Performance characteristics:

- Frequency band: 8-12GHz
- Gain: 26dB
- Saturated output power: 30.5 dBm

Power supply: Vgg-1. 2V; Vdd1, Vdd2, Vdd3: + 5V

Efficiency: 40%

Chip size: 3.45 mm × 2.75 mm × 0.1 mm

Product Description:

CW-PA0812P01A is a GaAs MMIC power amplifier with a frequency range of 8-12GHz, an output power of 30.5 dBm and an efficiency of 40%. The chip adopts Vg:-1.2 V; Vd: + 5V power supply.

Electrical parameters: (TA=25 ℃, Vgg=-1. 2V, Vdd1=Vdd2=Vdd3=+5V)

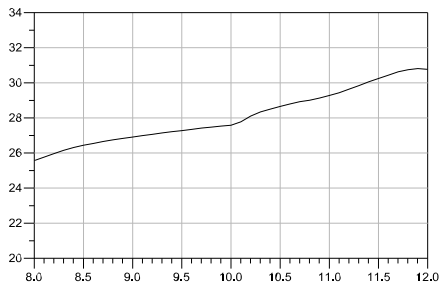
Indicators	Minimum value	Typical value	Maximum value	Unit
Frequency range		8-12		GHz
Gain	-	26	-	dB
Input standing wave	-	1.5	-	dB
Output standing wave	-	1.8	-	dB
Output P1dB	-	30.5	-	dBm
Static current	-	250	-	mA
PAE	-	40	-	%

Use limit parameters:

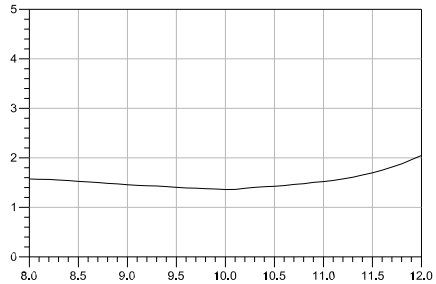
Input power	23dBm
Voltage	+ 7V
Storage temperature	-65 ℃-150 ℃
Operating temperature	-55 ℃-85 ℃

Typical curve:

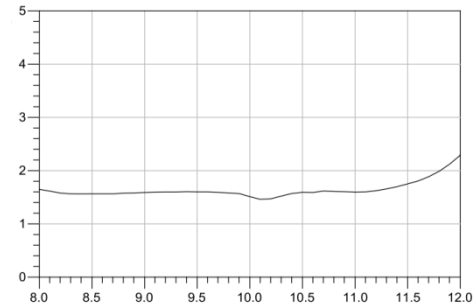
Gain



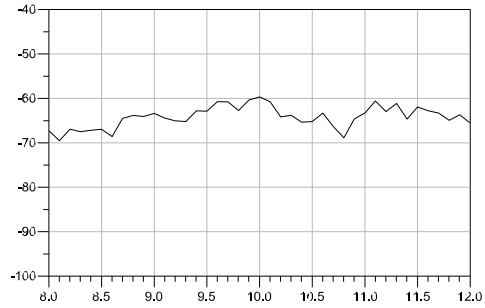
Input standing wave



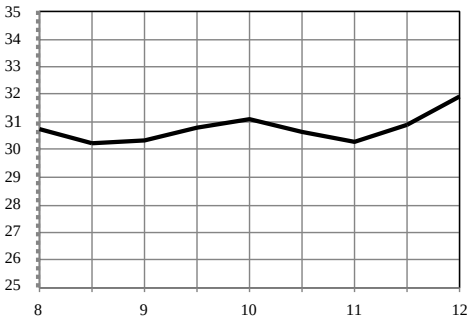
Output standing wave



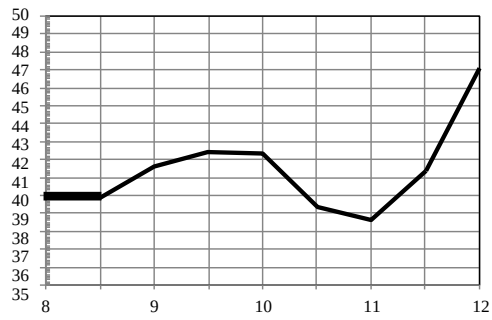
Reverse isolation



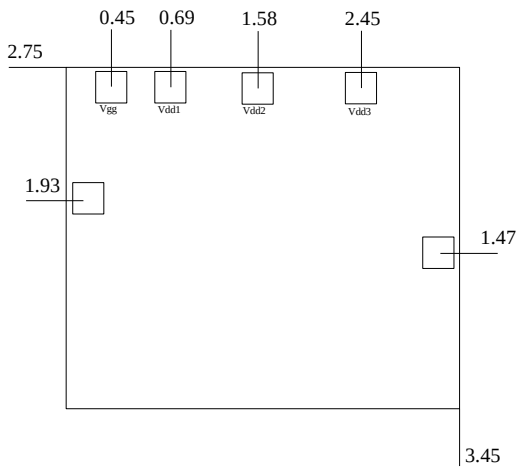
Saturated output power



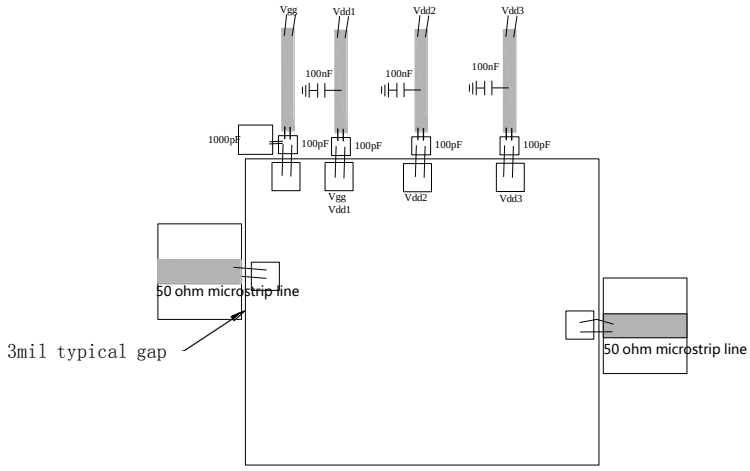
PAE



Dimension drawing: (in mm)



Suggested assembly drawing:



Instructions for use:

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

Cleaning treatment: Bare chips must be operated in a clean environment, and it is forbidden to use liquid cleaner to clean the chips.

Electrostatic protection: Please strictly abide by ESD protection requirements to avoid electrostatic damage of devices.

General operation: Please use vacuum chuck or precision pointed tweezers to take the chip. Avoid touching the chip surface with tools or fingers during operation.

Mounting operation: The chip can be installed by AuSn solder eutectic welding or conductive adhesive bonding process. The mounting surface must be clean and flat.

Bonding operation: Two bonding wires (recommended diameter 25um gold wire) are used for input and output, and the length of bonding wire is less than 250um. It is recommended to use as little ultrasonic energy as possible. Bonding starts at the pad point on the chip and ends at the package (or substrate).