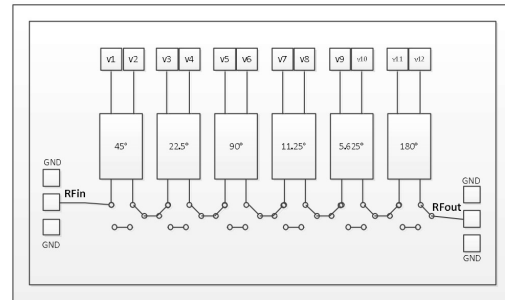


**Performance**

- Frequency: 33-37GHz
- Bit: 6
- Step: 5.625°
- Phase Shift Error (RMS): 3°
- Insertion loss: 7.5dB
- VSWR: 1.4:1
- Insertion Loss Variation: ±0.5dB
- Control Voltage: 0/-5V
- Chip size: 2.8\*1.1\*0.08mm

**Function Diagram**

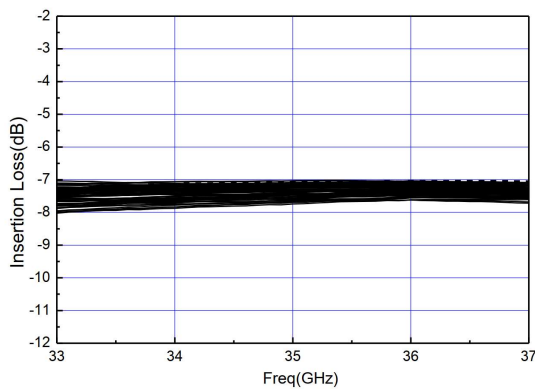


**Electrical Specifications (Ta=+25°C, V1~V12=0/-5V control, 50Ω system)**

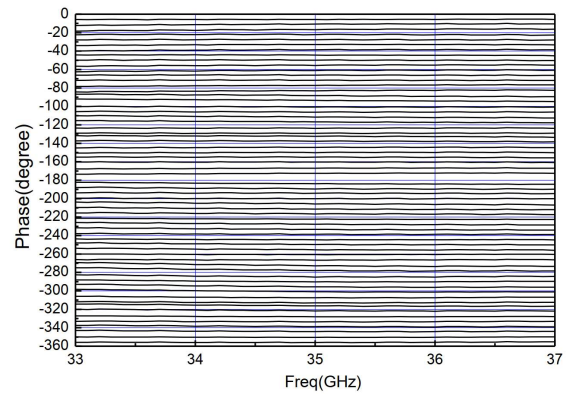
Parameter	Test Frequency	Min	Typical	Max	Unit
Insertion Loss	33-37GHz	-	7.5	-	dB
Phase Delay Error (RMS)	33-37GHz	-	2.5	-	deg
Insertion Loss Variation	33-37GHz	-	±0.5	-	dB
VSWR	33-37GHz	-	1.4	-	

