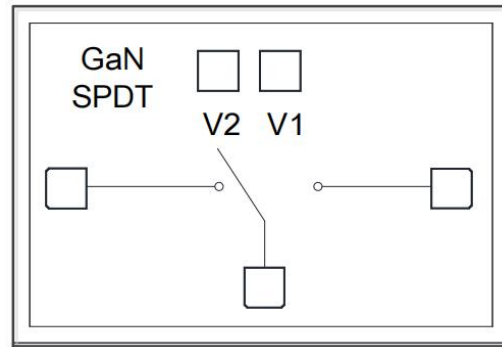


Performance

- Frequency: 40~110GHz
- Insertion loss: 2.5dB
- Isolation: 38dB
- Input P-0.3: >37dBm
- Input/Output VSWR: 2.0:1
- Switching Time: 10ns
- Control Mode: 0/-15V
- Voltage control reflective switch
- Chip size: 1.03*1.0*0.08mm

Function Diagram



Electrical Specifications (Ta=+25°C, V1~V2=0V/-15V, F=40~110GHz)

Symbol	Parameter	Min.	Typ.	Max.	Unit
Li	Insertion Loss	-	2.5	-	dB
ISO	Isolation	-	38	-	dB
VSWR	Input / Output VSWR	-	2.0	-	-

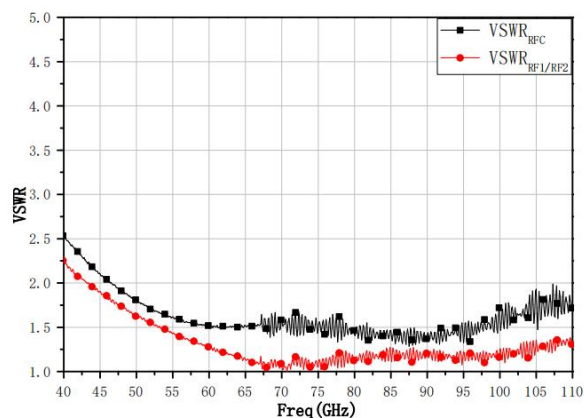
Absolute Maximum Ratings (Ta=+25°C)

Symbol	Parameter	Value	Notes
V1,2	Control Voltage	0.5/-30V	
Pcw	Input Continuous Wave Power	>37dBm	
Tch	Channel Temperature	225°C	
T	Sintering Temperature	310°C	30s, N2 protection
Tstg	Storage Temperature	-65~150°C	

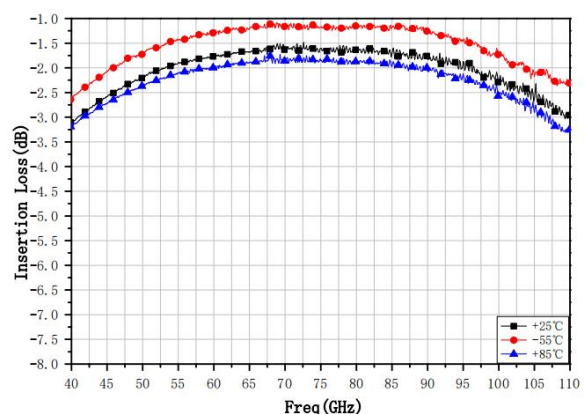
Exceed any of above listed ratings may cause permanent damage.

