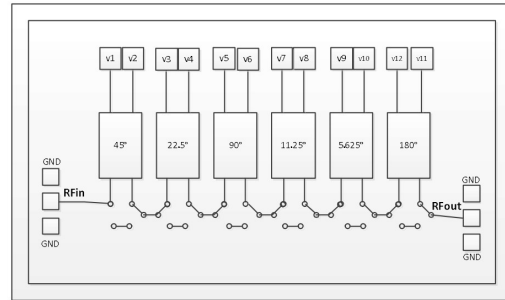


Performance

- Frequency: 30-40GHz
- Bit: 6
- Step: 5.625°
- Phase Shift Error (RMS): 3.5°
- Insertion loss: 7.5dB
- VSWR: 1.8:1
- Insertion Loss Variation: ±0.7dB
- Control Voltage: 0/-5V
- Chip size: 2.8*1.1*0.08mm

Function Diagram

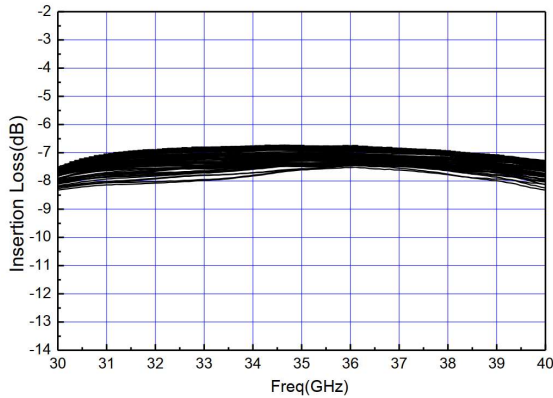


Electrical Specifications (Ta=+25°C, V1~V12=0/-5V control, 50Ω system)

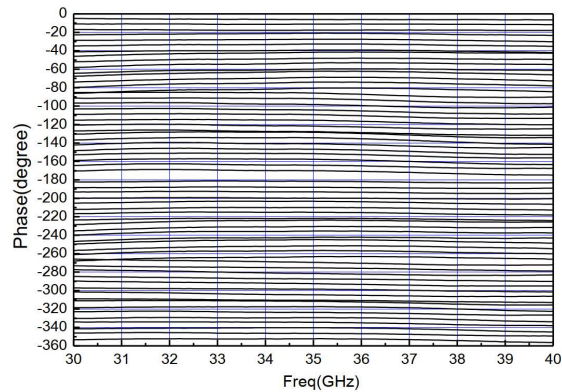
Parameter	Test Frequency	Min	Typical	Max	Unit
Insertion Loss	30-40GHz	-	7.5	-	dB
Phase Delay Error (RMS)	30-40GHz	-	3.5	-	deg
Insertion Loss Variation	30-40GHz	-	±0.7	-	dB
VSWR	30-40GHz	-	1.8	-	