**Test Curves**

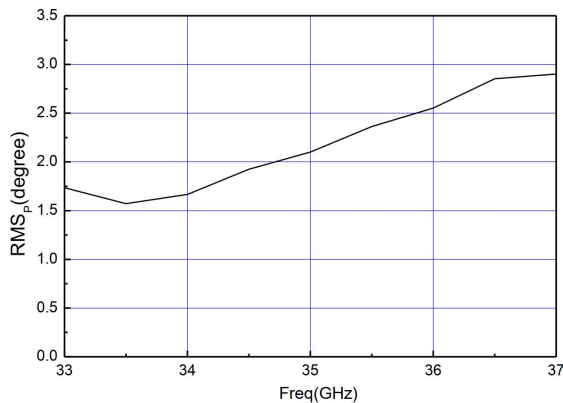
Insertion Loss vs. Freq



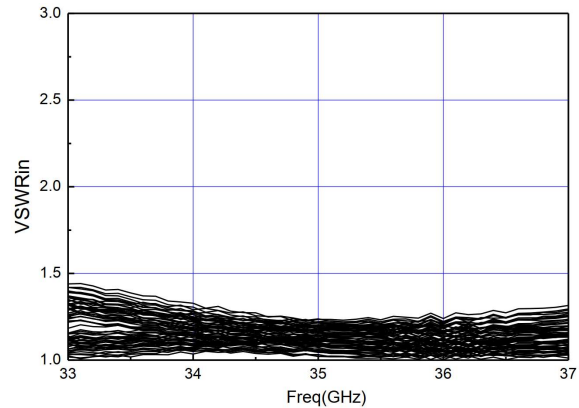
All states Phase vs. Freq

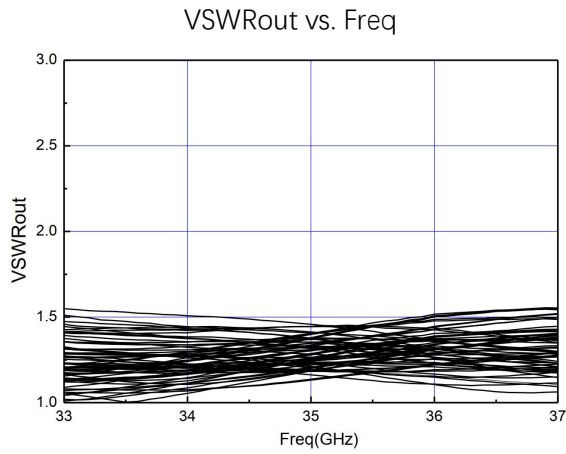


RMS vs. Freq

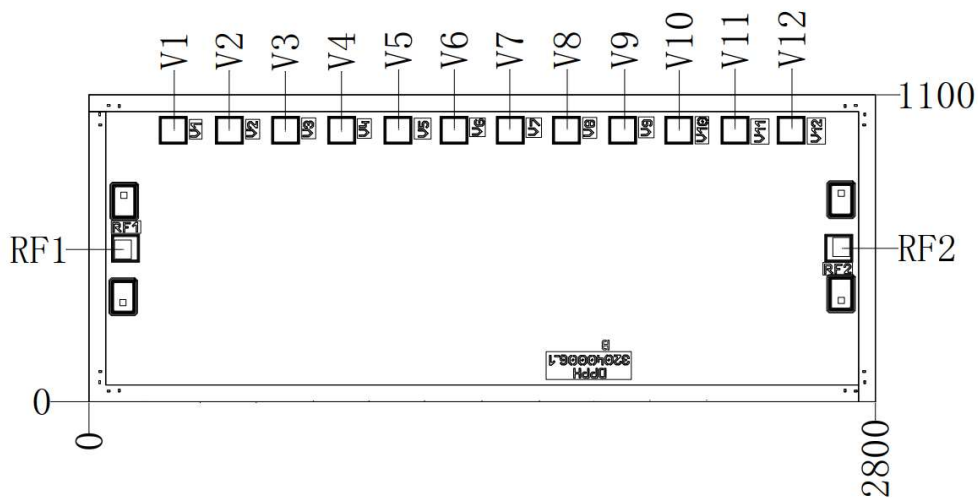
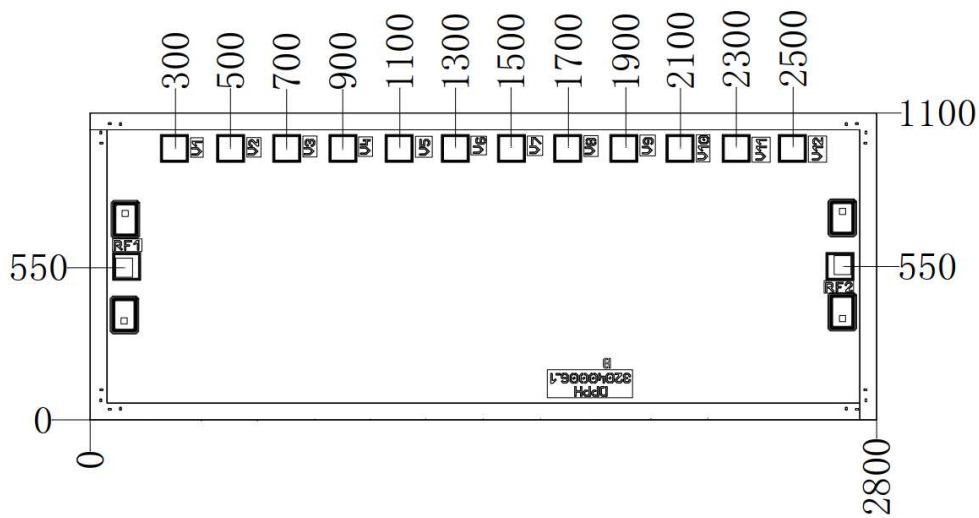


VSWRin vs. Freq





Outline Drawing (mm):



**Truth Table**

Pin No	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12
Reference	-5	0	-5	0	-5	0	-5	0	-5	0	-5	0
5.625°	-5	0	-5	0	-5	0	-5	0	0	-5	-5	0
11.25°	-5	0	-5	0	-5	0	0	-5	-5	0	-5	0
22.5°	-5	0	0	-5	-5	0	-5	0	-5	0	-5	0
45°	0	-5	-5	0	-5	0	-5	0	-5	0	-5	0
90°	-5	0	-5	0	0	-5	-5	0	-5	0	-5	0
180°	-5	0	-5	0	-5	0	-5	0	-5	0	0	-5

**Absolute Maximum Ratings**

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

Exceed any of above ratings may cause permanent damage.