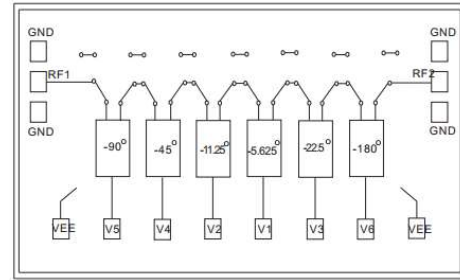


Performance

- Frequency: 1.6~3.2GHz
- Driver integrated
- Insertion loss: 10dB
- Phase shift accuracy (RMS): 1.5°
- Amplitude Ripple: ± 0.5 dB
- Chip size: 5.0*3.2*0.1mm

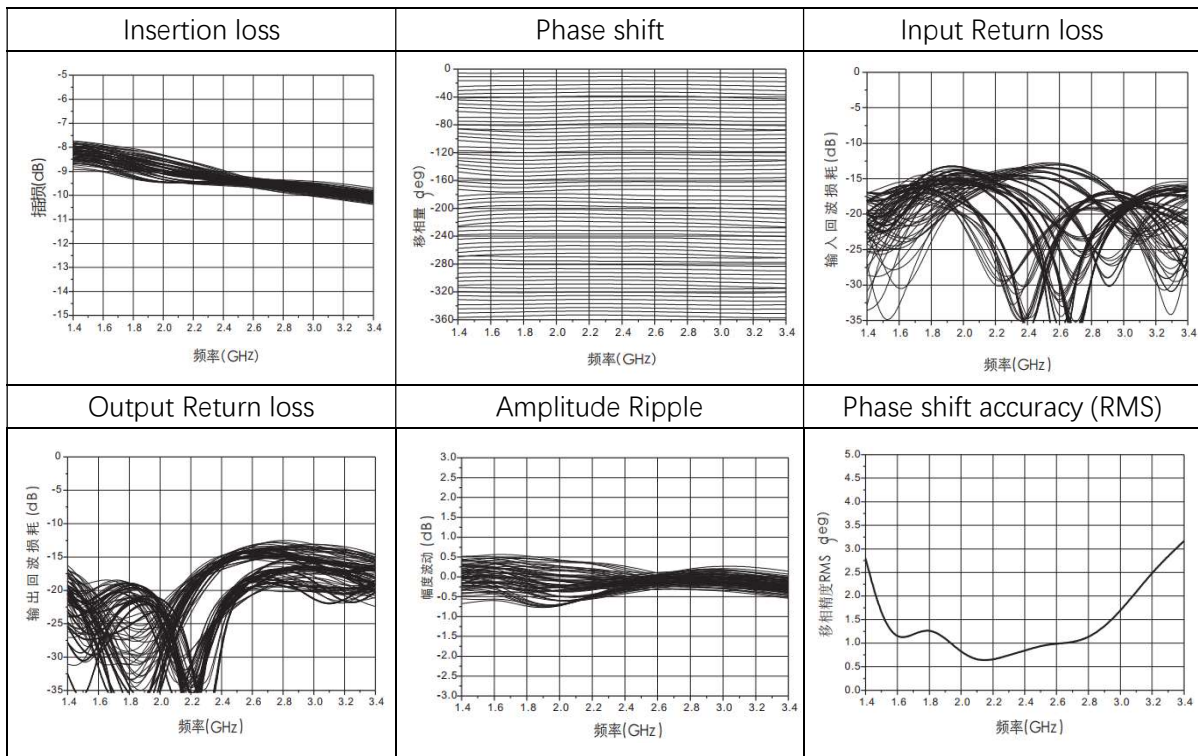
Function Diagram



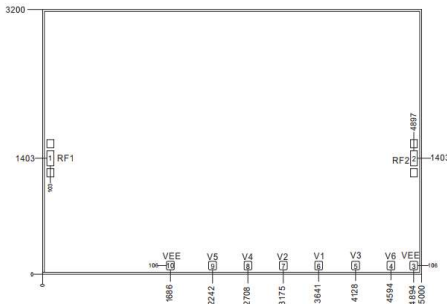
Electrical Specifications (Ta=+25°C, 0/+5V control, 50Ω system, VEE=-5V)

Parameter	Test Frequency	Min	Typical	Max	Unit
Insertion Loss	1.6~3.2GHz	-	10	10.5	dB
Amplitude Ripple	1.6~3.2GHz	-	± 0.5	± 0.8	dB
Phase shift accuracy (RMS)	1.6~3.2GHz	-	1.5	2.5	deg
Return loss (RF1, RF2)	1.6~3.2GHz	-	15	-	dB
Input P1dB	1.6~3.2GHz	-	21	-	dBm
Input IP3	1.6~3.2GHz	-	35	-	dBm
Switch time	-	-	35	-	ns

Test Curves



Outline Size



Note:

1. Unit: um
2. Bottom side is gold plated
3. Bottom side is GND
4. Bonding pads is gold plated, size:
1,2: 90*180(um); 3-10: 100*100(um)
5. Don't bonding on thru holds
6. Tolerance: ±50um

Truth Table

-5.625°	-11.25°	-22.5°	-45°	-90°	-180°	Phase shift Status
V1	V2	V3	V4	V5	V6	
0	0	0	0	0	0	Reference
1	0	0	0	0	0	-5.625°
0	1	0	0	0	0	-11.25°
0	0	1	0	0	0	-22.5°
0	0	0	1	0	0	-45°
0	0	0	0	1	0	-90°
0	0	0	0	0	1	-180°

Bonding Pads Definition

Number	Symbol	Description
1,2	RF1, RF2	RF port, 50ohm
3,10	VEE	Bias Voltage -5V±5% (choose any of 3,10)
4,5,6,7,8,9	CTRL	Control Port
-	GND	Bottom must be GND



ELECTROSTATIC SENSITIVE DEVICE
OBSERVE HANDLING PRECAUTIONS

Control Voltage

Status	Bias
Low (0)	0~0.2V
High (1)	3.3~5V

Bias Voltage and Current

VEE Range = -5Vdc±10%		
VEE(Vdc)	IEE(Typ)(mA)	IEE(Max)(mA)
-5	9	15

Absolute Max Ratings

Input Power	+24dBm
CTRL Range (V1 to V6)	-0.5V~+5.5V
Bias Voltage VEE	-6V DC
Junction Temperature	175°C
Storage Temperature	-65 ~ +150°C
Operating Temperature	-55 ~ +125°C
Static Protection (HBM)	Class 1A

Application

