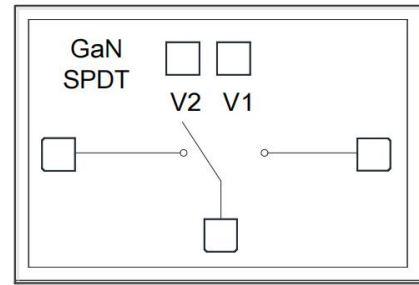


Performance

- Technology: GaN FET
- Frequency: 10~18GHz
- Insertion loss: RFin to RFout1:0.7dB(launch channel);RFin to RFout2:1.2dB(receiving channel)
- Isolation: 20dB(launch channel)28dB(receiving channel)
- Input P-0.5: RFin to RFout1:47dBm(50W)(launch channel);RFin to RFout2:42dBm(16W)(receiving channel)
- Input/Output VSWR: 1.6:1(launch channel)2:1(receiving channel)
- Switching Time: 10ns
- Control Mode: 0/-40V
- Voltage control reflective switch
- Chip size: 1.8*0.85*0.08mm

Function Diagram



Electrical Specifications (Ta=+25°C, V1~V2=0V/-40V, F=10~18GHz)

Symbol	Parameter		Min.	Typ.	Max.	Unit
Li	Insertion Loss	RFout1	-	0.7	-	dB
		RFout2	-	1.2	-	
ISO	Isolation	RFout1	-	20	-	dB
		RFout2	-	28	-	
VSWR	Input / Output VSWR	RFout1	-	1.5	-	-
		RFout2	-	1.8	-	

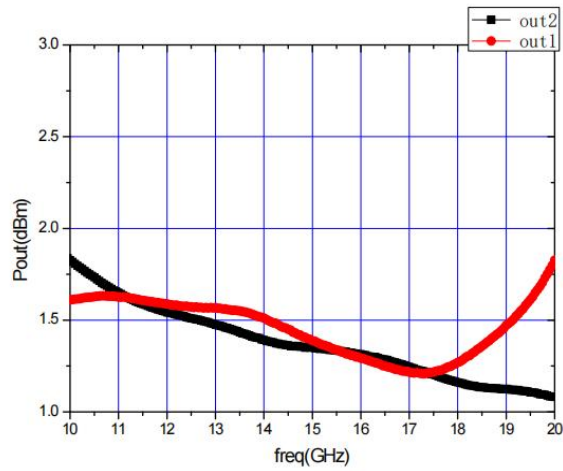
Absolute Maximum Ratings (Ta=+25°C)

Symbol	Parameter	Value	Notes
V1,2	Control Voltage	-60V	
Pcw	Input Continuous Wave Power	47.5dBm/44dBm	
Tch	Channel Temperature	225°C	
T	Sintering Temperature	310°C	30s, N2 protection
Tstg	Storage Temperature	-55~150°C	

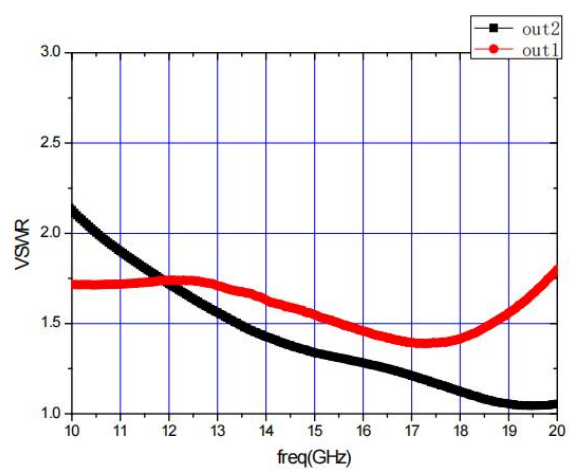
Exceed any of above listed ratings may cause permanent damage.

