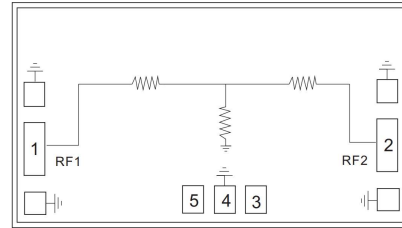


Performance

- Frequency: DC~20GHz
- Insertion loss: 2dB @ 20GHz
- Max. Attenuation: 34dB
- Handling Power: +25dBm
- Chip size: 1.9*0.9*0.1mm

Function Diagram

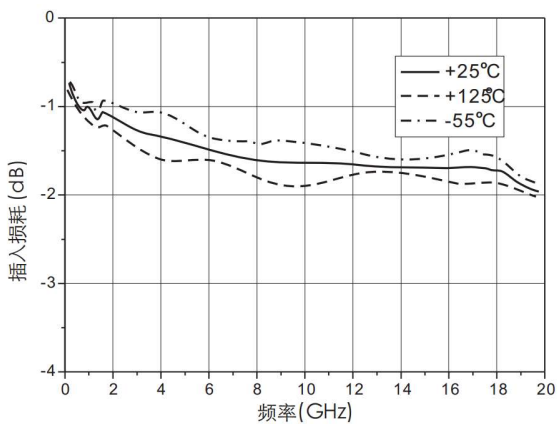


Electrical Specifications (Ta=+25°C, 50Ω system)

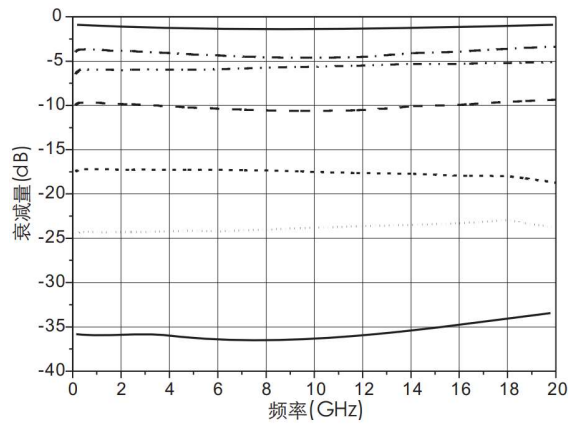
Parameter	Min	Typical	Max	Unit
Frequency Range	DC~20			GHz
Insertion Loss	0.8	2	-	dB
Attenuation	0	-	34	dB
Return loss (RF1、RF2)	-	15	-	dB
Input P1dB	-	20 (5GHz) 18 (15GHz)	-	dBm
Input IP3 (Pin=0dBm)	-	30	-	dBm

Test Curves (Die chip + Bonding line test)

