

Performance Characteristics:

- Frequency range: 18-40GHz
- Insertion loss: 0.6dB
- Fluctuation of insertion loss: ± 0.1 dB
- Isolation degree: 11dB
- Input/output voltage standing wave ratio: 1.4/1.4
- Chip size: 1.5mm x 3.0mm x 0.1mm

Product Description:

The CW-PD1840 is a GaAs MMIC ⁰ two-way power divider with excellent performance. The chip covers a band range of 18-40GHz, has insertion loss of less than 0.6dB and input-output voltage standing wave ratio of less than 1.4

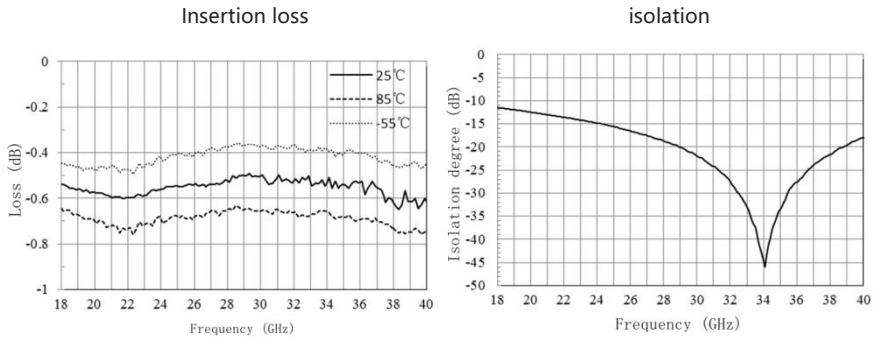
Electrical parameters: ($T_A=25^\circ\text{C}$)

| Indicators | Minimum | Typical value | Maximum value | Units |
|---------------------------|---------|---------------|---------------|-------|
| Frequency range | 18-40 | | | GHz |
| Insertion loss | 0.5 | - | 0.6 | dB |
| Fluctuations in plug loss | - | - | ± 0.1 | dB |
| isolation | 11 | - | - | dB |
| Input standing wave | - | - | 1.4 | - |
| Output standing wave | - | - | 1.4 | - |

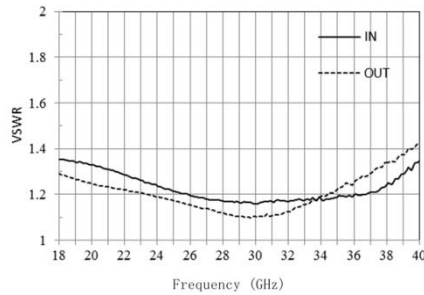
Use limit parameters: (Exceeding any of the above maximum limits may cause permanent damage.)

| | |
|---------------------|-------------|
| Maximum input power | 37dBm |
| Storage temperature | -65°C-150°C |
| Service temperature | -55°C-125°C |

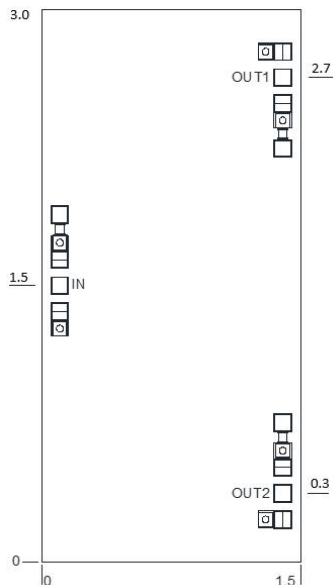
Typical curve:

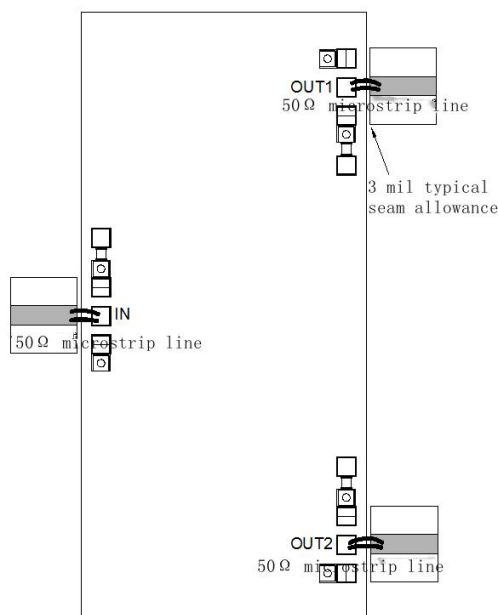


Standing wave ratio



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 25μm gold wire) bonding wire, bonding wire length less than 250μm 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).