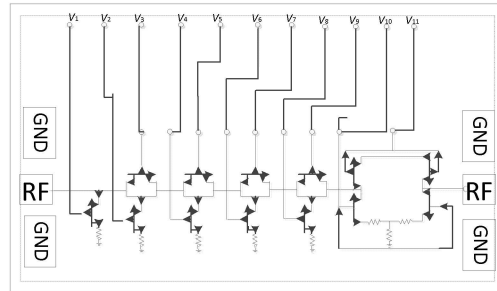


Performance

- Frequency: DC-4GHz
- Insertion loss: 1.3dB
- Attenuation: 0~31.5dB
- Attenuation Accuracy: $\pm(0.3+5\%A_i)$ dB
- Step: 0.5dB
- Input/Output VSWR: 1.3/1.3
- Ton/Toff: 20ns
- Control Mode: 0/-5V
- Chip size: 2.1*0.95*0.1mm

Functional Diagram

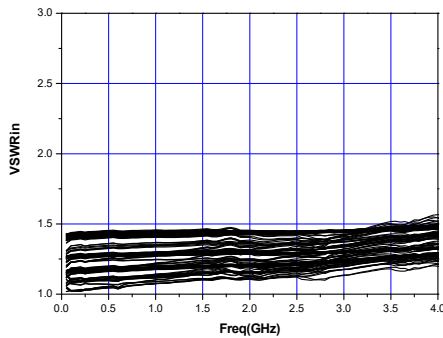


Electrical Specifications (Ta=+25°C, 50Ω system)

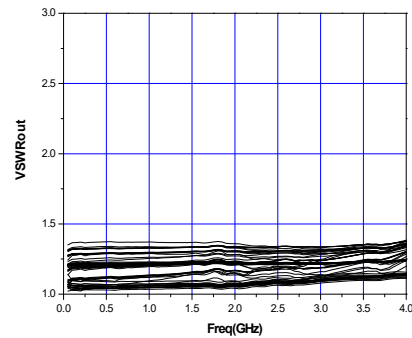
Parameter	Test Condition	Min	Typical	Max	Unit
Insertion Loss Li	Freq: DC-4GHz V1~V10=0V/-5V	-	1.3	2	dB
Attenuation Accuracy ΔA_i		-	$\pm (0.3+5\%A_i)$	$\pm (0.3+10\%A_i)$	dB
VSWR in/out		-	1.3	2.6	

Test Curves

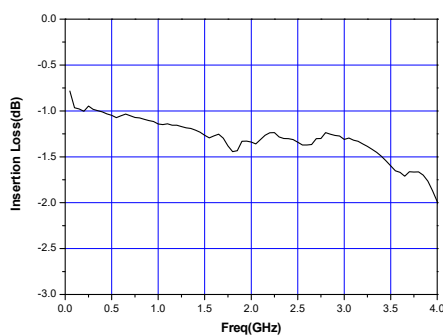
VSWRin vs. Freq



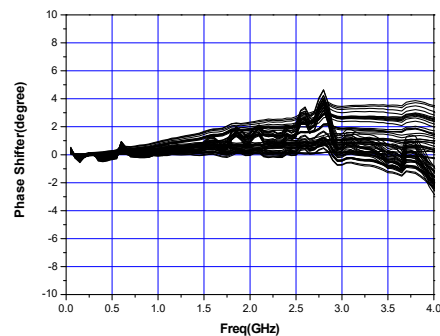
VSWRout vs. Freq



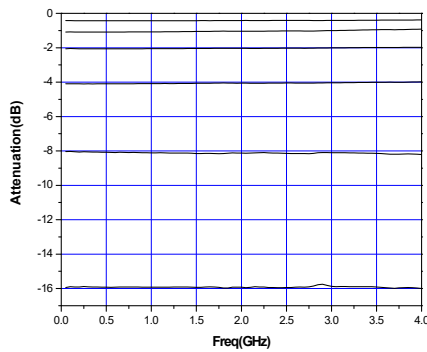
Insertion loss vs. Freq



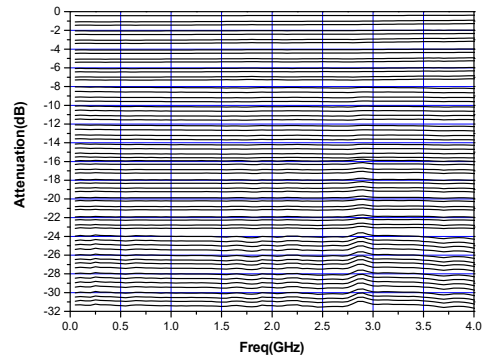
64 states Add phase shift



Main state attenuation



All states Attenuation vs. Freq



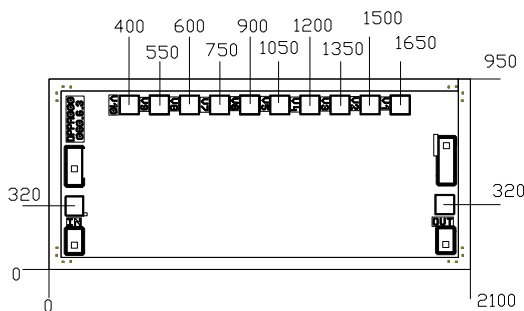
Truth Table

Control Port State	16dB		8dB		0.5dB	4dB		2dB		1dB
	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Reference state	0V	-5V	0V	-5V	-5V	0V	-5V	0V	-5V	-5V
0.5dB	0V	-5V	0V	-5V	0V	0V	-5V	0V	-5V	-5V
1dB	0V	-5V	0V	-5V	-5V	0V	-5V	0V	-5V	0V
2dB	0V	-5V	0V	-5V	-5V	0V	-5V	-5V	0V	-5V
4dB	0V	-5V	0V	-5V	-5V	-5V	0V	0V	-5V	-5V
8dB	0V	-5V	-5V	0V	-5V	0V	-5V	0V	-5V	-5V
16dB	-5V	0V	0V	-5V	-5V	0V	-5V	0V	-5V	-5V

Absolute Ratings (Ta=25°C)

Symbol	Parameter	Value	Note
V1,2...10	Control Voltage	0.6/-8V	
Pcw	CW input power	25dBm	
TCH	Channel Operating Temperature	150°C	
T	Junction Temperature	300°C	1min, N2 protection
TSTG	Storage Temperature	-55°C ~ 150°C	

Outline Size



Assembly Diagram

