

**Performance characteristics:**

- Frequency band: 2GHz~6GHz
- Gain: 23dB
- Saturated output power: 26dBm
- Power add-on efficiency: 30%
- Input/output return loss: 15dB/10dB
- Power supply: +8V@200mA
- Chip size: 2.4mm×1.5mm×0.1mm

**Product Description:**

CW-DA0206 is a GaAs MMIC driver amplifier chip with a frequency range covering 2~6GHz and a typical saturation output power of 26dBm.

**Electrical parameters:** (  $T_A = 25^\circ\text{C}$ ,  $V_D = +8\text{V}$ )

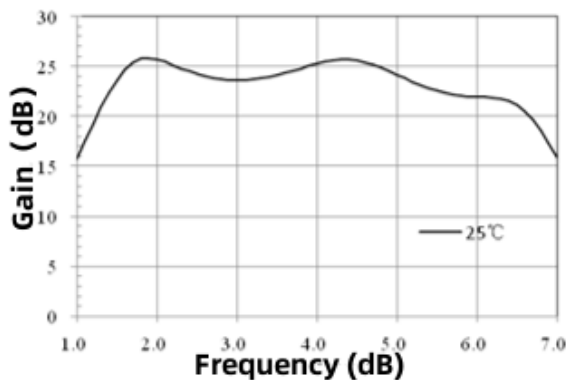
Indicators	Minimum value	Typical values	Maximum value	Unit
Frequency range		2~6		GHz
Gain	-	23	-	dB
Saturated output power	-	26	-	dBm
Input Return Loss	-	15	-	dB
Output Return Loss	-	10	-	dB

**Usage limitation parameters:** (Exceeding any of the above maximum limits may result in permanent damage.)

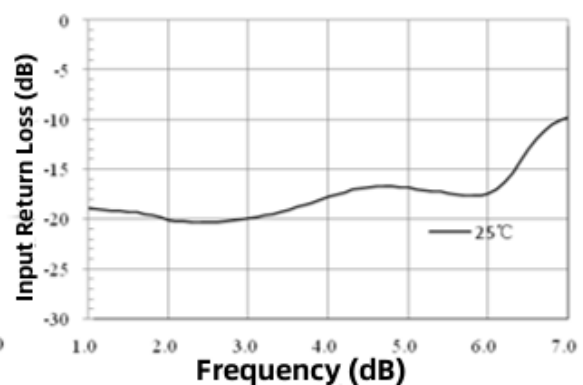
Input power	+12dBm
Control voltage	+9V
Storage temperature	-65°C~150°C
Operating temperature	-55°C~125°C

