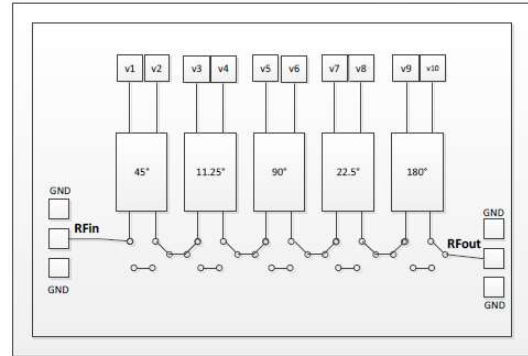


Performance

- Frequency: 33-37GHz
- Bit: 5
- Step: 11.25°
- Phase Shift Error (RMS): 2°
- Insertion loss: 7dB
- VSWR: 1.4:1
- Insertion Loss Variation: ±0.5dB
- Control Voltage: 0/-5V
- Chip size: 2.6*1.1*0.08mm

Function Diagram

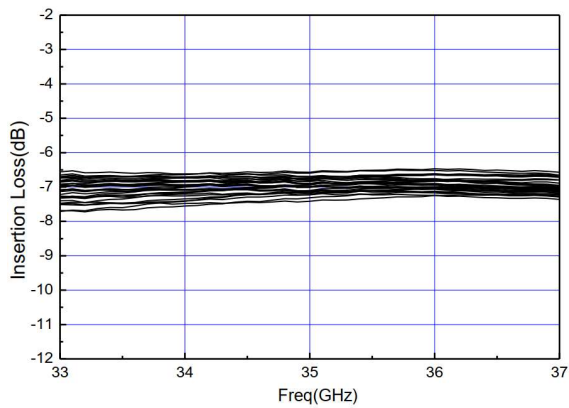


Electrical Specifications (Ta=+25°C, V1~V10=0/-5V control, 50Ω system)

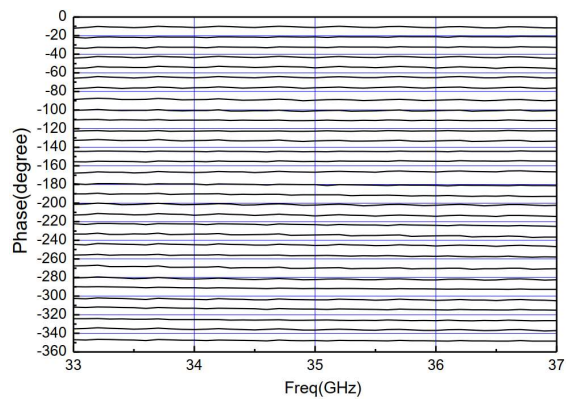
Parameter	Test Frequency	Min	Typical	Max	Unit
Insertion Loss	33-37GHz	-	7	-	dB
Phase Delay Error (RMS)	33-37GHz	-	2	-	deg
Insertion Loss Variation	33-37GHz	-	±0.5	-	dB
VSWR	33-37GHz	-	1.5	-	

Test Curves (V1-10= -5V, F=33-37GHz)