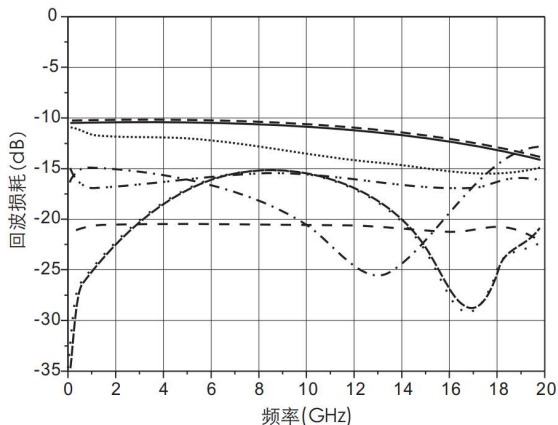
Insertion Loss vs. Freq



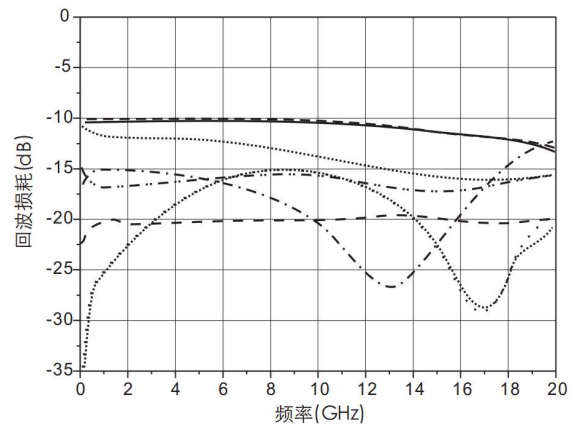
Attenuation vs. Freq



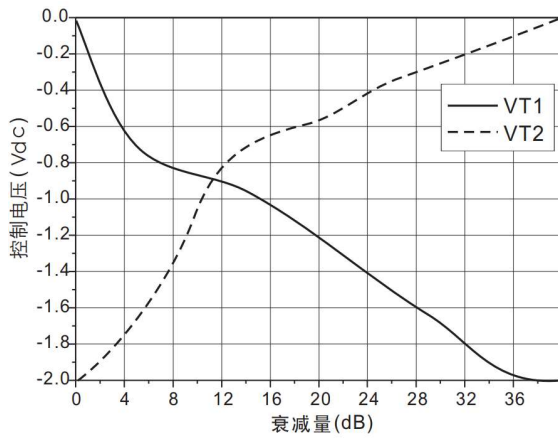
Input Return Loss vs. Freq



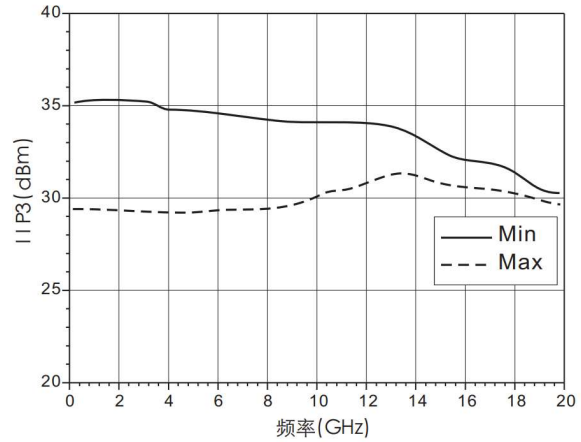
Output Return loss vs. Freq



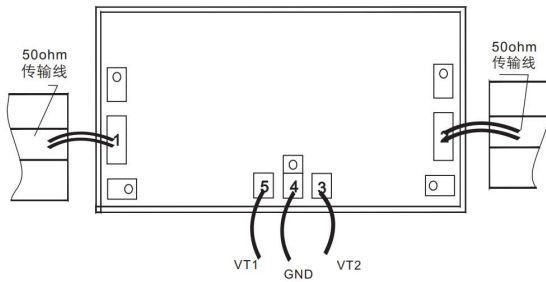
Attenuation vs. Control voltage @ 10GHz



Input IP3 @ Pin=0dBm

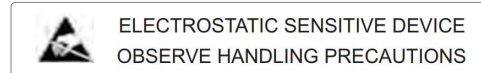


Application

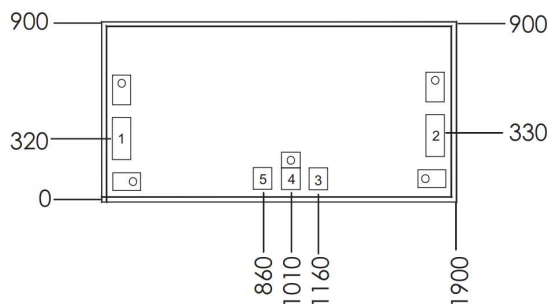


Absolute Rating

RF Input Power	+25dBm
Storage Temperature	-65~+150°C
Operating Temperature	-55~+125°C
Static Protection (HBM)	Class 1A



Outline Size



Note:

- Unit: μm
- Bottom side is gold plated
- Bottom side is GND
- Bonding pads is gold plated, Pad size: $200 \times 100(\mu\text{m})$, $100 \times 100(\mu\text{m})$
- Don't bonding on thru holds
- Tolerance: $\pm 50\mu\text{m}$

Bonding Pads Definition

Number	Symbol	Description
1、2	RF1、RF2	RF ports, 50ohm
3	VT2	Control port
5	VT1	Control port
4	GND	Can be suspended