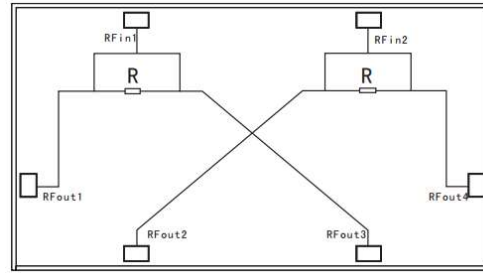


Performance

- Frequency: 40~50GHz
- Insertion loss: 0.7dB
- Chip size: 2.9*1.7*0.1mm

Function Diagram

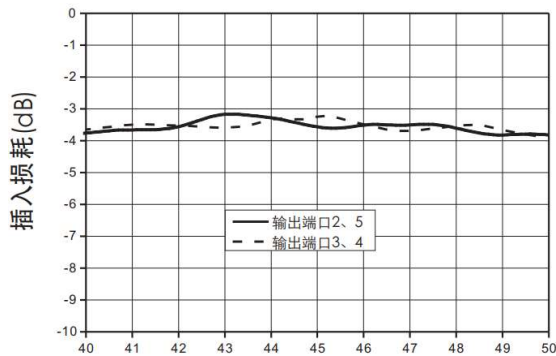


Electrical Specifications (Ta=+25°C, 50Ω system)

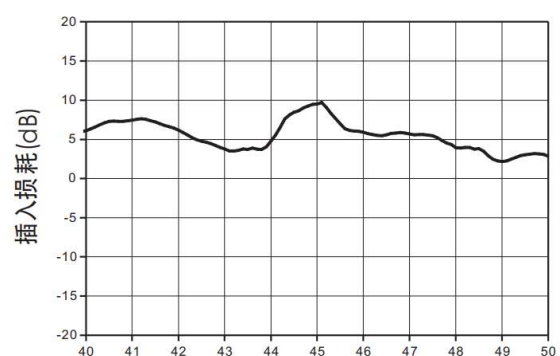
Parameter	Min	Typical	Max	Unit
Frequency Range	40~50			GHz
Insertion Loss	-	3.5	-	dB
Insertion Loss Ripple	-	±0.2	-	dB
Phase Balance	-	8	-	°
Isolation	-	20	-	dB
Input Return Loss	17	15	-	dB
Output Return Loss	15	20	-	dB

Test Curves

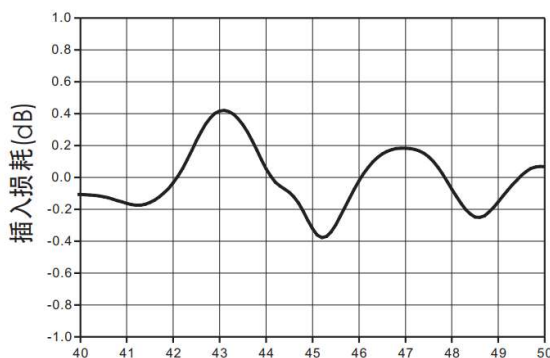
Insertion loss vs. Freq



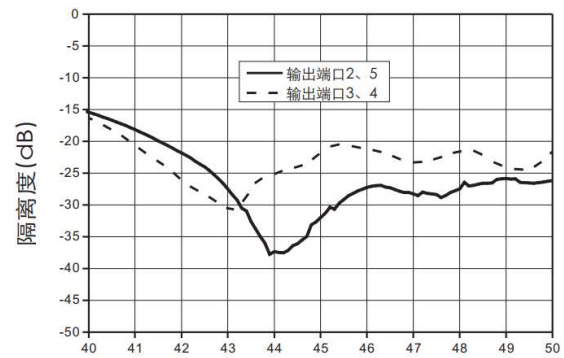
Phase Balance vs. Freq

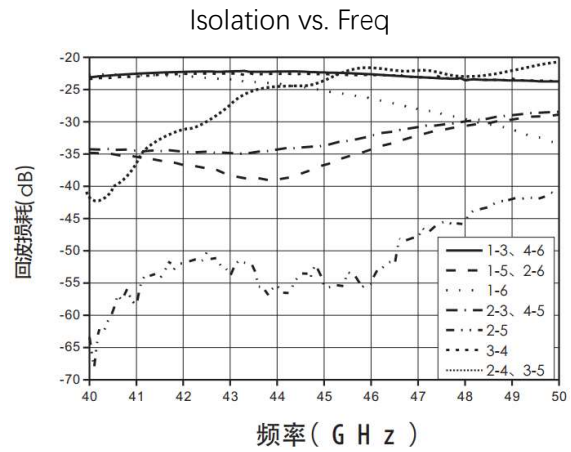
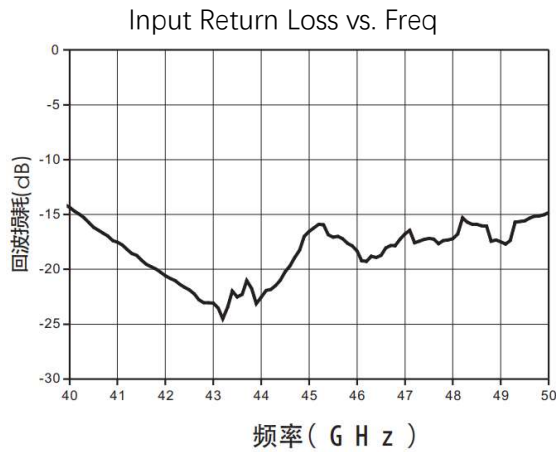


Insertion Loss Ripple vs. Freq



Output Return Loss vs. Freq

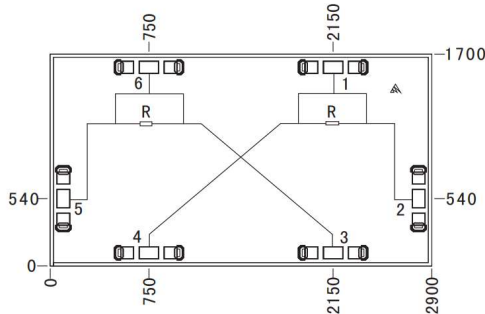




Absolute Max Ratings

Parameter	Value
Input Signal Power	+33dBm
Storage Temperature	-65~150°C
Operating Temperature	-55~125°C
Junction Temperature	175°C
Static protection Grade (HBM)	Class 1A

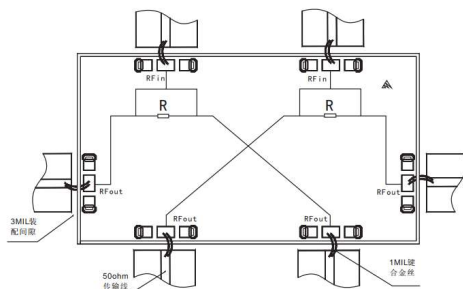
Outline Size



Note:

1. Unit: um
2. Bottom side is gold plated
3. Bottom side is GND
4. Bonding pads is gold plated
Pads size: 100*150 um
5. Don't bonding on thru holds
6. Tolerance: ±50um

Assembly Diagram



Bonding Definition

No.	Symbol	Description
1,6	RFIn2,RFIn1	RF input, 50ohm
2,3,4,5	RFout4, RFout3, RFout2, RFout1,	RF Output, 50ohm
3	RF2	RF Output, 50ohm
-	GND	Bottom must be grounded