Performance Characteristics:

- Frequency band: 1-18 GHz
- Passband loss: 0.5dB
- All measures: 4.0 dB
- Return loss: 25 dB
- Chip size: 0.95mm×1.0mm×0.1mm

Product Description:

CW-AE0118-4 is a GaAs MMIC 4dB equalizer chip.The equalizer chip has the characteristics of small size, light weight, easy integration, high performance, etc., and is widely used in improving the amplitude flatness of chann els.The equalizer chip is realized by lumped unit, the performance is not affected by the external box body, and t he use is simple and convenient.The chip size is 0.95mm×1.0mm×0.1mm.

Electrical parameters: (T_A=25°C)

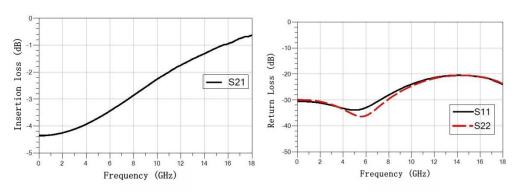
Indicators	Minimum	Typical value	Maximum value	Units
Frequency range	1-18			GHz
Insertion loss @18GHz	-	0.5	-	dB
Even measure	-	4	-	dB
Return loss	-	25	-	dB

Use limit parameters: (Exceeding any of the following maximum limits risks permanent damage)

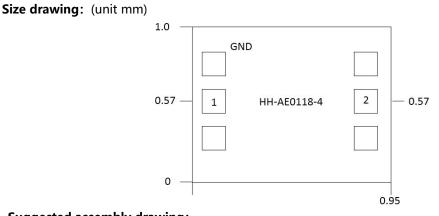
Input power	+30dBm	
Storage temperature	-65℃~+175℃	
Service temperature	-55°C~+85℃	

Typical curve: (T_A=25°C)

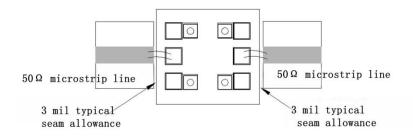
Insertion loss



return loss



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).