

Performance Characteristics:

- Frequency band: 14~18GHz
- Insertion loss: 0.5dB
- Isolation: 16dB
- Input/output voltage standing wave ratio: 1.5/1.4
- Chip size: 0.87mm×1mm×0.1mm

Product Description:

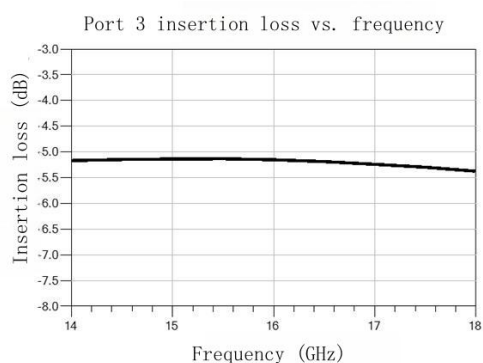
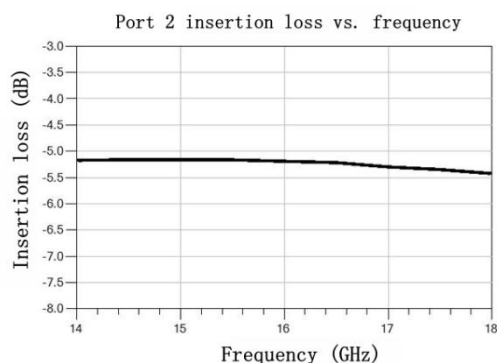
CW-PD31418 is a GaAs MMIC^{0°} three-way power splitter chip. The power splitter chip has the characteristics of small plug loss, high isolation, small size, easy integration and so on. It is widely used in power distribution and synthesis. Its frequency range covers 14~18GHz, with in-band insertion loss of 0.5dB.

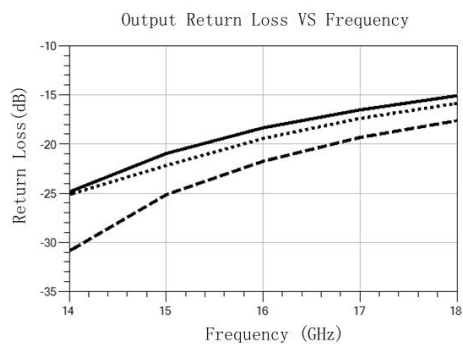
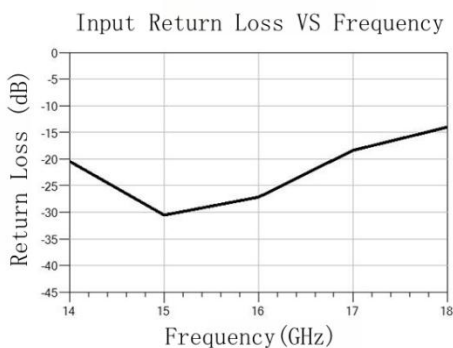
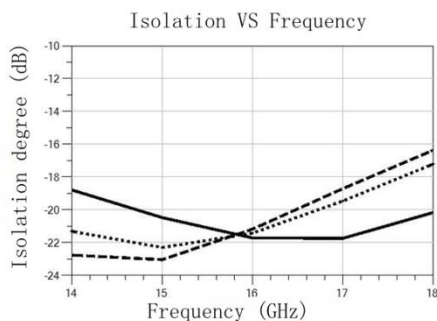
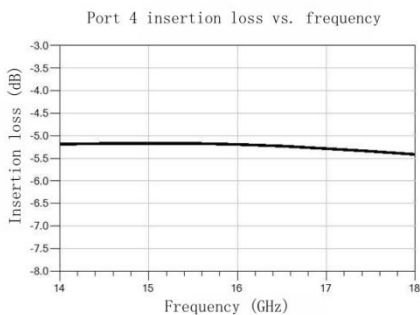
Electrical parameters: ($T_A=25^{\circ}\text{C}$)

Indicators	Minimum	Typical value	Maximum value	Units
Frequency range	14~18			GHz
Insertion loss	-	0.5	0.6	dB
isolation	-	16	-	dB
Input voltage standing wave	-	1.5	-	-
Output voltage standing wave	-	1.4	-	-

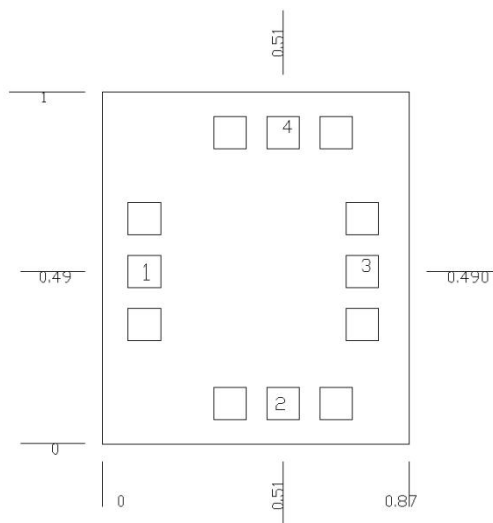
Use limiting parameters:

Input power	+33dBm
Storage temperature	-65°C~150°C
Service temperature	-55°C~85°C

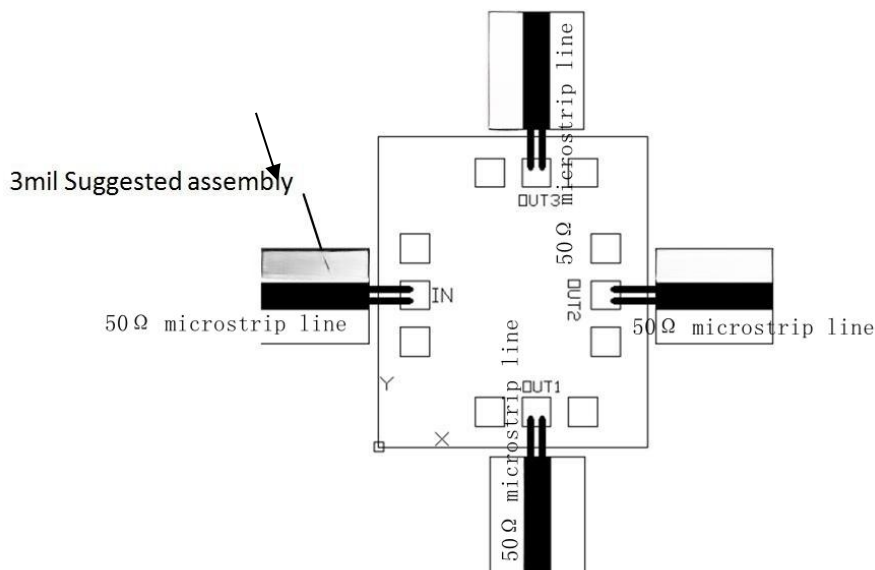
Typical curve:



Dimensional drawing: (unit mm)



Suggested assembly drawing:



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).