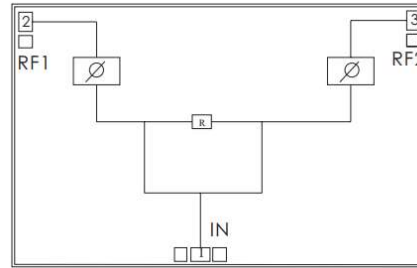


Performance

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

Function Diagram

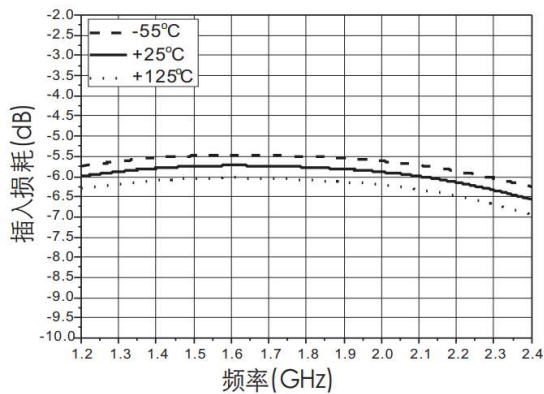


Electrical Specifications (Ta=+25°C, 50Ω system)

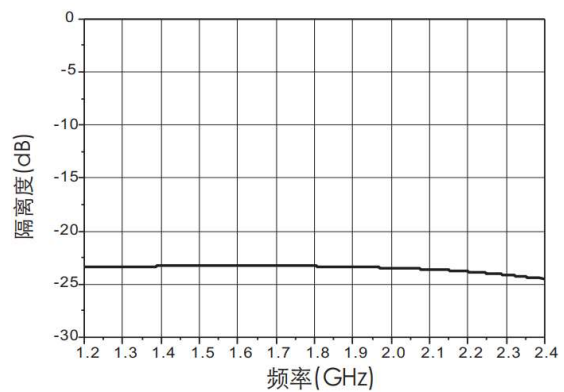
Parameter	Min	Typical	Max	Unit
Frequency Range	1.2~2.4			GHz
Insertion Loss	-	3.0	3.5	dB
Phase shift value	-183	-180	-177	Deg
Insertion Loss Ripple	-	±0.7	±1	dB
Isolation	-	22	20	dB
Input Return Loss	17	20	-	dB
Output Return Loss	15	25	-	dB

Test Curves

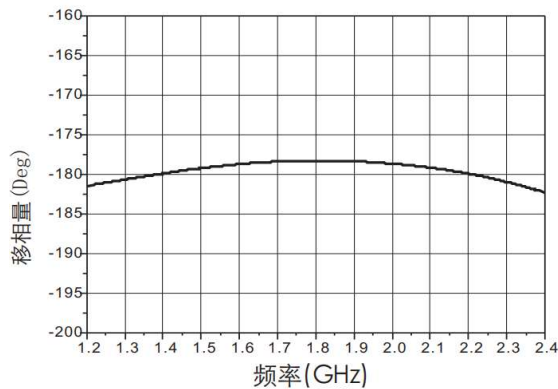
Insertion loss vs. Freq



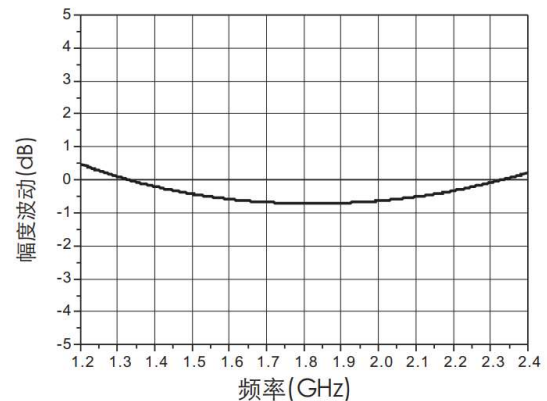
Isolation vs. Freq



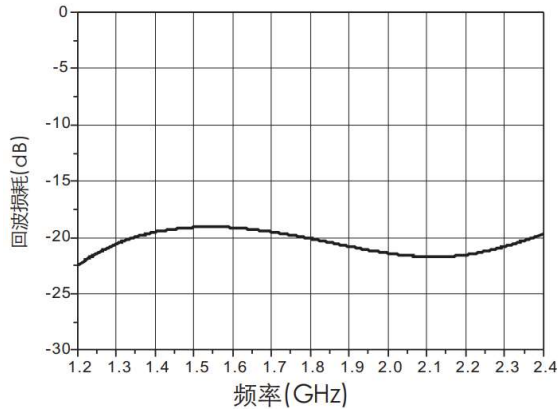
Phase shift Value vs. Freq



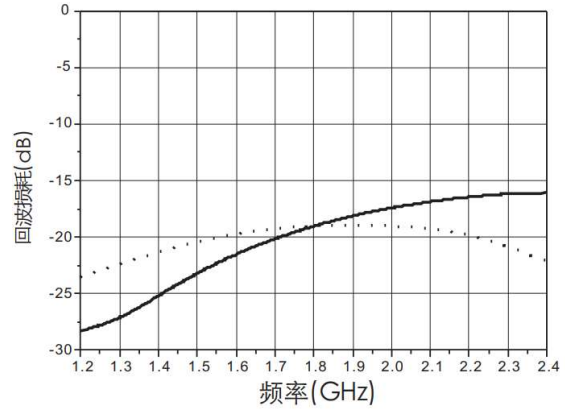
Amplitude Ripple vs. Freq



Input Return Loss vs. Freq



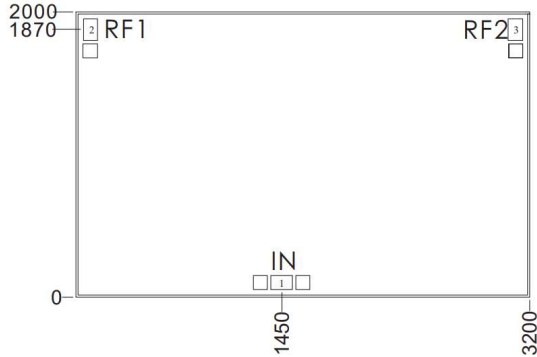
Output Return Loss vs. Freq



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

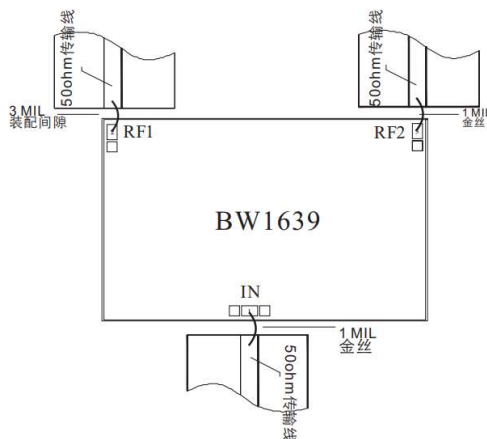
Outline Size



Note:

1. Unit: μm
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