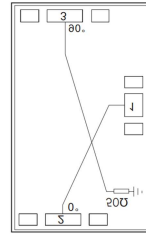


Performance

- Frequency: 22~32GHz
- Insertion loss: 1.5dB
- Chip size: 1.95*0.8*0.1mm

Function Diagram

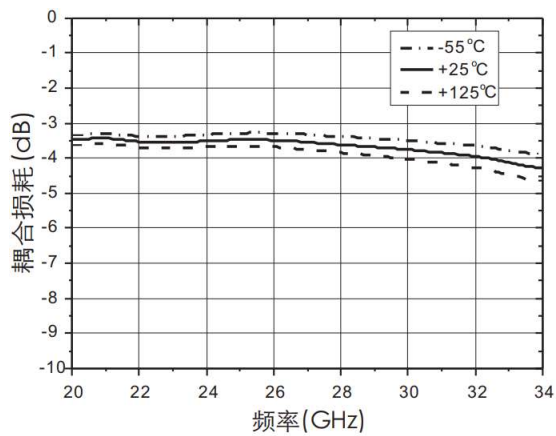


Electrical Specifications (Ta=+25°C, 50Ω system)

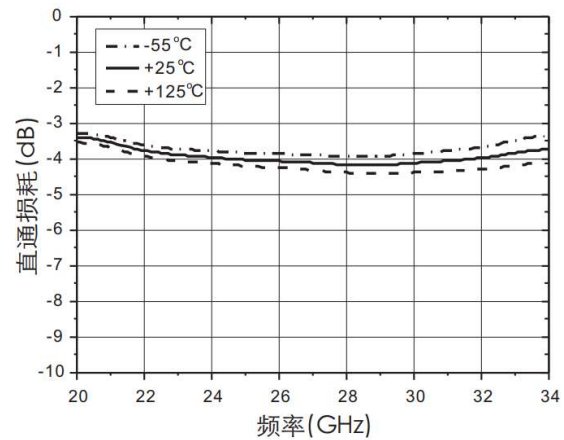
Parameter	Min	Typical	Max	Unit
Frequency Range	22~32			GHz
Insertion Loss	-	1.5	-	dB
Input Return loss	20	21	-	dB
Output Return loss	17	20	-	dB
Isolation	19	20	-	dB
Amplitude Balance	-	±0.5	-	dB
Phase Balance	-	±2	-	Deg

Test Curves (Die chip + Bonding line test)

