

Performance characteristics:

- Frequency band: 8GHz ~ 12GHz
 - Gain: 29dB
 - Output Psat: 31dBm
 - Chip size: 3.35 mm × 2.75 mm × 0.1 mm
- Power supply: VGG=-1. 3V, VDD=+5V @ 183mA

Input/output return loss: 14dB/12dB

Power Accessory Efficiency: 45%

Product Description:

CW-PA0812P01 is a GaAs MMIC power amplifier chip with a frequency range of 8-12GHz. The output saturation power of the chip is 31dBm.

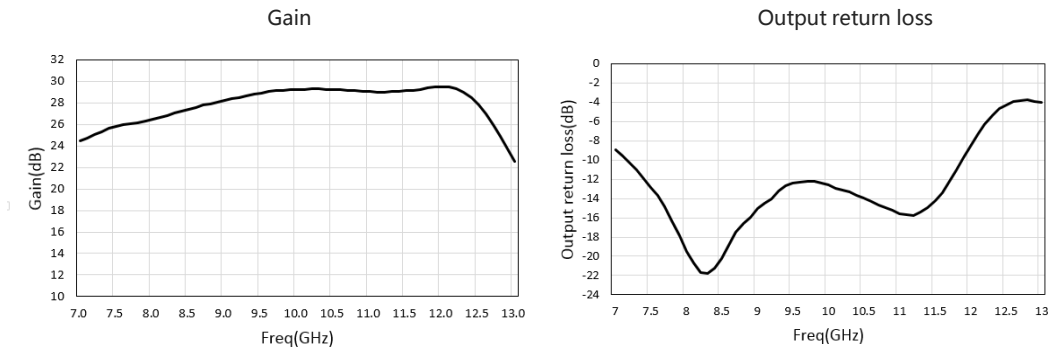
Electrical parameters: (TA=25 °C)

Indicators	Minimum value	Typical value	Maximum value	Unit
Frequency range	8GHz ~ 12GHz			GHz
Gain	-	29	-	dB
Input return loss	-	14	-	dB
Output return loss	-	12	-	dB
Output Psat	-	31	-	dBm
Power accessory efficiency	-	45	-	%
Static working current	-	183	-	mA

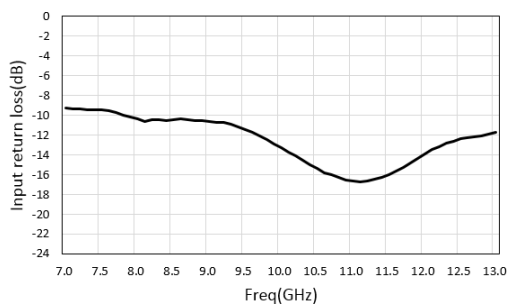
Use constraint parameters:

Maximum input power	15dBm
Storage temperature	-65 °C-150 °C
Operating temperature	-55 °C-85 °C

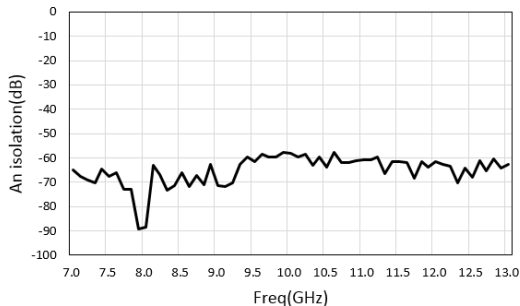
Typical curve:



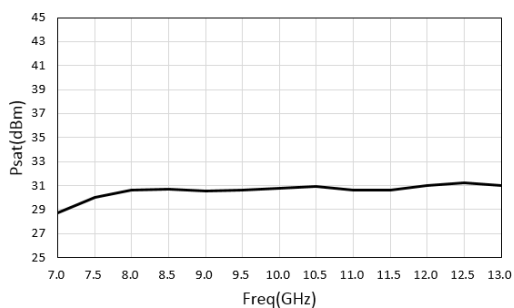
Input return loss



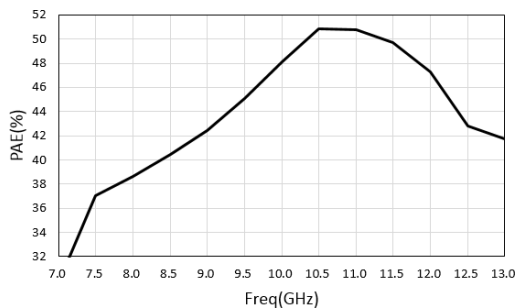
Reverse isolation



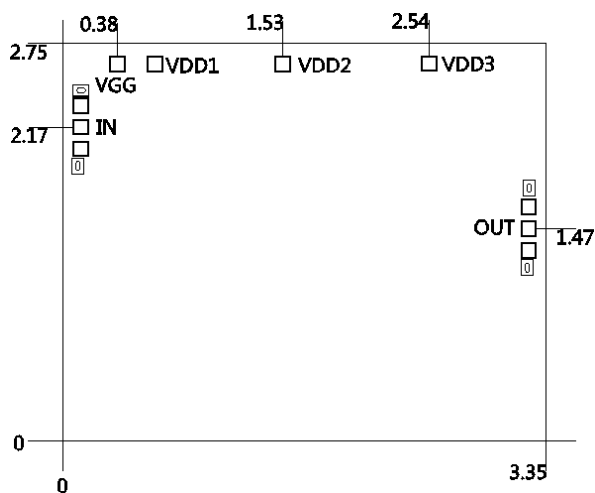
Output saturation power



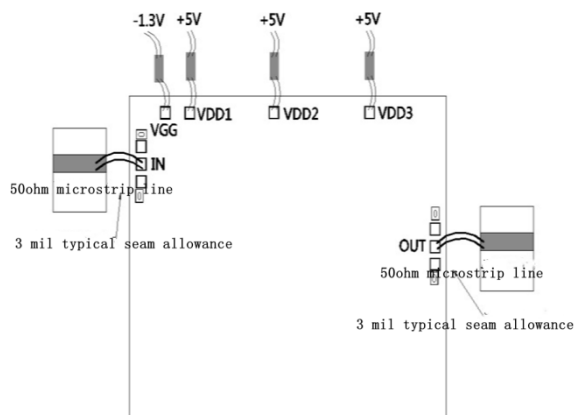
Power added efficiency



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 (25um diameter gold wire) bonding wires are used for input and output, and the length of bonding wire is 300um. 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)