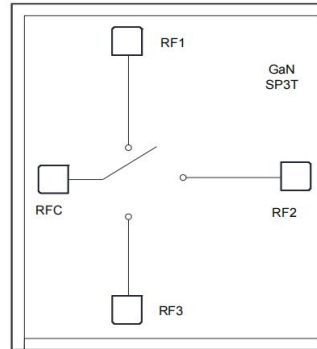


Performance

- Frequency: 2~18GHz
- Insertion loss: 2.2dB
- Isolation: 50dB
- Input P-0.3: 47dBm
- Input/Output VSWR: 2.0:1
- Switching Time: 20ns
- Control Mode: 0/-40V
- Voltage control reflective switch
- Chip size: 1.7*2.0*0.08mm

Function Diagram



Electrical Specifications (Ta=+25°C, V1~V6=0V/-40V, F=2~18GHz)

Symbol	Parameter	Min.	Typ.	Max.	Unit
Li	Insertion Loss	-	2.2	-	dB
ISO	Isolation	-	50	-	dB
VSWR	Input / Output VSWR	-	2.0	-	-

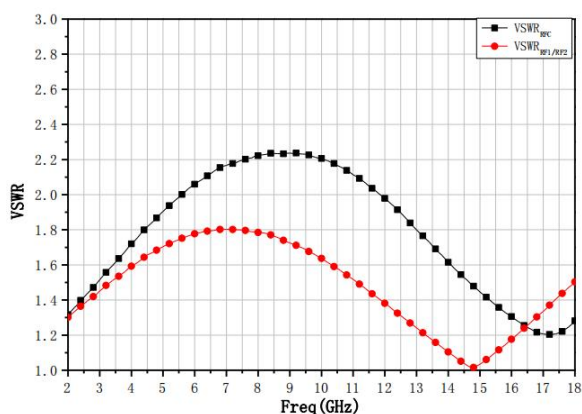
Absolute Maximum Ratings (Ta=+25°C)

Symbol	Parameter	Value	Notes
V1,2	Control Voltage	-60V	
Pcw	Input Continuous Wave Power	48dBm	
Tch	Channel Temperature	225°C	
T	Sintering Temperature	310°C	30s, N2 protection
Tstg	Storage Temperature	-65~150°C	

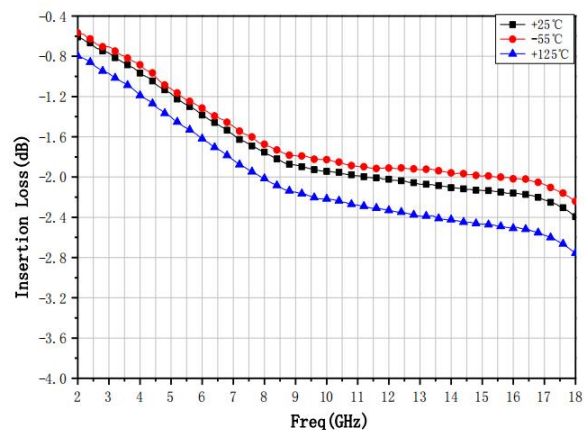
Exceed any of above listed ratings may cause permanent damage.

Test Curves (Ta=+25°C, (V=-40V))

