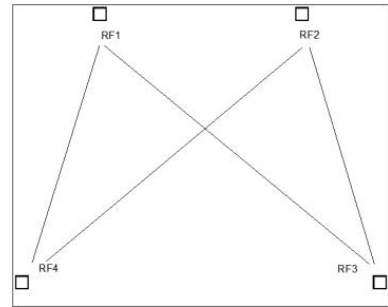


Performance Characteristics:

- Frequency band: 2~18GHz
- Insertion loss: 6.0dB
- Isolation: 45dB
- Enter P1dB: 18dBm
- V1, V2, V3, V4 at 0/-5V different power supply switch path
- Chip size: 3.1mm×2.5mm×0.1mm



Product Description:

CW-SW0218A4 is a GaAs MMIC single pole double throw matching switch chip with a frequency range of 2~18GHz and an entire in-band insertion loss of less than 6.0dB. V1, V2, V3, V4 switch switch paths at 0/-5V different power supply.

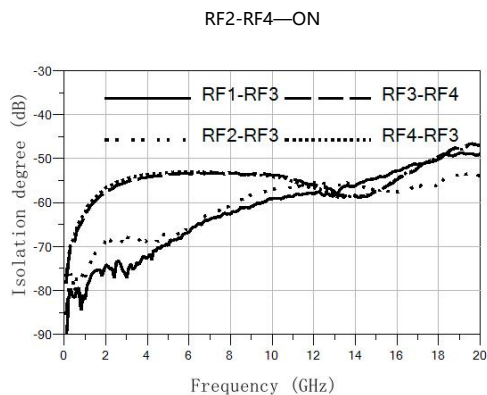
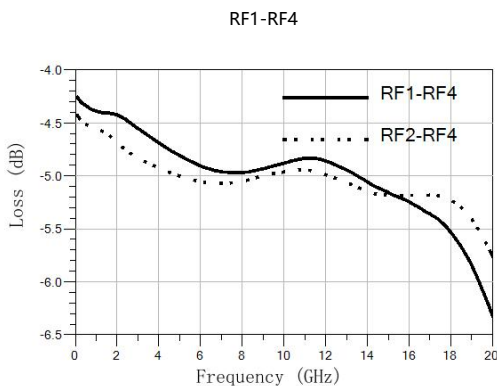
Electrical parameters: (TA=25°C)

Indicators	Minimum	Typical value	Maximum value	Units
Frequency range	2~18			GHz
Insertion loss	-	-	6.0	dB
isolation	45	-	-	dB

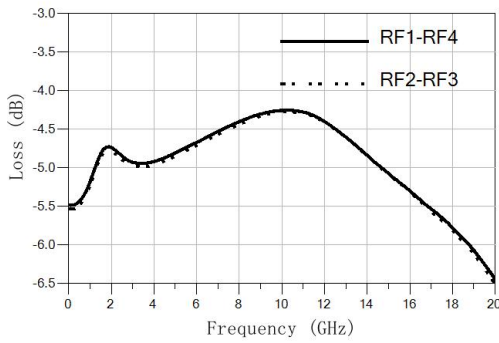
Use limiting parameters:

Input power	+27dBm
Storage temperature	-65°C~150°C
Service temperature	-55°C~125°C

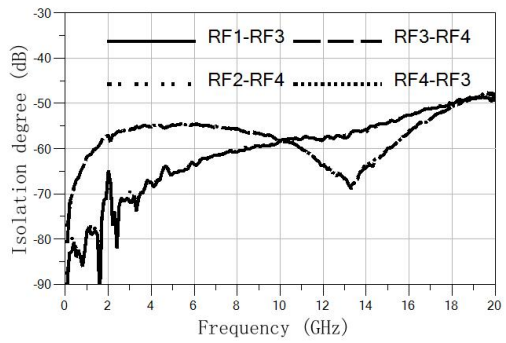
Typical curve:



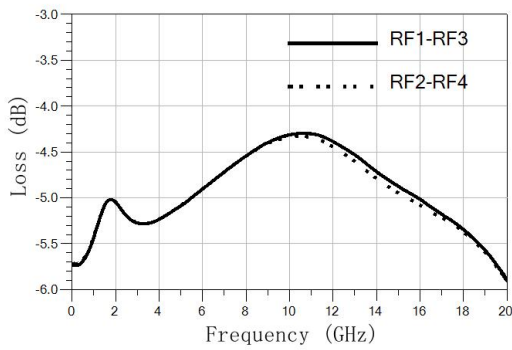
RF1-RF4



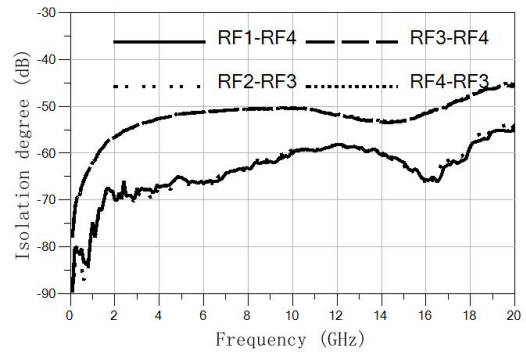
RF2-RF3—ON



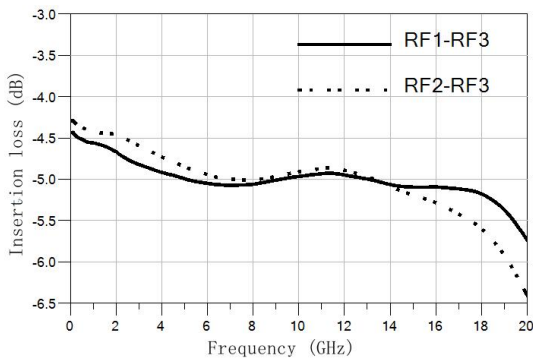
RF1-RF3



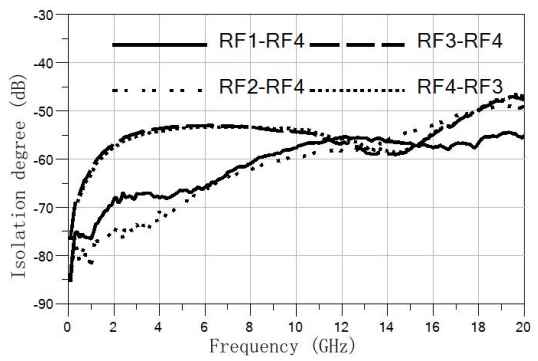
RF2-RF4—ON



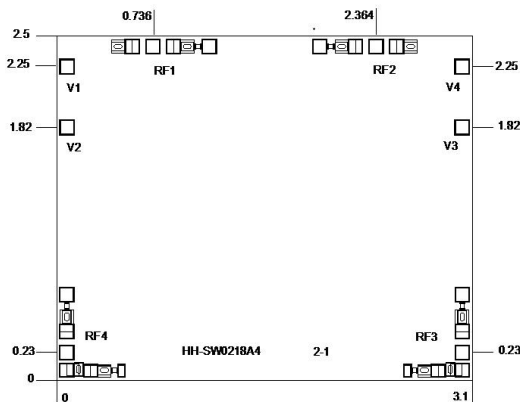
RF1-RF3



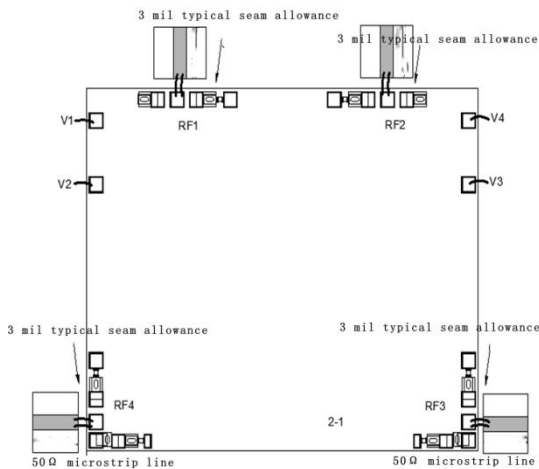
RF2-RF3—ON



Size drawing: (unit mm)



Suggested assembly drawing:



Truth table:

V1	V2	V3	V4	ON	OFF
0	-5	0	-5	RF1→RF4 RF2→RF4	RF1→RF3 RF2→RF3
0	-5	-5	0	RF1→RF4 RF2→RF3	RF1→RF3 RF2→RF4
-5	0	0	-5	RF1→RF3 RF2→RF4	RF1→RF4 RF2→RF3
-5	0	-5	0	RF1→RF3 RF2→RF3	RF1→RF4 RF2→RF4

Instructions:

Storage: The chip must be placed in a container with electrostatic protection and stored in a nitrogen environment.

Cleaning treatment: The bare chip must be operated and used in a purified environment. It is forbidden to use liquid cleaning agent to clean the chip.

Electrostatic protection: Strictly comply with the ESD protection requirements to avoid electrostatic damage to the components.

General operation: Use vacuum chuck or precision pointed tweezers to pick up the chip. Avoid touching the surface of the chip with tools or fingers during handling.

Mounting operation: The chip can be installed using AuSn solder eutectic welding or conductive adhesive bonding process. The mounting surface must be clean and flat.

Bonding operation: Input and output with 2 (recommended diameter of 25um gold wire) bonding wire, bonding wire length less than 250um is optimal. It is recommended to use the smallest possible ultrasonic energy. Bonding begins at the pressure point on the chip and ends at the package (or substrate).