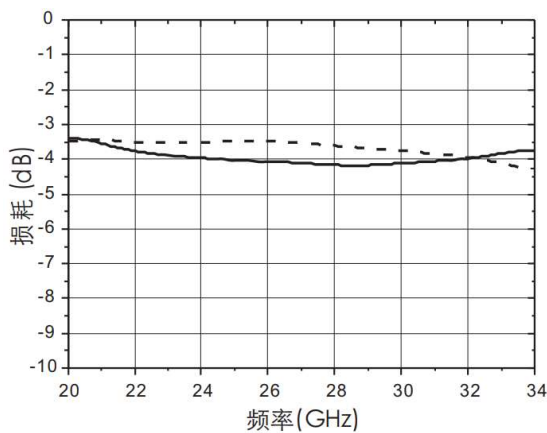
Insertion loss vs. Freq



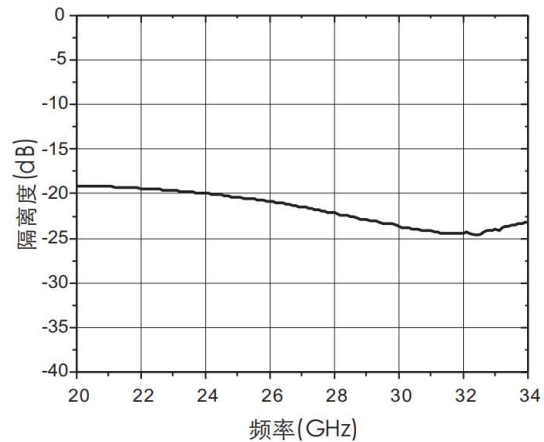
Insertion loss vs. Freq



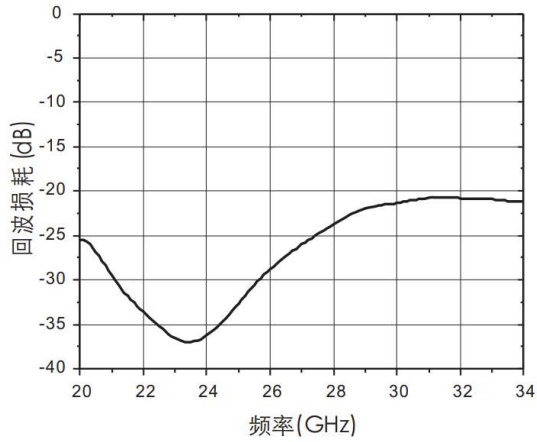
Insertion loss vs. Freq



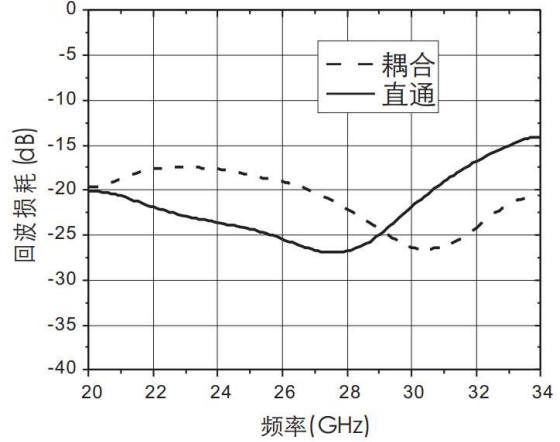
Isolation vs. Freq



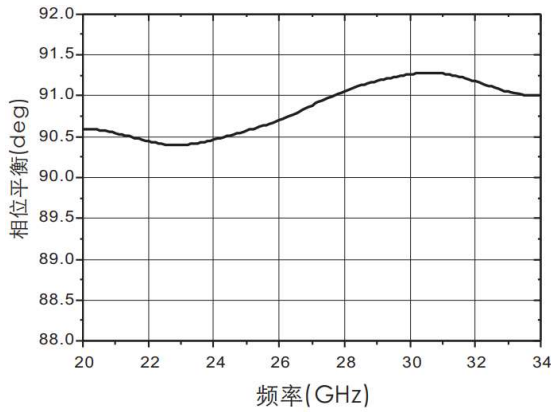
Input Return Loss vs. Freq



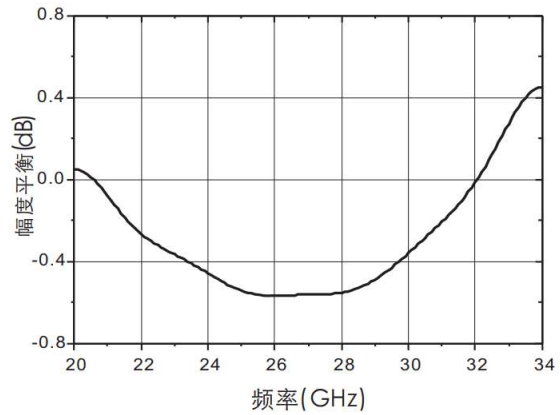
Output Return Loss vs. Freq



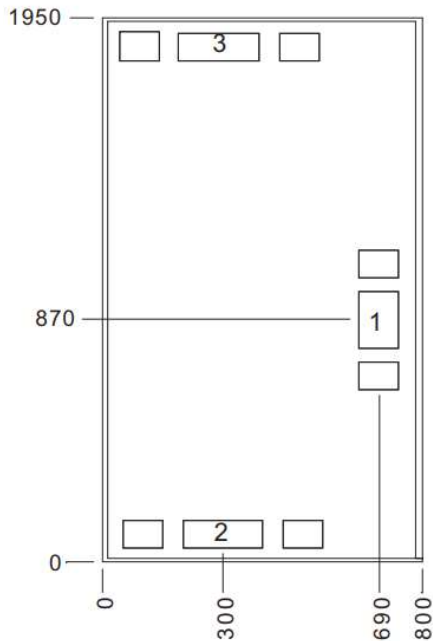
Phase Balance vs. Freq



Amplitude Balance vs. Freq



Outline Size



Note:

1. Unit: μm
2. Bottom side is gold plated
3. Bottom side is GND
4. Bonding pads is gold plated, size: $100 \times 200(\mu\text{m})$
5. Don't bonding on thru holds
6. Tolerance: $\pm 50\mu\text{m}$

Bonding Pads Definition

Number	Symbol	Description
1	RFin	RF input port, 50ohm
2	RFC	Coupling output port
3	RFOUT	Thru output port
-	GND	Bottom must be grounded

Absolute Max Ratings

Max Input Power	+33dBm
Static Class	Class 1B
Storage Temperature	-65 ~ +150°C
Operating Temperature	-55 ~ +125°C

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



Application

