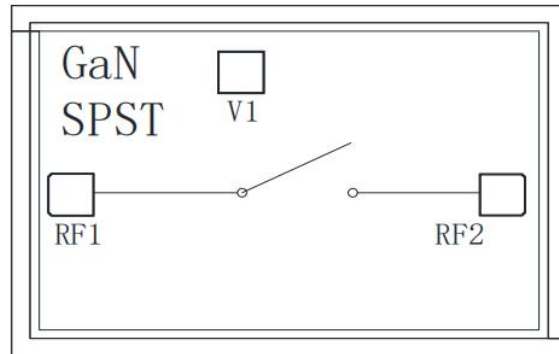


Performance

- Technology: 0.15um GaN FET
- Frequency: 42~100GHz
- Insertion loss: 1.4dB
- Isolation: 50dB
- Input P-0.3: >33dBm
- Input/Output VSWR: 1.8:1
- Switching Time: 20ns
- Control Mode: 0/-15V
- Voltage Controlled Absorptive Switch
- Chip size: 1.3*0.65*0.08mm

Function Diagram



Electrical Specifications (Ta=+25°C, V1=0V/-15V, F=42~100GHz)

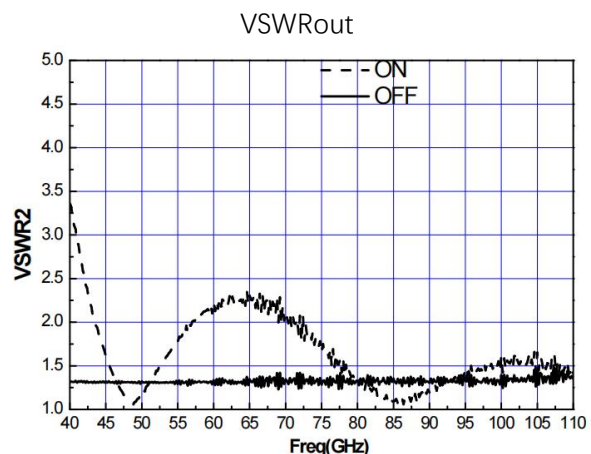
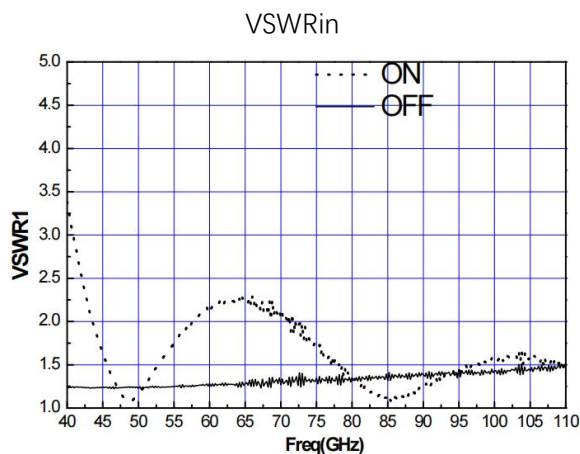
Symbol	Parameter	Min.	Typ.	Max.	Unit
Li	Insertion Loss	-	1.4	-	dB
ISO	Isolation	-	-50	-	dB
VSWR	Input / Output VSWR	-	1.8	-	-

Absolute Maximum Ratings (Ta=+25°C)

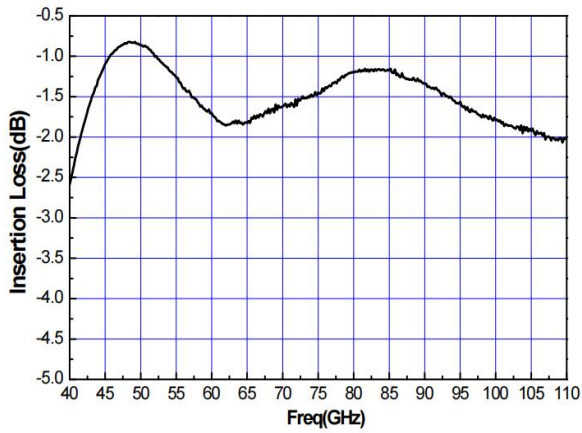
Symbol	Parameter	Value	Notes
V1	Control Voltage	-30V	
P _{cw}	Input Continuous Wave Power	>34dBm	
T _{ch}	Channel Temperature	225°C	
T	Sintering Temperature	310°C	30s, N2 protection
T _{stg}	Storage Temperature	-55~150°C	

Exceed any of above listed ratings may cause permanent damage.

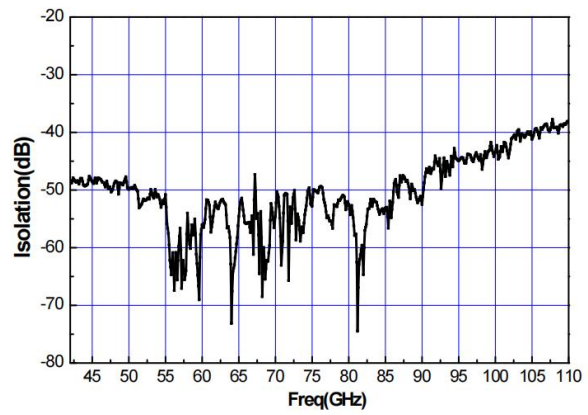
Test Curves (Ta=+25°C, (V1=-15V))



Insertion Loss



Isolation



Outline Size (μm)	Assembly Diagram

Note: 1, For same pads, choose any of them.

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

PIN Definition

PIN	Description
RF1	RF ports, 50Ω, no block capacitor
RF2	RF ports, 50Ω, no block capacitor
V1	Control Ports
GND	Bottom must be grounded

Truth Table

V1	RF1→RF2
1	OFF
0	ON

Note: Low level "0" is -10V~-20V, High level "1" is 0V~0.5V