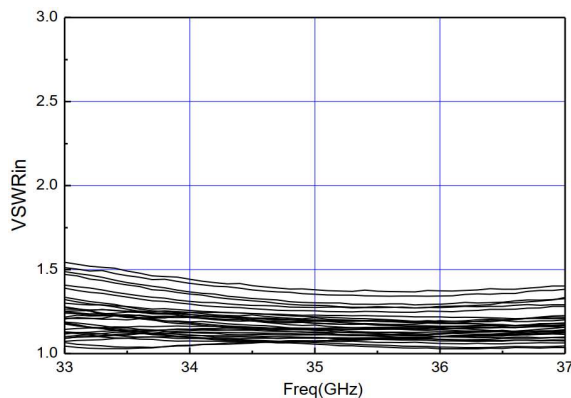
Insertion Loss vs. Freq



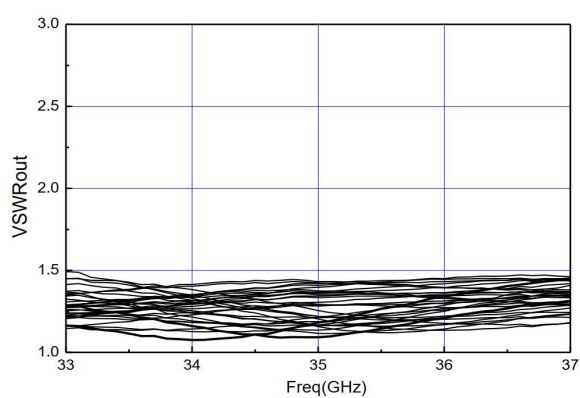
Phase vs. Freq



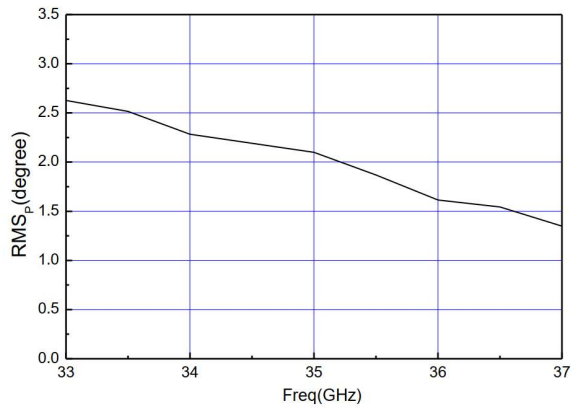
VSWRin vs. Freq



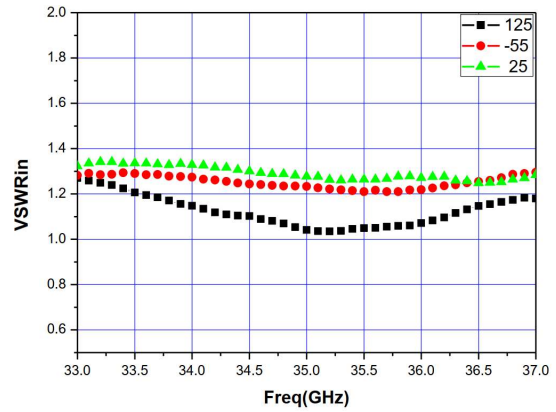
VSWRout vs. Freq



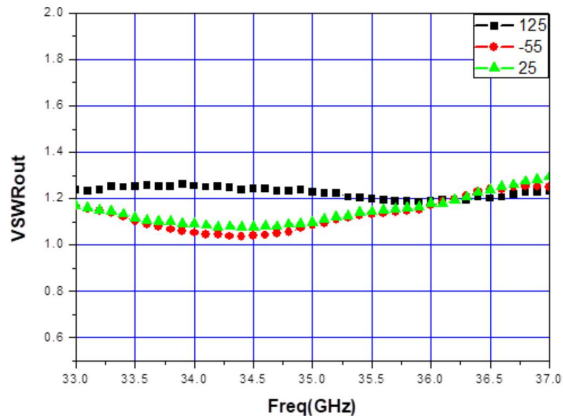
RMS vs. Freq.



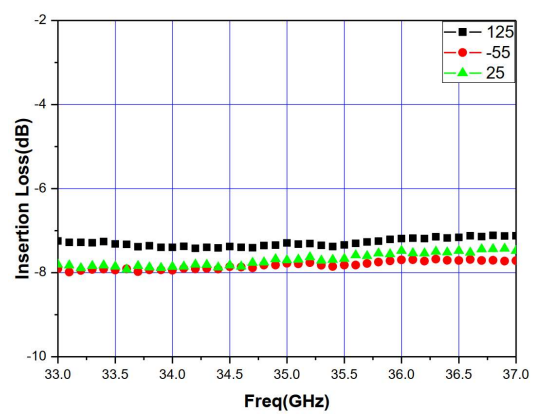
VSWRin vs. Freq vs. Temperature



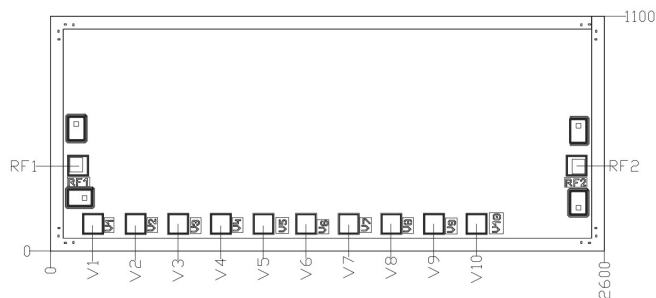
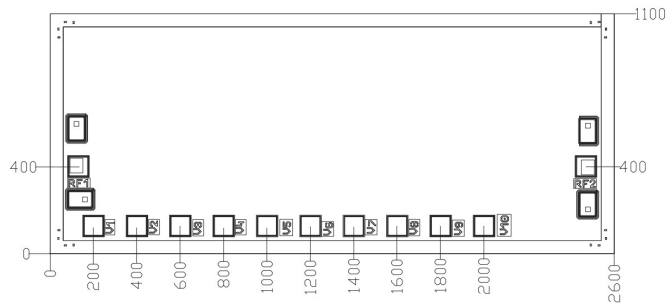
VSWRout vs. Freq vs. Temperature



I.L vs. Freq vs. Temperature



Outline Drawing:



Truth Table

Pin No	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Reference	-5	0	-5	0	-5	0	-5	0	-5	0
11.25°	-5	0	0	-5	-5	0	-5	0	-5	0
22.5°	-5	0	-5	0	-5	0	0	-5	-5	0
45°	0	-5	-5	0	-5	0	-5	0	-5	0
90°	-5	0	-5	0	0	-5	-5	0	-5	0
180°	-5	0	-5	0	-5	0	-5	0	0	-5

Absolute Maximum Ratings

Symbol	Parameter	Value	Remark
V1-10	Control Voltage	0.5V/-7V	
Pin	Input Power (CW mode)	25dBm	
Tch	Channel Temperature	150°C	
Tm	Mounting Temperature	300°C	1min, N ₂ protecting
Tstg	Storage Temperature	-55~150°C	

Exceed any of above ratings may cause permanent damage.