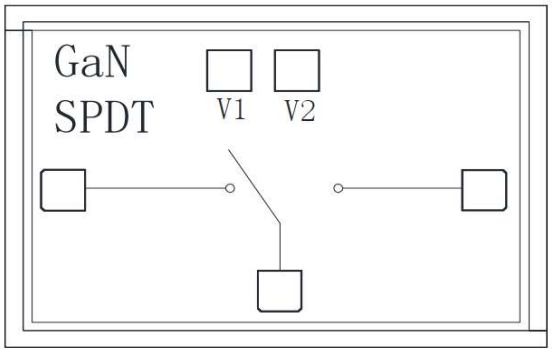
Performance

- Frequency: 6~18GHz
- Insertion loss: 1.4dB
- Isolation: 45dB
- Input P-0.3: 47dBm
- Input/Output VSWR: 1.3:1
- Switching Time: 20ns
- Control Mode: 0/-40V
- Voltage Control, SPDT Reflective
- Technology: 0.25um GaN FET
- Chip size: 2.5*1.5*0.08mm

Function Diagram



Electrical Specifications (Ta=+25℃, V1~V2=0V/-40V, F=6~18GHz)

Symbol	Parameter	Min.	Typ.	Max.	Unit
Li	Insertion Loss	-	1.4	-	dB
ISO	Isolation	-	45	-	dB
VSWR	Input / Output VSWR	-	1.4	-	-

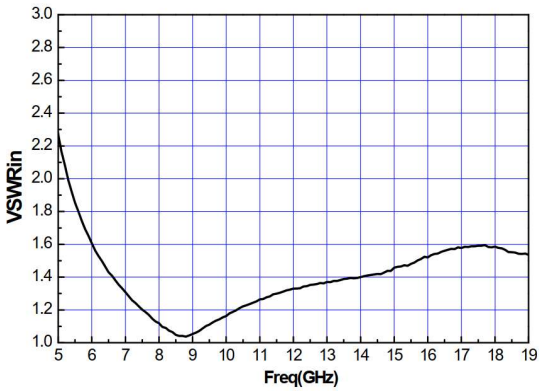
Absolute Maximum Ratings (Ta=+25℃)

Symbol	Parameter	Value	Notes
V1,2	Control Voltage	-60V	
Pcw	Input Continuous Wave Power	48dBm	
Tch	Channel Temperature	225℃	
T	Sintering Temperature	310℃	30s, N2 protection
Tstg	Storage Temperature	-55~150℃	

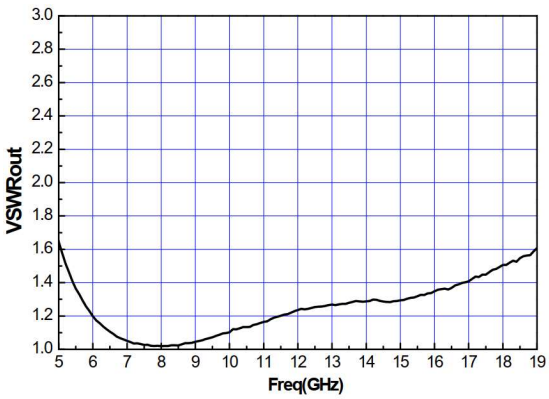
Exceed any of above listed ratings may cause permanent damage.

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

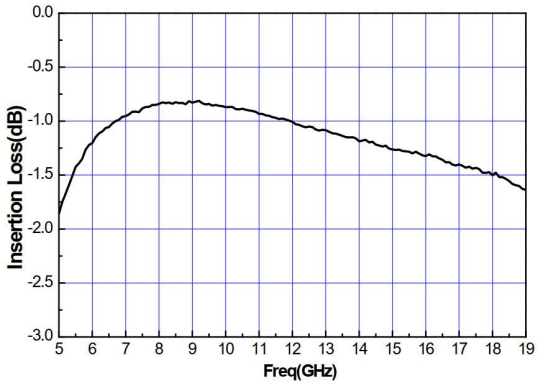
Input VSWR (-40V)



