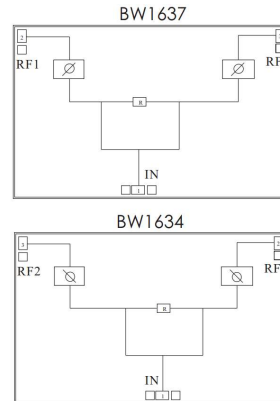


**Performance**

- Frequency: 1.2~2.4GHz
- Insertion loss: 3.0dB
- Chip size: 3.20\*2.00\*0.1mm

**Function Diagram**



**Electrical Specifications (Ta=+25°C, 50Ω system)**

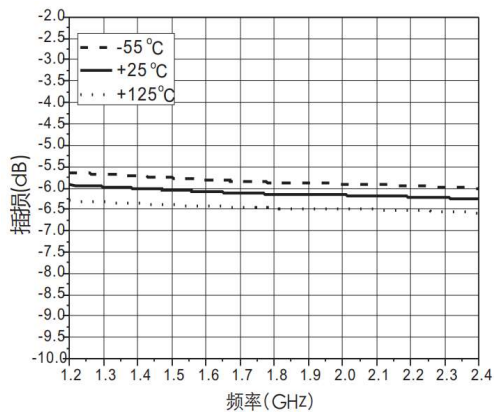
Parameter	Min	Typical	Max	Unit
Frequency Range	1.2~2.4			GHz
Insertion Loss	-	3.0	3.5	dB
Phase shift value	-92	-90	-88	Deg
Insertion Loss Ripple	-	±0.1	±0.3	dB
Isolation	-	22	20	dB
Input Return Loss	15	20	-	dB
Output Return Loss	17	25	-	dB

**Absolute Max Ratings**

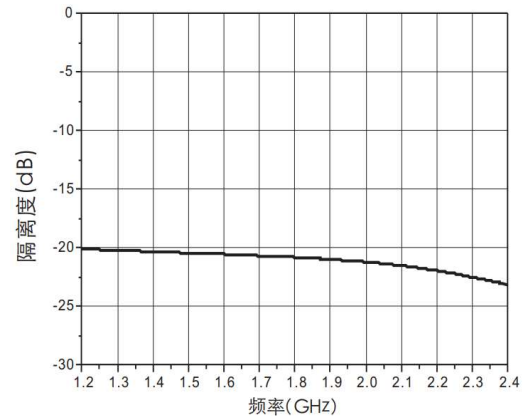
Parameter	Value
Input Signal Power	+37dBm
Storage Temperature	-65~150°C
Operating Temperature	-55~125°C
Junction Temperature	175°C
Static protection Grade (HBM)	Class 1B

