Tolerance: ±50um

Bonding Pads Definition

Number	Symbol	Description
4	RFC	RF input, 50ohm, external block capacitor needed
1,7	RF1,RF2	RF input, 50ohm, external block capacitor needed
3,6,9	CTRLB	Control port
2,5,8,10	CTRLA	Control port
-	GND	Bottom must be GND

Application (2 of Φ25um, 300um length bonding lines applied)



Absolute Max Ratings

Input Power (Vctl=-5V)	+27dBm
Control voltage range (A,B)	+0.5~-7.5V
Junction Tem(°C)	175
Static Class	Class 1A
Storage Temperature	-65 ~ +150°C
Operating Temperature	-55 ~ +125°C

Note: For high power application, assemble with Eutectic sintering.