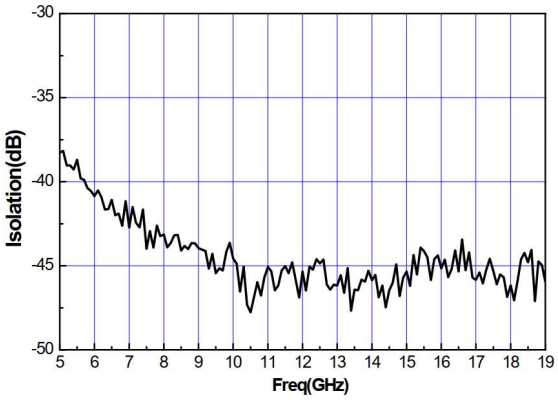
Output VSWR (-40V)



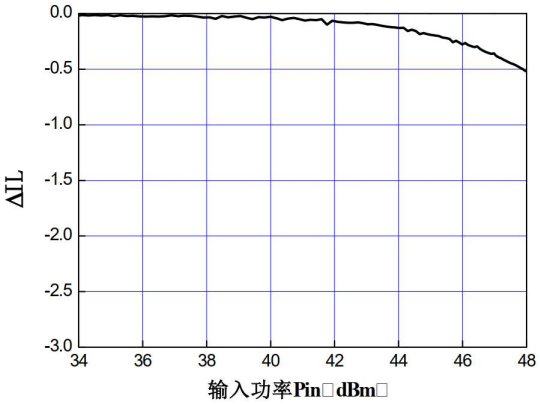
Insertion Loss (-40V)

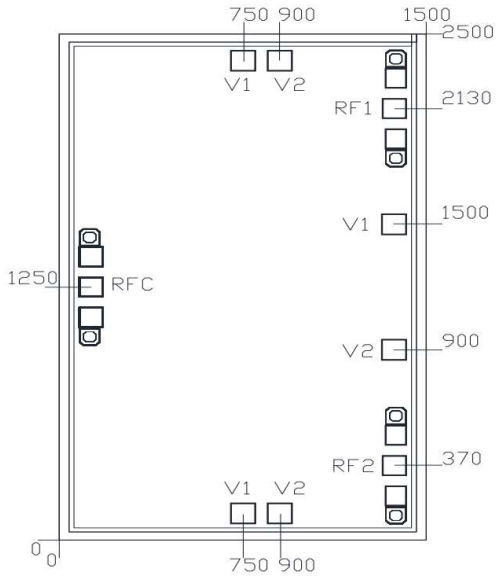
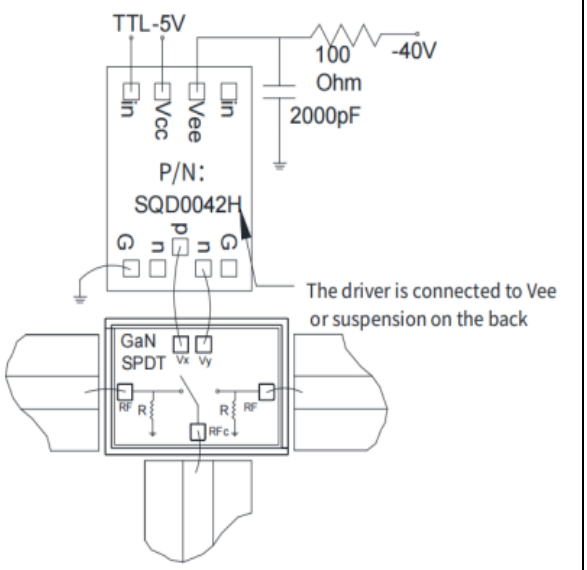


Isolation (-40V)



Pin (10GHz)



Outline Size (μm)	Assembly Diagram
	

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

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

PIN Definition

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

Truth Table

V1	V2	$RF_C \rightarrow RF_1$	$RF_C \rightarrow RF_2$
0	1	ON	OF
1	0	OFF	ON

Note: Low level “0” is -28V~-40V, High level “1” is 0V~0.5V