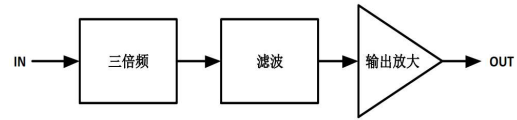


Performance

- Input Frequency: 7.33GHz~15GHz
- Output Frequency: 22GHz~45GHz
- Input Power: 0dBm
- Output Power: 2dBm
- Consumption: 5V/25mA
- Rf1: 40dBc
- Rf2: 35dBc
- Rf4: 40dBc
- Chip size: 1.85*0.65*0.1mm

Function Diagram

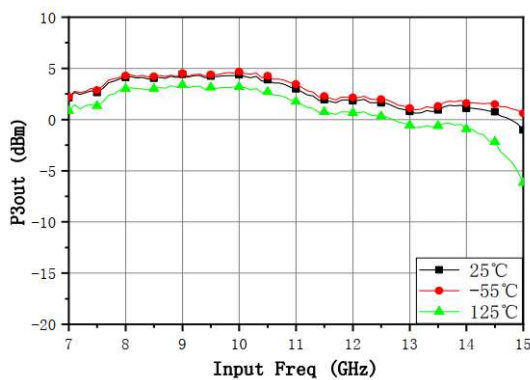


Electrical specifications (TA=+25°C, Pin=0dBm, Vcc=5V)

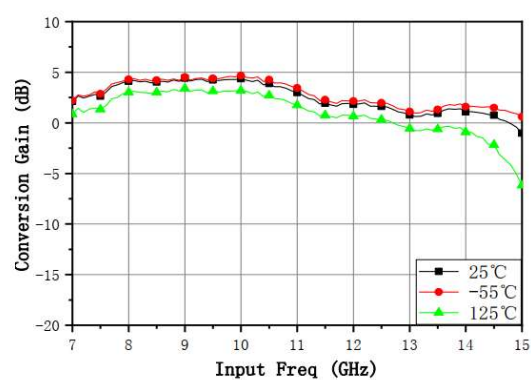
| Symbol | Parameter | Min | Typical | Max | Unit |
|---------|------------------|---------|---------|-----|------|
| Fin | Input Frequency | 7.33~15 | | | GHz |
| Fout | Output Frequency | 22~45 | | | GHz |
| Pout | Output Power | - | 2 | - | dBm |
| Rf1 | F1 Rejection | - | 40 | - | dBc |
| Rf2 | F2 Rejection | - | 35 | - | dBc |
| Rf4 | F4 Rejection | - | 40 | - | dBc |
| VSWRin | Input VSWR | - | 2 | - | |
| VSWRout | Output VSWR | - | 2 | - | |

Test Curves (Vcc=5V, Pin=0dBm)

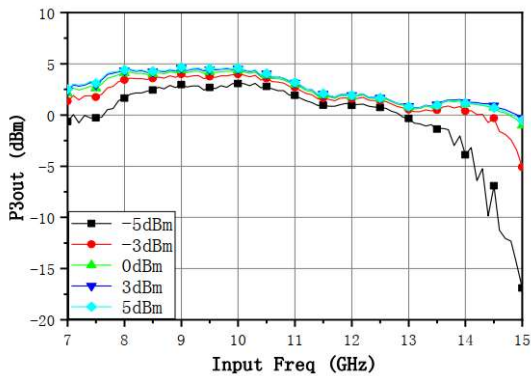
Output Power



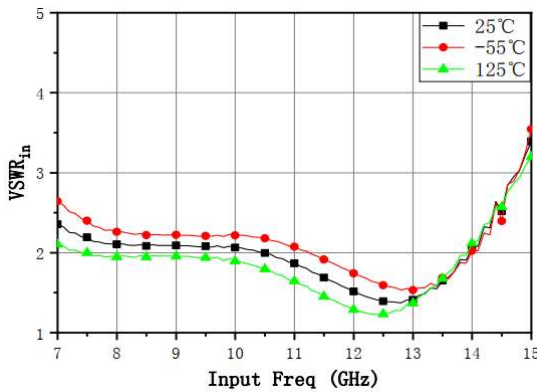
Conversion Gain



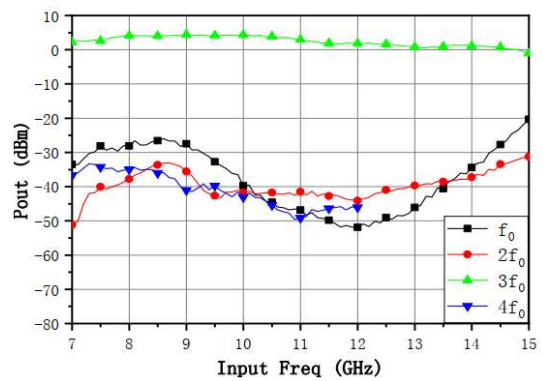
Output Power @ Input Power sweep curve



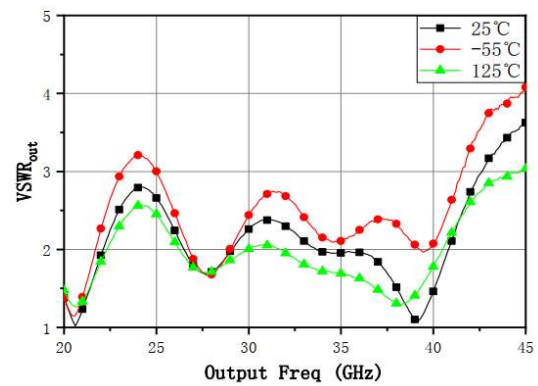
Input VSWR



Rejection at room temperature



Output VSWR

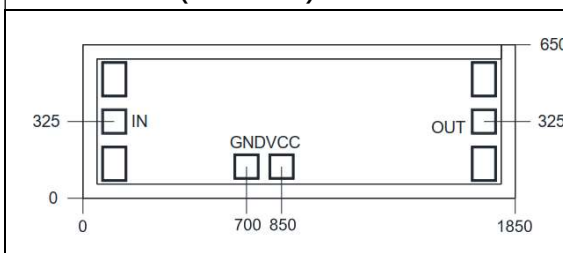


Absolute Max Ratings (TA=25°C)

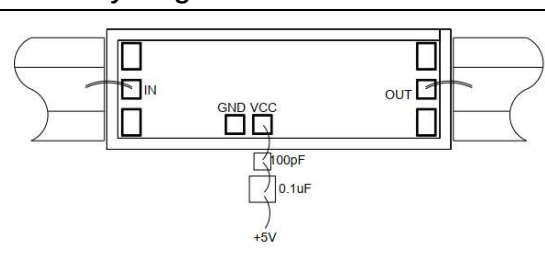
| Symbol | Parameter | Value | Note |
|--------|----------------------|-----------|---------------------|
| Vcc | Voltage | 6V | |
| Pin | Input Power | 10dBm | |
| Tch | Channel Temperature | 175°C | |
| Tm | Mounting Temperature | 310°C | 1min, N2 protection |
| Tstg | Storage Temperature | -65~150°C | |

Exceeding any one or combination of these limits may cause permanent damage.




Outline Size (Unit: mm)



Assembly Diagram



Pads Definition

| Pad | Description | Equivalent |
|-----|---|---|
| IN | RF signal input, connect to 50ohm system, no block capacitor needed. |  |
| OUT | RF signal output, connect to 50ohm system, no block capacitor needed. |  |
| Vcc | Collector bias, external 100pF and 0.1uF capacitor is needed. |  |