Test Curves

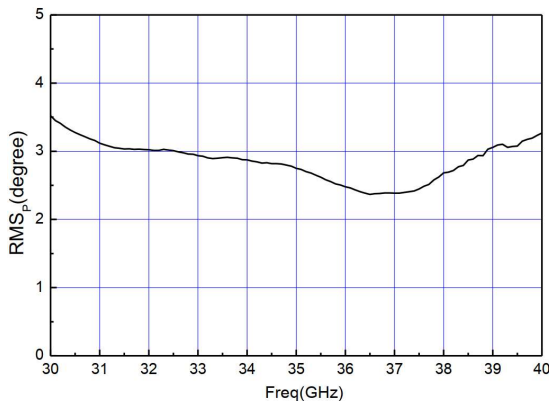
Insertion Loss vs. Freq



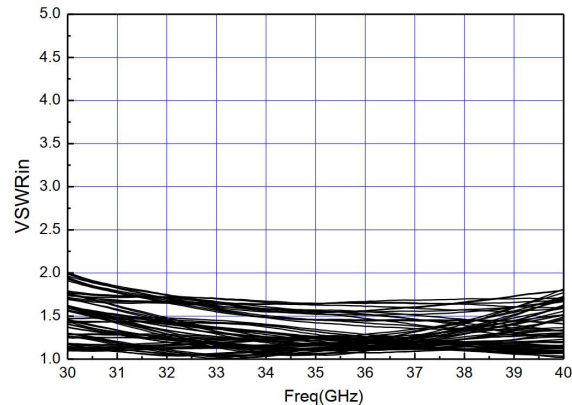
All states Phase vs. Freq

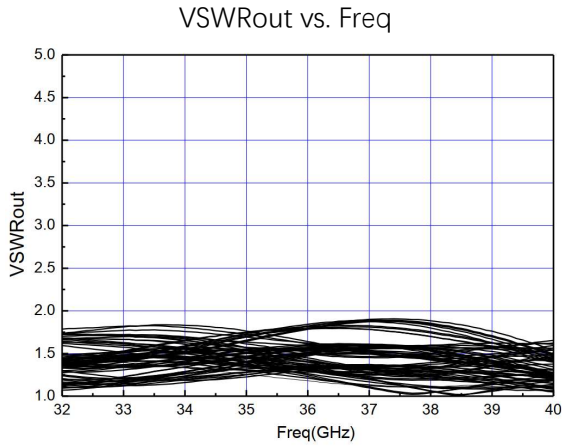


RMS vs. Freq

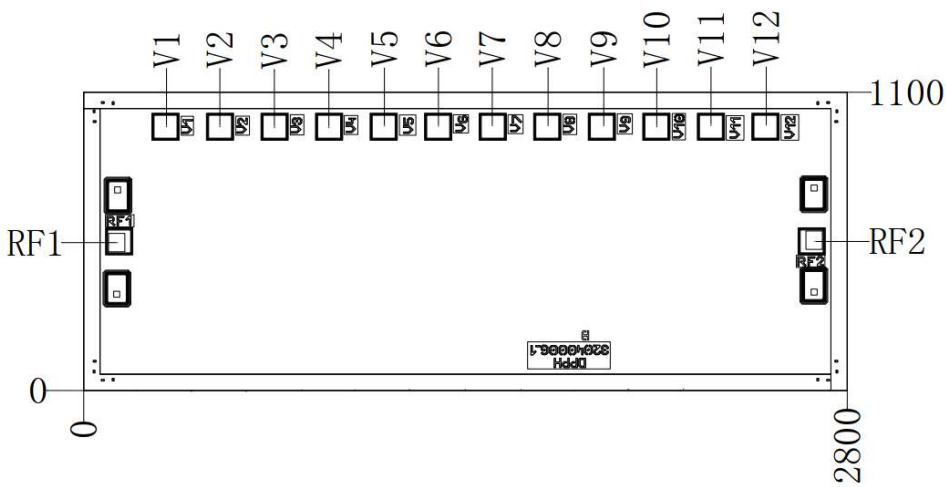
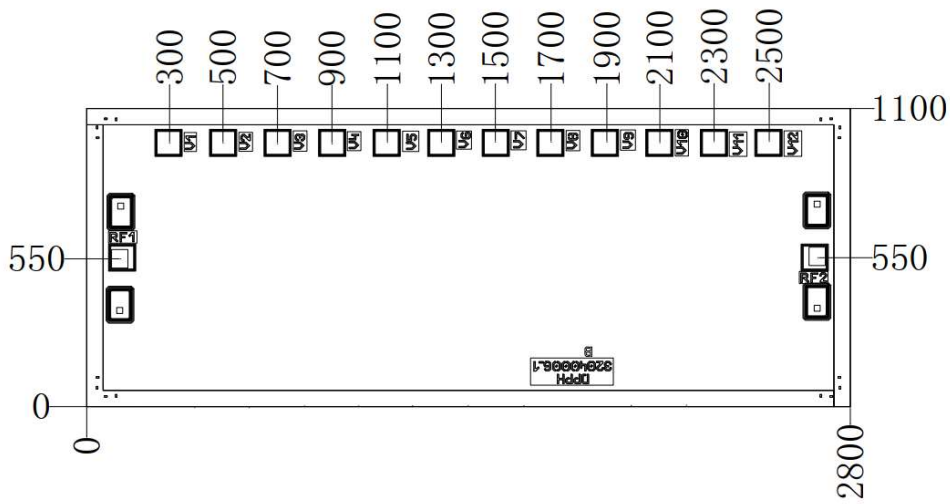


VSWRin vs. Freq





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 ₂ protecting
Tstg	Storage Temperature	-55~150°C	

Exceed any of above ratings may cause permanent damage.