Test Curves (Ta=+25°C, (V1,2=-15V))

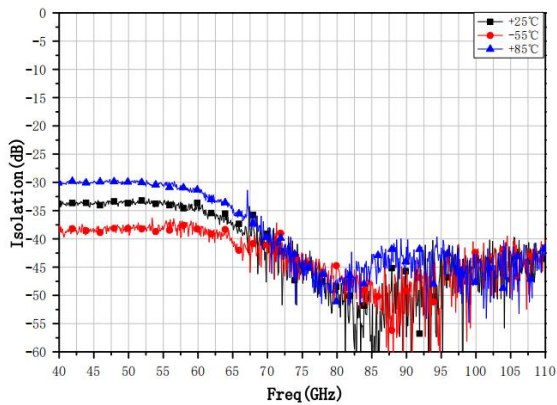
VSWR



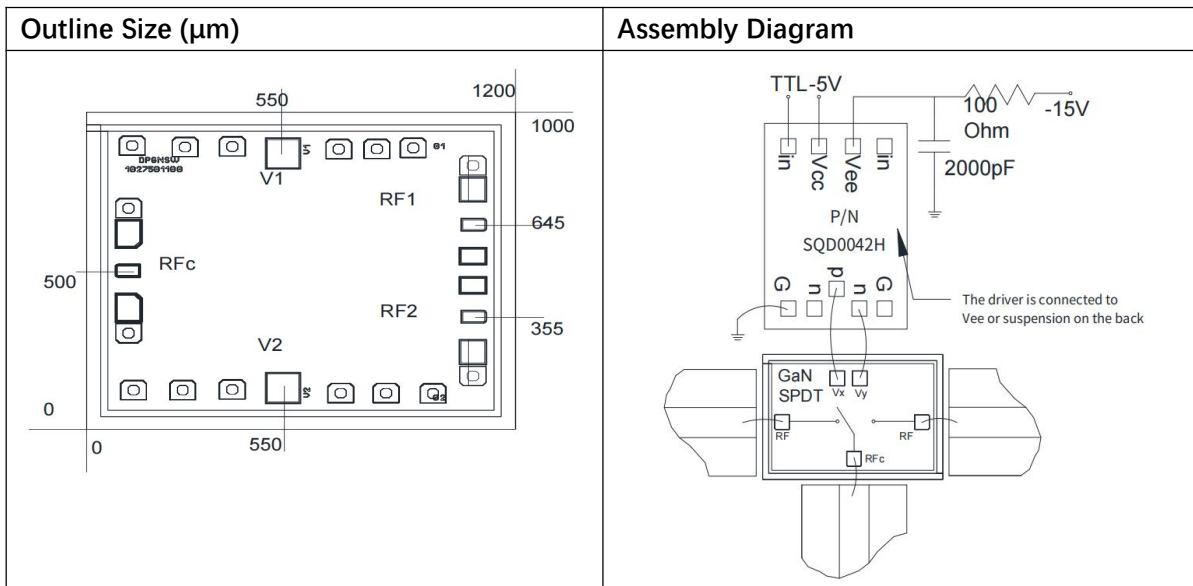
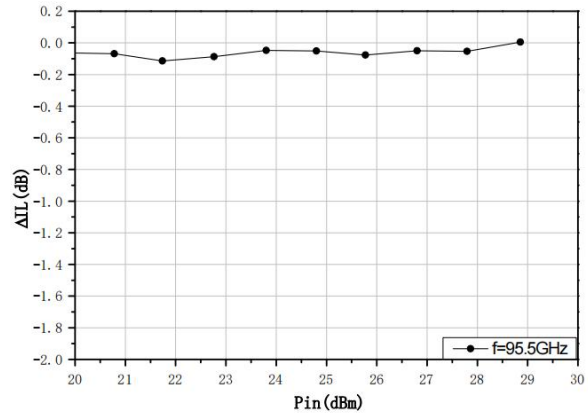
Insertion Loss @ Different temperature



Isolation @ Different temperature



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



Note: RF input/output dual wire length is less than 200μm.

PIN Definition

PIN	Description
RF1、RF2	RF ports, 50Ω, no block capacitor
RFc	RF common ports, 50Ω, no block capacitor
V1、V2	Control Ports
GND	Bottom must be grounded

Truth Table

V1	V2	RFc→RF1	RFc→RF2
1	0	OFF	ON
0	1	ON	OFF

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

2. Performance is same under condition of -10V ~ -20V