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

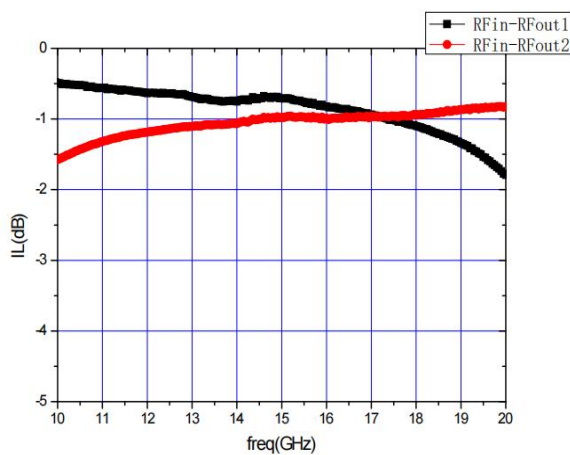
VSWR_{in}



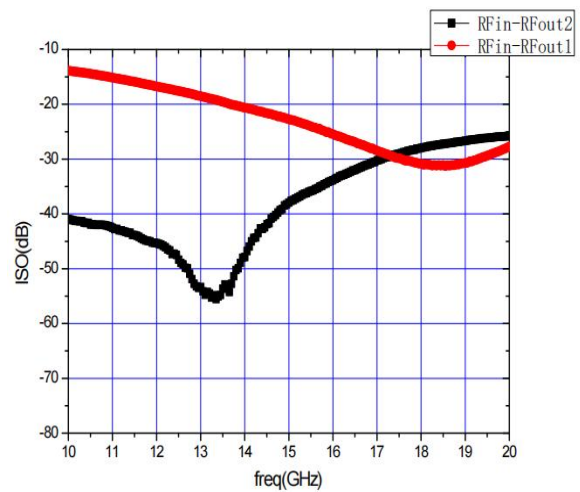
VSWR_{out}



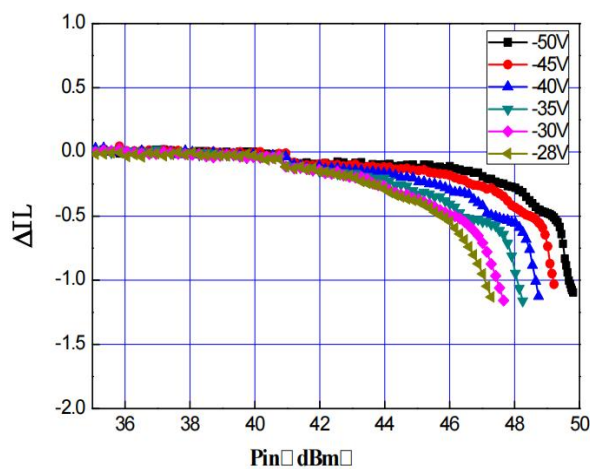
Insertion Loss



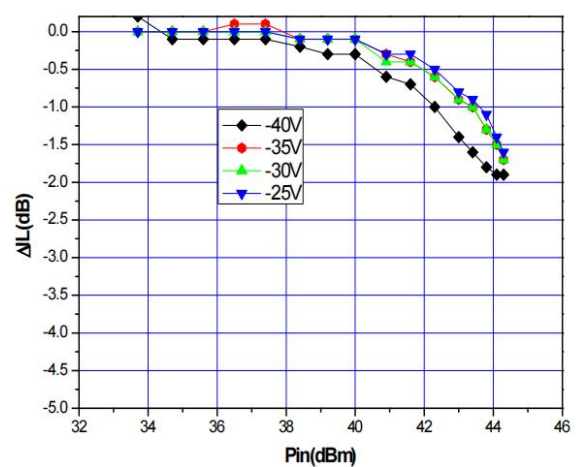
Isolation

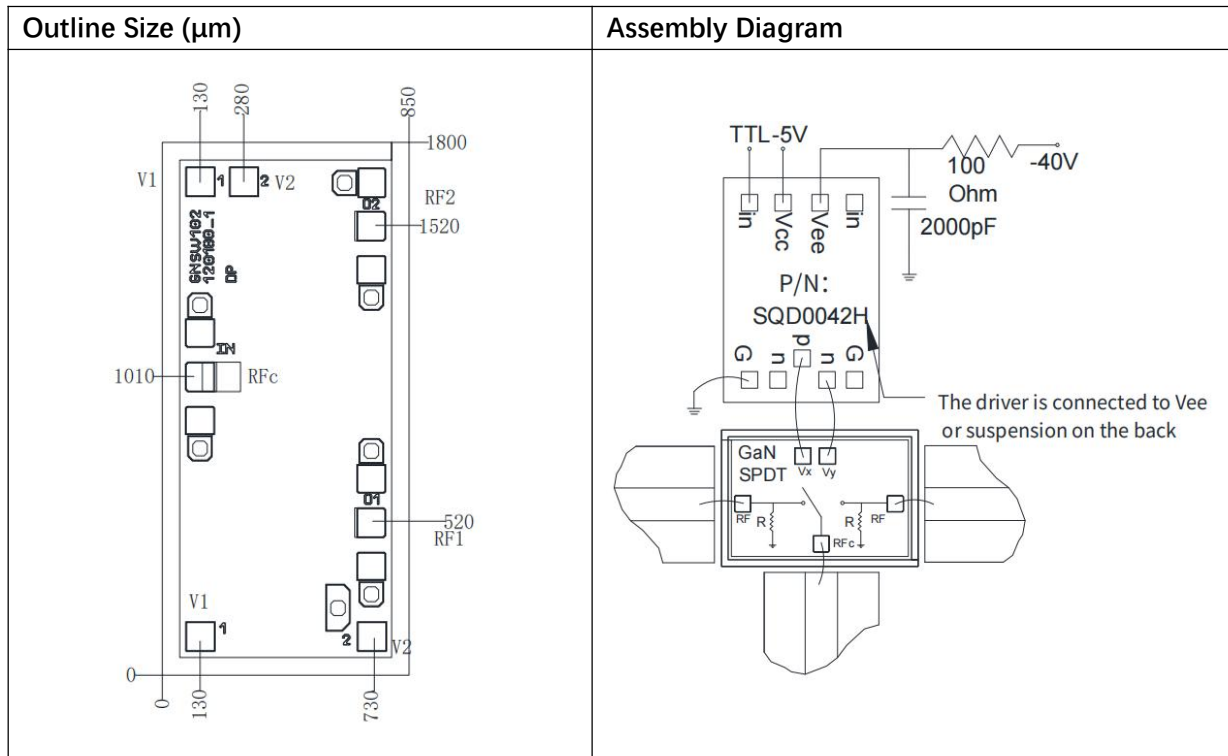


Input Power (Y axis is normalized value of I.L)



RFc to RF2 pass test frequency is 13GHz





Note: RF input/output dual wire length is less than 300μm.

Truth Table

V1	V2	RF _c →RF ₁	RF _c →RF ₂
1	0	ON	OFF
0	1	OFF	ON

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