

**Performance Characteristics:**

- Passband band: 6.0 ~ 12.0GHz
- Passband loss: 0.9 dB
- All measurements: 3.4dB
- Return loss: 20dB
- Chip size: 0.80mmx0.85mm x 0.1mm

**Product Description:**

CW-AE0612 is a gallium arsenide monolithic equalizer chip. The equalizer chip has the characteristics of small size, light weight, easy integration, high performance, etc., and is widely used in the improvement of channel amplitude flatness. The equalizer chip is realized by lumped unit, the performance is not affected by the external box body, and the use is simple and convenient. The chip size is 0.80mmx0.85mm x 0.1mm.

**Electrical parameters:** ( $T_A=25^{\circ}\text{C}$ )

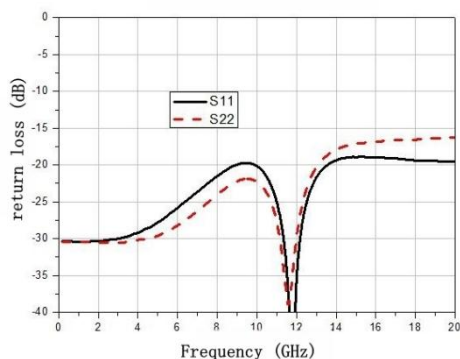
Indicators		Minimum	Typical value	Maximum	Units
Frequency range		2 ~ 18			GHz
Insertion loss	CW-AE0612	0.9	-	4.3	dB
Even measure	CW-AE0612	-	3.4	-	dB
Input return loss		20	-	-	dB
Output return loss		20	-	-	dB

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

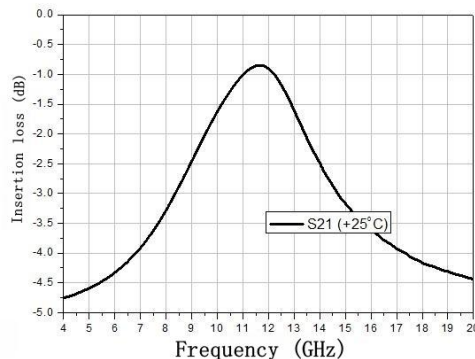
Maximum input power	+30dBm
Storage temperature	-65°C ~ +150°C
Service temperature	-55°C ~ +125°C

**Typical curve:** ( $T_A=+25^{\circ}\text{C}$ )

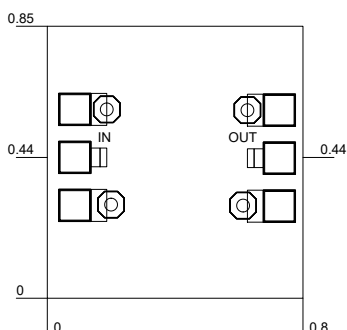
I/O return loss



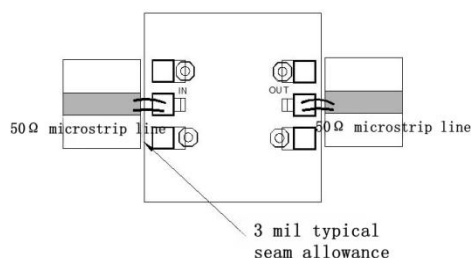
Insertion loss



**Size 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).