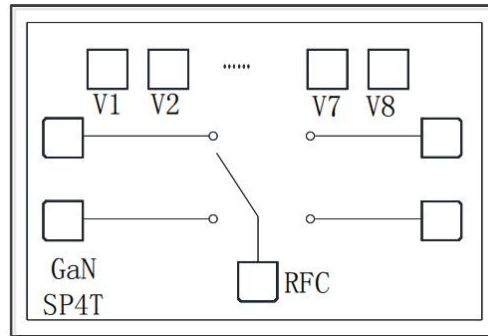


Performance

- Frequency: DC~18GHz
- Insertion loss: 1.5dB
- Isolation: 45dB
- Input P-0.3: 41.5dBm
- Input/Output VSWR: 2:1
- Switching Time: 20ns
- Control Mode: 0/-40V
- Voltage control reflective switch
- Chip size: 1.8*1.63*0.08mm

Function Diagram



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

Symbol	Parameter	Min.	Typ.	Max.	Unit
Li	Insertion Loss	-	1.8	-	dB
ISO	Isolation	-	45	-	dB
VSWR	Input / Output VSWR	-	2.0	-	-

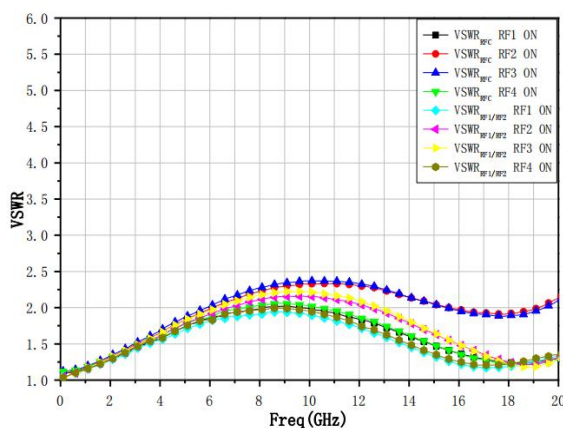
Absolute Maximum Ratings (Ta=+25°C)

Symbol	Parameter	Value	Notes
V1,2	Control Voltage	-60V	
Pcw	Input Continuous Wave Power	42.5dBm	
Tch	Channel Temperature	225°C	
T	Sintering Temperature	310°C	30s, N2 protection
Tstg	Storage Temperature	-65~150°C	

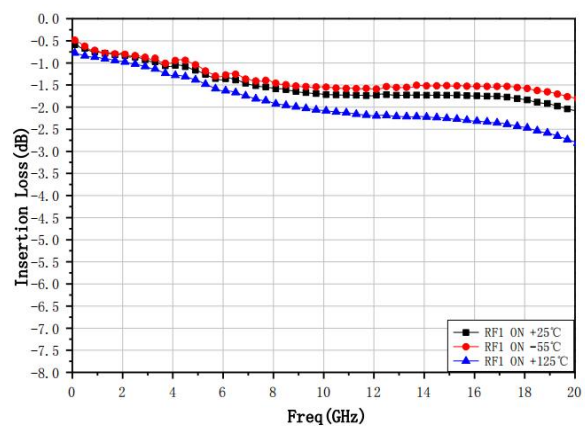
Exceed any of above listed ratings may cause permanent damage.

Test Curves (Ta=+25°C, (V=-40V))