**Test Curves**

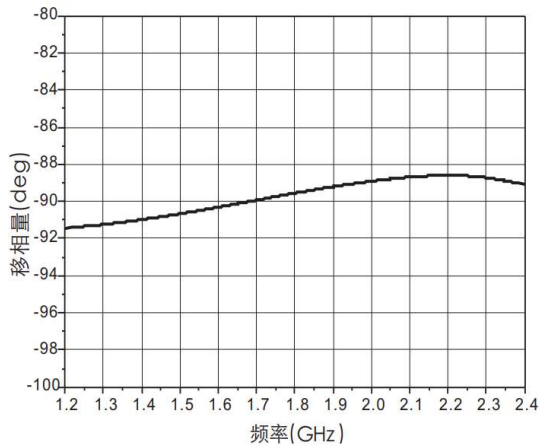
Insertion loss vs. Freq



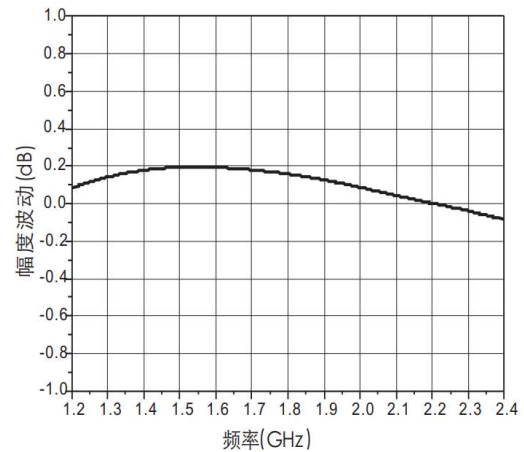
Isolation vs. Freq



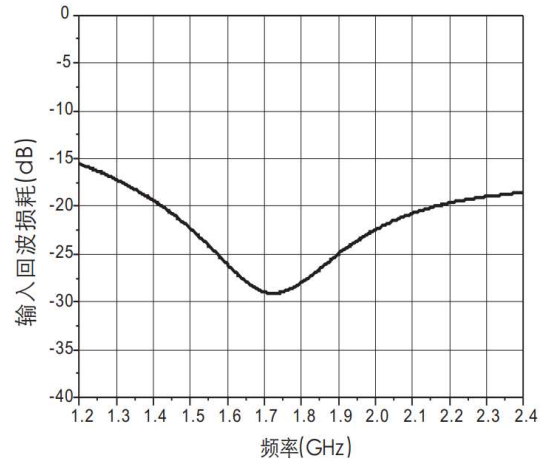
Phase shift Value vs. Freq



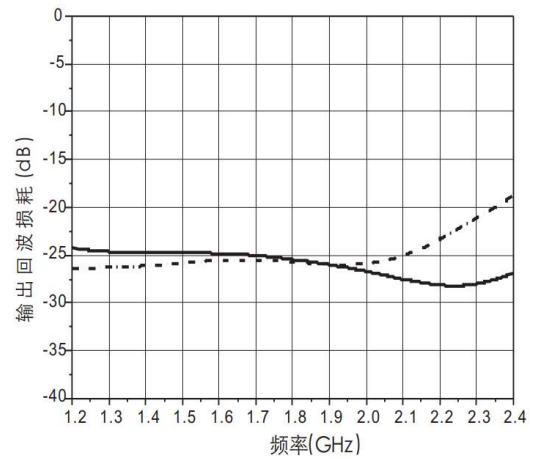
Amplitude Ripple vs. Freq



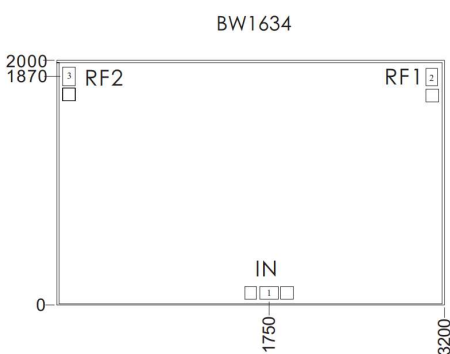
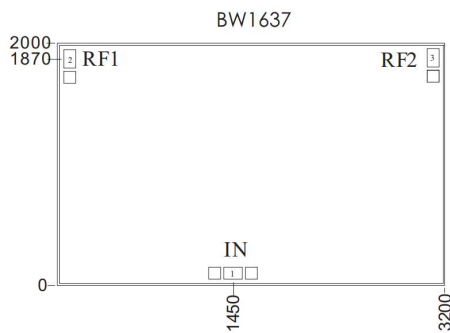
Input Return Loss vs. Freq



Output Return Loss vs. Freq



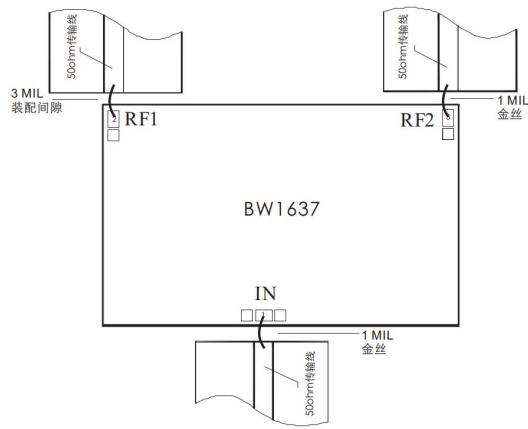
Outline Size



Note:

1. Unit:  $\mu\text{m}$
2. Bottom side is gold plated
3. Bottom side is GND
4. Bonding pads is gold plated  
Pads size:  $150 \times 100 \mu\text{m}$
5. Don't bonding on thru holds
6. Tolerance:  $\pm 50 \mu\text{m}$

**Assembly Diagram**



**Bonding Definition**

No.	Symbol	Description
1	IN	RF input, 50ohm
2	RF1	RF Output (REF Phase), 50ohm
3	RF2	RF Output, 50ohm
-	GND	Bottom must be grounded