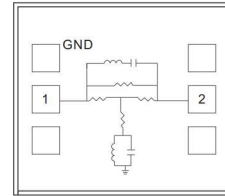


### Performance

- Frequency: 8~12GHz
- Insertion Loss:  $\leq 1.0\text{dB}$
- Attenuation: 4dB
- Impedance:  $50\Omega$
- Chip size:  $0.8 \times 0.7 \times 0.1\text{ mm}$

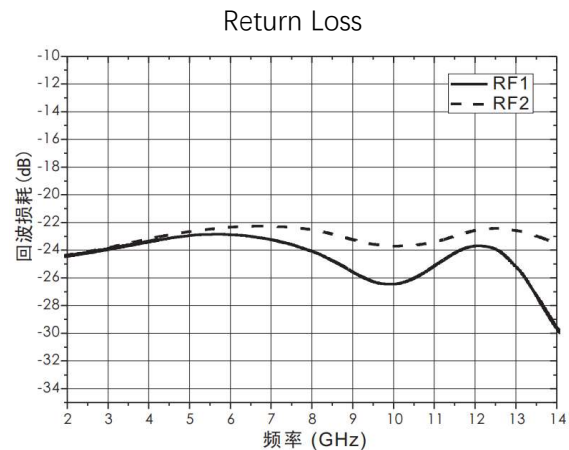
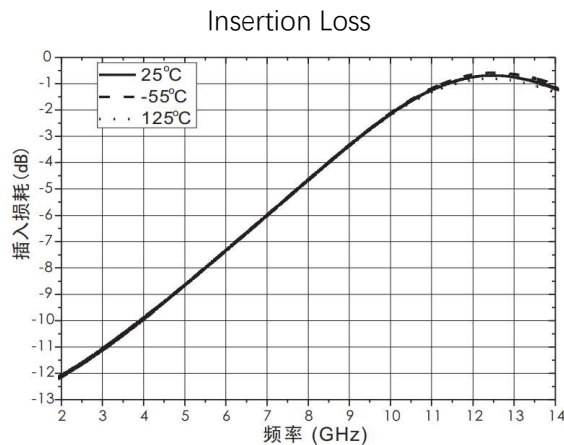
### Function Diagram



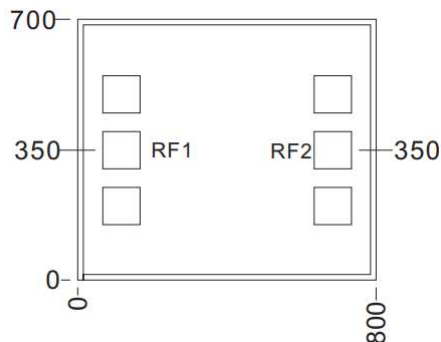
### Electrical Specifications (TA=+25°C, 50Ω system)

| Parameter          | Min | Typical | Max | Unit |
|--------------------|-----|---------|-----|------|
| Frequency Range    |     | 8~12    |     | GHz  |
| Insertion Loss     | -   | 0.8     | 1.1 | dB   |
| Attenuation        | -   | 4       | -   | dB   |
| Input Return Loss  | 22  | 24      | -   | dB   |
| Output Return Loss | 21  | 23      | -   | dB   |

### Test Curves (Die chip test)



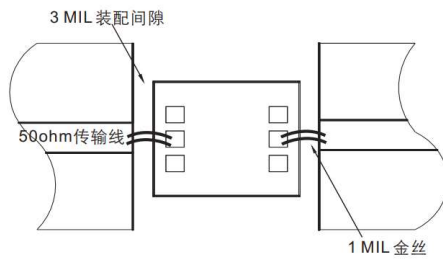
### Outline Size



### 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:  $100 \times 100\ \mu\text{m}$
5. Don't bonding on thru holes
6. Tolerance:  $\pm 50\ \mu\text{m}$

### Assembly Drawing



### Bonding Pads Definition

| Number  | Symbol   | Description                          |
|---------|----------|--------------------------------------|
| RF1、RF2 | RF Ports | RF ports, 50 ohm impedance           |
|         | GND      | Bottom side of chip must be grounded |

### Absolute Max. Ratings

|                         |           |
|-------------------------|-----------|
| Static Protection Grade | Class 1A  |
| Input Power             | 30 dBm    |
| Storage Temperature     | -65~150°C |
| Operating Temperature   | -55~125°C |



**ELECTROSTATIC SENSITIVE DEVICE**  
**OBSERVE HANDLING PRECAUTIONS**