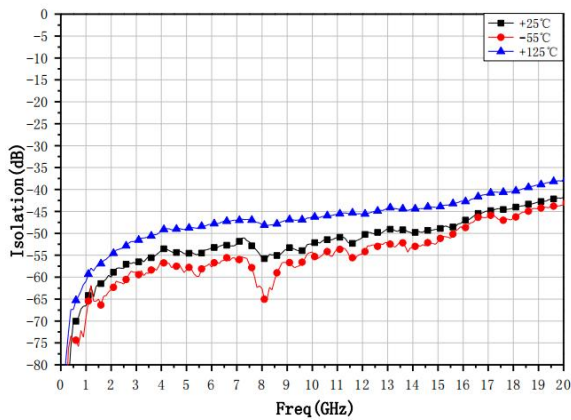
VSWR



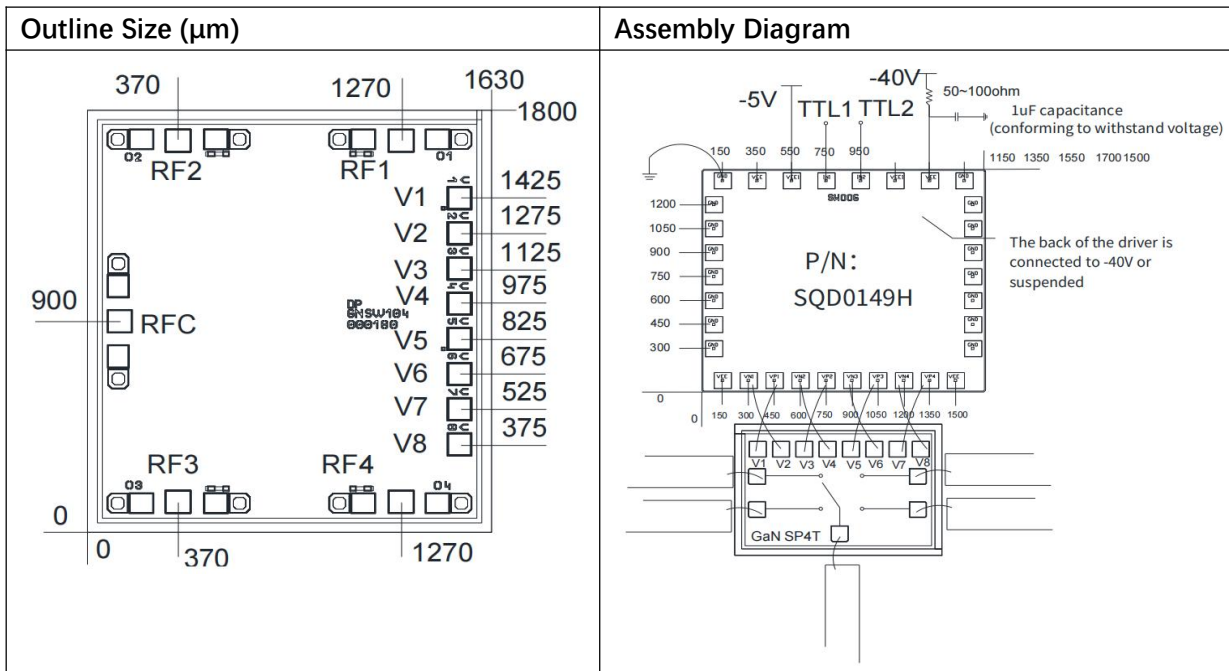
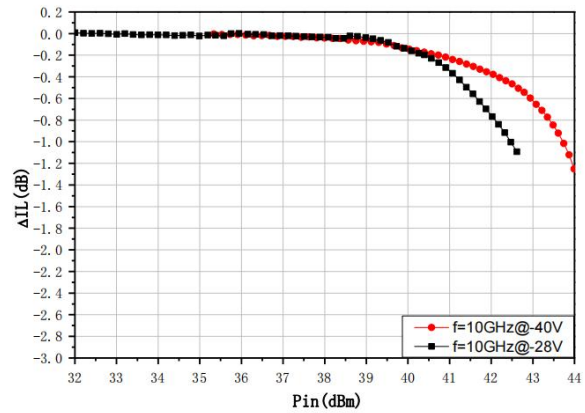
Insertion Loss @ Different temperature



Isolation @ Different temperature



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



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

PIN Definition

PIN	Description
RF1、RF2、RF3、RF4	RF ports, 50Ω, no block capacitor
RFc	RF common ports, 50Ω, no block capacitor
V1、V2、V3、V4、V5、V6、V7、V8	Control Ports
GND	Bottom must be grounded

Truth Table

V1	V2	V3	V4	V5	V6	V7	V8	RF1	RF2	RF ₃	RF ₄
0	1	0	1	0	1	0	1	OFF	OFF	OFF	OFF
1	0	0	1	0	1	0	1	ON	OFF	OFF	OFF
0	1	1	0	0	1	0	1	OFF	ON	OFF	OFF
0	1	0	1	1	0	0	1	OFF	OFF	ON	OFF
0	1	0	1	0	1	1	0	OFF	OFF	OFF	ON

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

2. Performance is same under condition of -28V ~ -40V