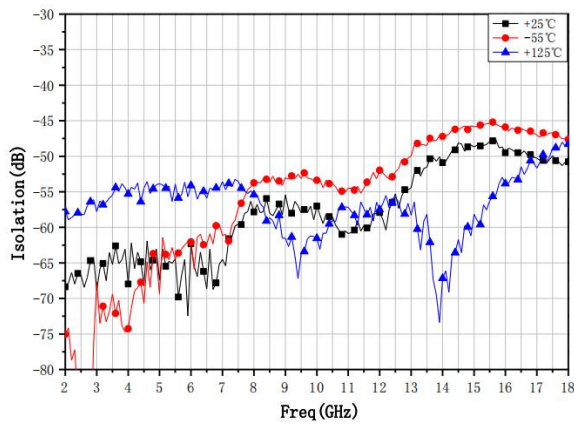
VSWR



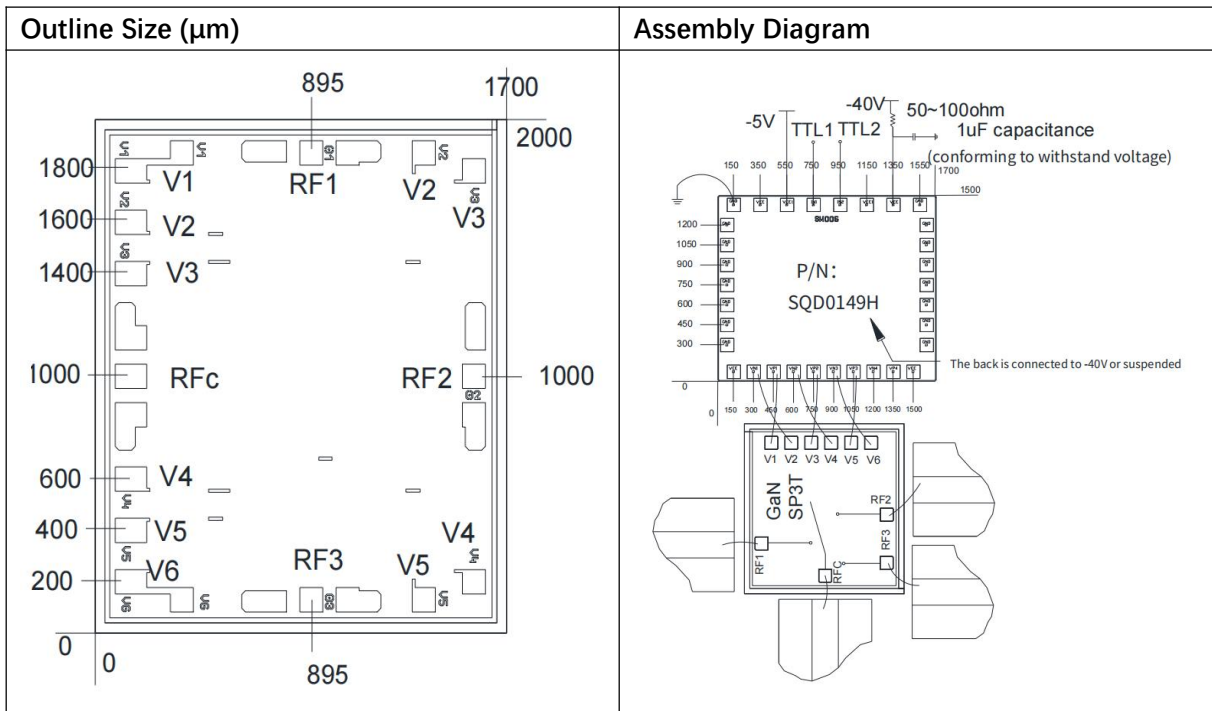
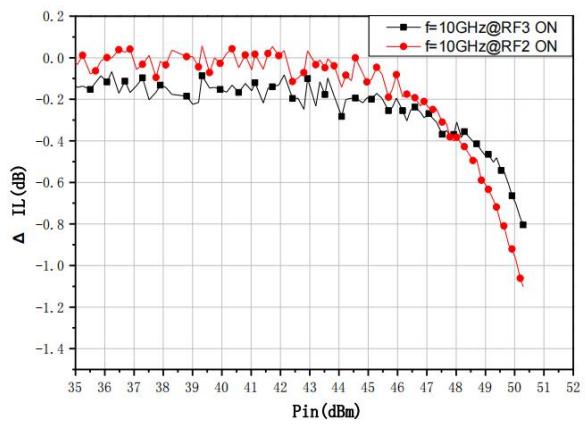
Insertion Loss @ Different temperature



Isolation @ Different temperature



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



Note: For same pads, choose any of them.

PIN Definition

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

Truth Table

V1	V2	V3	V4	V5	V6	RF _c →RF ₁	RF _c →RF ₂	RF _c →RF ₃
0	1	0	1	0	1	OFF	OFF	OFF
1	0	0	1	0	1	ON	OFF	OFF
0	1	1	0	0	1	OFF	ON	OFF
0	1	0	1	1	0	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

Note

- a) This product is an electrostatic sensitive device, and anti-static should be paid attention to during use, transportation and operation;
- b) It is recommended to use 80/20 gold tin for sintering, the sintering temperature should not exceed 310°C, and the sintering time should be as short as possible, not exceeding 30 seconds;
- c) It is recommended to use 2 bonding wires (gold wires with a diameter of 25 μm) at the input and output ends, and the length of the bonding wires is about 300 μm is the best;
- d) The hydrogen resistance of this product is not less than 20000ppm. It is recommended to pay attention to controlling the hydrogen concentration in the sealed cavity when using it.