

Performance Characteristics:

- Frequency band: 18~40GHz
- Insertion loss: 0.8dB
- Fluctuation of insertion loss: ± 0.2 dB
- Isolation: 25dB
- Input/output voltage standing wave ratio: 1.2/1.1
- Chip size: 1.67mm \times 1.4mm \times 0.075mm

Product Description:

CW-PD1840V is a GaAs MMIC 0° two-way power splitter chip. The power splitter chip has the characteristics of small plug loss, high isolation, small size, light weight, easy integration and so on. Its frequency range covers 18~40GHz.

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

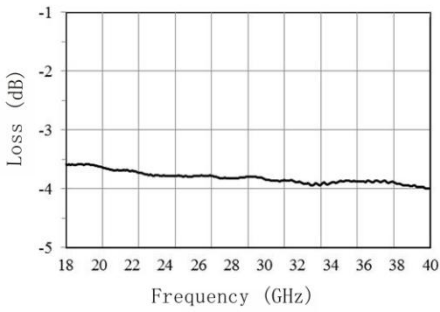
Indicators	Minimum	Typical value	Maximum value	Units
Frequency range	18~40			GHz
Insertion loss	0.6	0.8	1.0	dB
Fluctuations in plug loss	-	-	± 0.2	dB
isolation	22	25	-	dB
Enter the standing wave ratio	-	1.2	1.4	-
Output standing wave ratio	-	1.1	1.3	-

Use limit parameters: (Exceeding any of the above maximum limits risks permanent damage.)

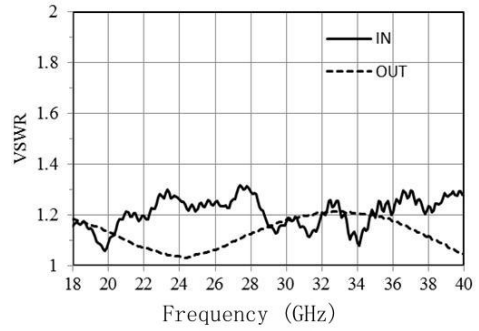
Input power	+37dBm
Storage temperature	-65°C~150°C
Service temperature	-55°C~125°C

Typical curve:

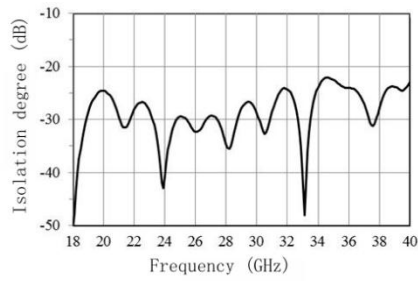
Insertion loss



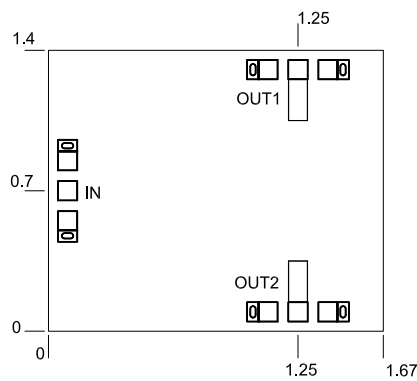
input-output standing wave ratio



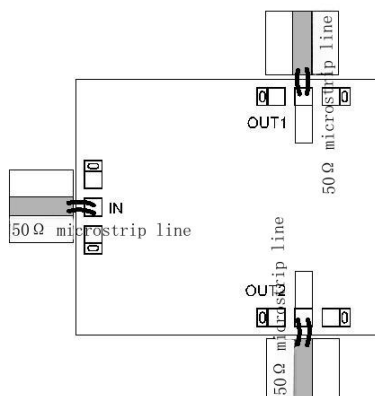
isolation



Size 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).