**Typical curves:**

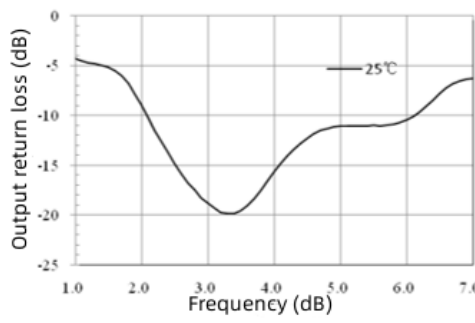
Gain Vs Frequency



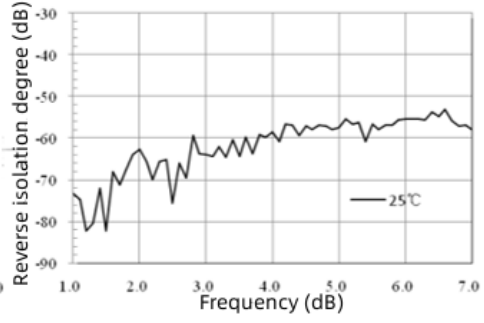
Input return loss Vs frequency



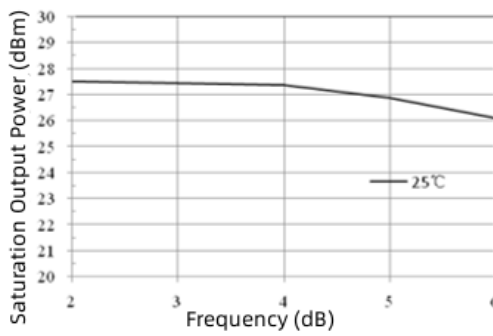
Output return loss Vs frequency



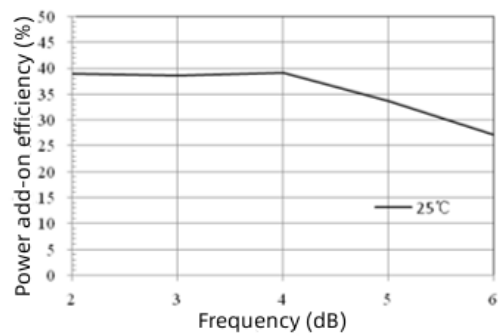
Reverse isolation degree Vs frequency



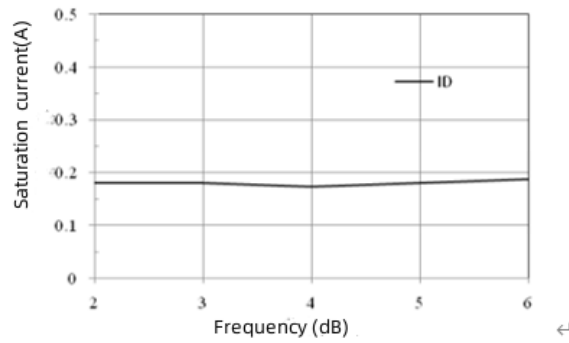
Output Saturation Power Vs Frequency



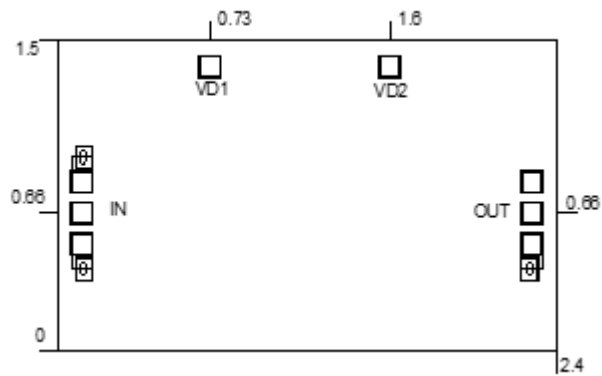
Power Added Efficiency Vs Frequency



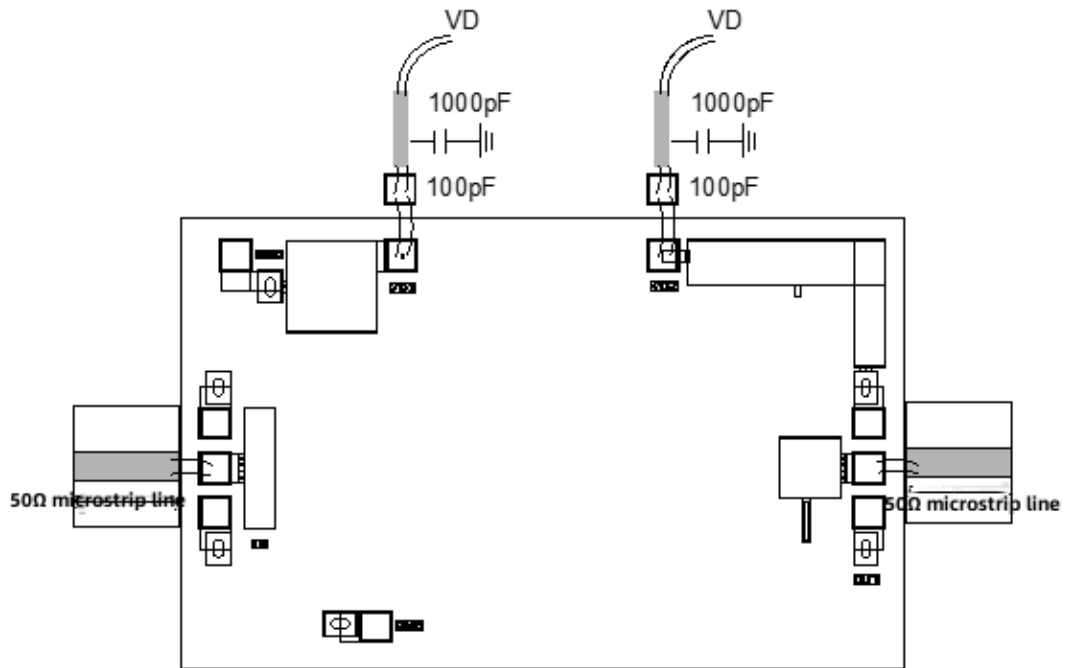
Saturation current Vs Frequency



**Dimensional drawing:** (unit mm)



### Suggested assembly drawing:



### Instructions for use:

**Caution:** Input and output have isolation capacitors

**Storage:** The chip must be placed in a container with electrostatic protection and stored in a nitrogen atmosphere.

**Cleaning treatment:** Bare chips must be operated and used in a purified environment, and it is prohibited to use liquid cleaners to clean the chips.

**Electrostatic protection:** Please strictly comply with ESD protection requirements to avoid electrostatic damage to the device.

**Routine operation:** Please use vacuum chuck or precision pointed tweezers to pick up the chips. Avoid touching the chip surface with tools or fingers during the operation.

**Mounting operation:** Chip mounting can be done using AuSn solder eutectic welding or conductive adhesive bonding process. The mounting surface must be clean and flat.

**Bonding operation:** 2 (25um diameter gold wire is recommended) bonding wires for each input and output, with a bonding wire length of less than 250um optimal. It is recommended to use the lowest possible ultrasonic energy. Bonding starts at the pressure point on the chip and ends at the package (or substrate).