#### **Performance Characteristics:**

• Frequency band: 2~18GHz

Insertion loss: 1 dB

• Fluctuation in insertion loss: ±0.3dB

Isolation: 15dB

Input/output voltage standing wave ratio: 1.5/1.5

• Chip size: 2.0mm x 2.0mm x 0.075mm

# **Product Description:**

CW-PD0218V is a GaAs MMIC 0° two-way power splitter chip. Its frequency range covers 2~18GHz and the insert ion loss is less than 1.3dB in the entire band.

# Electrical parameters: (T<sub>A</sub>=25°C)

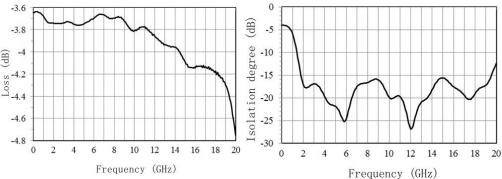
| Indicators                    | Minimum | Typical value | Maximum value | Units |
|-------------------------------|---------|---------------|---------------|-------|
| Indicators                    |         | 2~18          |               | GHz   |
| Frequency range               | 0.7     | 1             | 1.3           | dB    |
| Insertion loss                | -       | -             | ±0.3          | dB    |
| Fluctuations in plug loss     | 15      | -             | -             | dB    |
| isolation                     | -       | 1.5           | -             | -     |
| Enter the standing wave ratio | -       | 1.5           | -             | -     |

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

| <del>-</del>        |           |  |
|---------------------|-----------|--|
| Input power         | +37dBm    |  |
| Storage temperature | -65℃~150℃ |  |
| Service temperature | -55℃~125℃ |  |

# **Typical curve:**



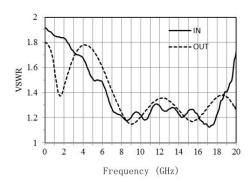


website: www.cdcwtec.com

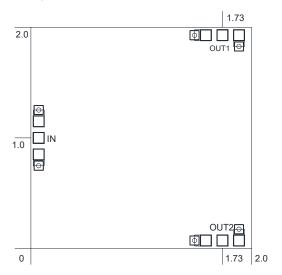
portraiture: 028-8709823

website: www.cdcwtec.com

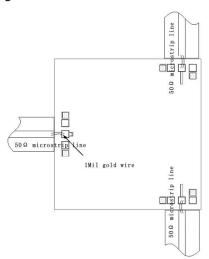
# Standing wave ratio



# **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 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).

website: www.cdcwtec.com