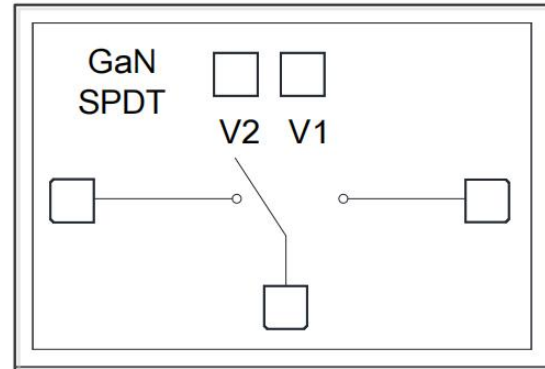


Performance

- Technology: 0.25um GaN FET
- Frequency: 29~36GHz
- Insertion loss: 1.5dB
- Isolation: 30dB
- Input P-0.3: 40dBm
- Input/Output VSWR: 1.4:1
- Switching Time: 20ns
- Control Mode: 0/-40V or 0/+40V
- Voltage control reflective switch
- Chip size: 1.5*0.85*0.08mm

Function Diagram



Electrical Specifications (Ta=+25°C, V1~V2=0V/+40V or 0V/-40V, F=29~36GHz)

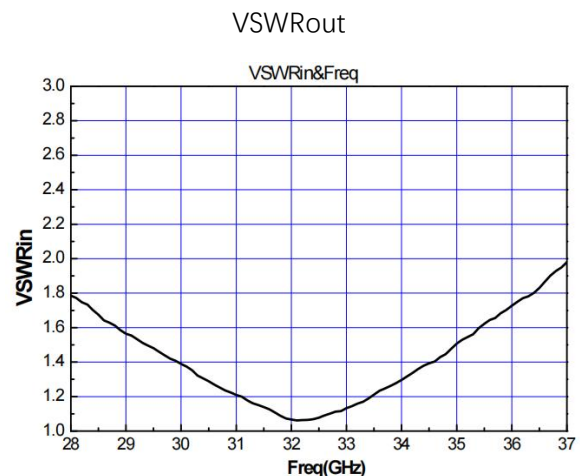
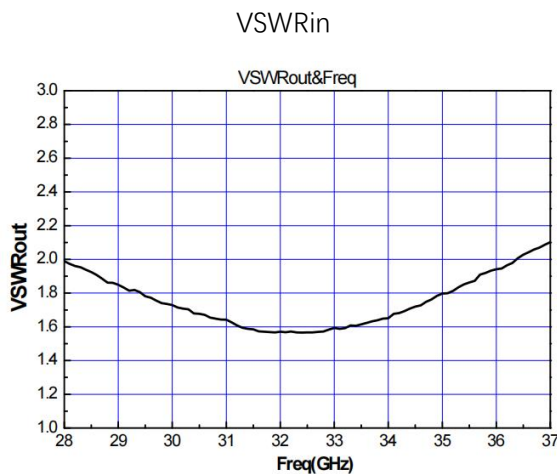
Symbol	Parameter	Min.	Typ.	Max.	Unit
Li	Insertion Loss	-	1.5	-	dB
ISO	Isolation	-	30	-	dB
VSWR	Input / Output VSWR	-	1.4	-	-

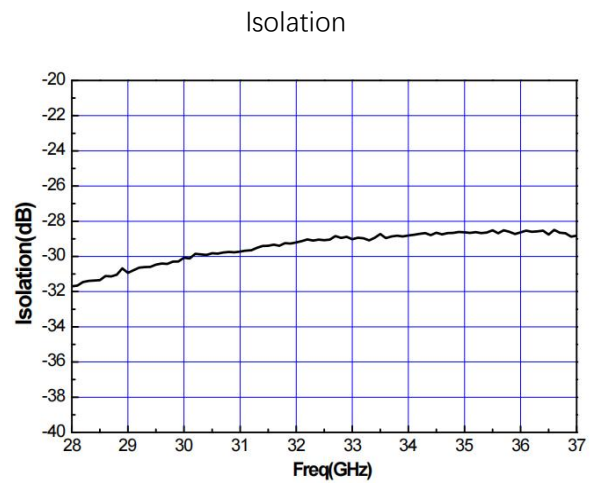
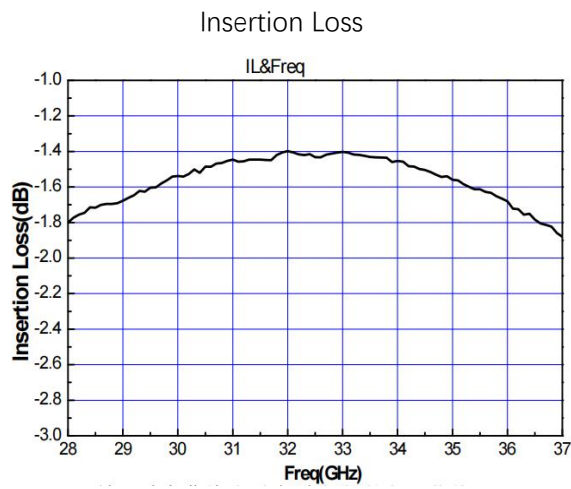
Absolute Maximum Ratings (Ta=+25°C)

Symbol	Parameter	Value	Notes
V1,2	Control Voltage	-60V	
P _{cw}	Input Continuous Wave Power	42dBm	
T _{ch}	Channel Temperature	225°C	
T	Sintering Temperature	310°C	30s, N2 protection
T _{stg}	Storage Temperature	-55~150°C	

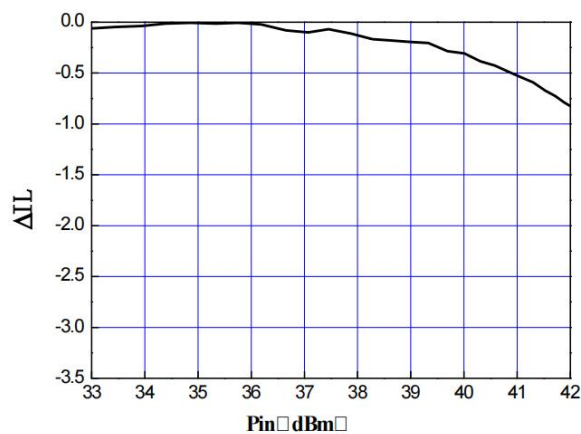
Exceed any of above listed ratings may cause permanent damage.

Test Curves (Ta=+25°C, (V_{1,2}=-40V))





Input Power (Y axis is normalized value of I.L)



Outline Size (μm)	Assembly Diagram
	The driver is connected to Vee or suspension on the back

Note: 1, The RF port of the chip has a built-in DC blocking capacitor.

2, RF input/output gold wire length is less than 300 μm .

PIN Definition

PIN	Description
RF1、RF2	RF ports, 50Ω
RFc	RF common ports, 50Ω
V1、V2	Control Ports
GND	Bottom must be grounded

Truth Table

V1	V2	RF _c →RF1	RF _c →RF2
1	0	OFF	ON
0	1	ON	OFF

Note: During negative voltage control:Low level "0" is -28V~-40V, High level "1" is 0V~0.5V;
During positive voltage control:Low level "0" is 0V~0.5V, High level "1" is +28V~+40V;