#### **Performance Characteristics:**

• Frequency: 2.6~3.5GHz

Insertion loss: 0.7dB

Isolation degree: 47dB

I/O return loss: 15dB

• Chip size: 1.0mm×1.0mm×0.1mm

## **Product Description:**

CW-SW206305 is a GaAs MMIC matching single-pole double-throw switch chip, the frequency range covers 2. 6~3.5GHz, the insertion loss is less than 0.7dB, the isolation is greater than 45dB, the CW-SW206305 adopts TTL logic control.

# **Electrical parameters:** (TA=25°C, VEE=-5V)

Indicators	Minimum	Typical value	Maximum value	Units
Frequency range		2.6~3.5		GHz
Insertion loss		0.5	0.7	dB
isolation		47		dB
Input return loss		15		dB
Output return loss		15		dB

## **Use limiting parameters:**

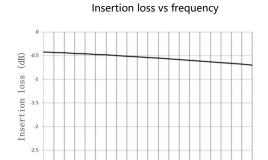
Input power	+30dBm
Storage temperature	-65℃~150℃
Service temperature	-55℃~85℃

### Truth table:

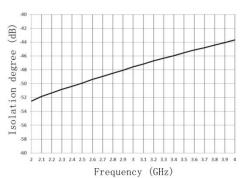
VEE	A1	OUT1	OUT2
-5	5	ON	OFF
-5	0	OFF	ON

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# **Typical curves:**



isolation VS Frequency



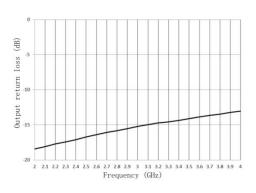
Input return loss vs frequency

2.6 2.7 2.8 2.9 3 3.1 3.2 Frequency (GHz)



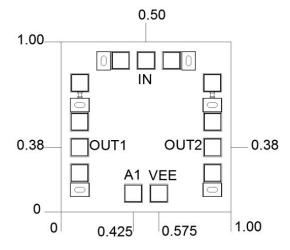
2.7 2.8 2.9 3 3.1 3.2 Frequency (GHz)

output return loss VS Frequency

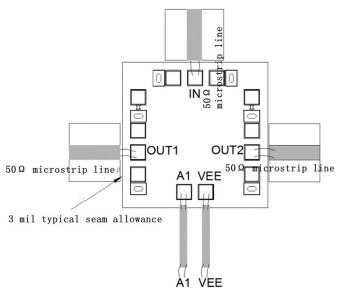


# Size chart: (unit mm)

Input Return Loss (dB)



## Suggested assembly drawing:



#### Instructions:

Note: I/O no straight capacitance

**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).

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