

### Features

Freq: 4~12GHz  
 Slope: 3.5dB  
 Insertion Loss: 0.4dB@12GHz  
 Chip Size: 0.76mm×0.74mm×0.1mm

### General Description

The HG115JH-1 is a GaAs pHEMT equalizer. Covering 4 to 12 GHz, this equalizer offers very high slope of 3.5dB and extremely low insertion loss of 0.4dB@12GHz. Input and output VSWR are 1.4/1.4.

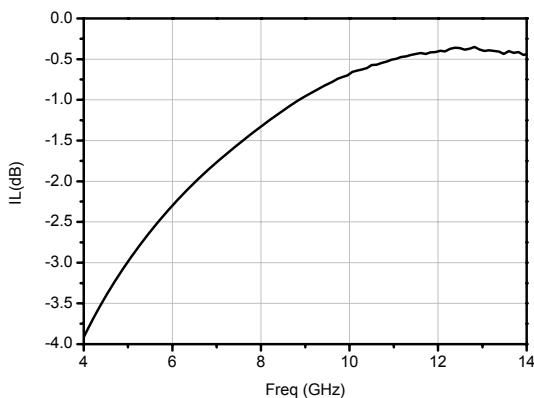
### Electrical Specifications( $T_A=25^\circ\text{C}$ )

Parameter	Min.	Typ.	Max.
Frequency Range(GHz)	4~12		
Input VSWR	-	1.4	-
Output VSWR	-	1.4	-
Insertion Loss(dB)	-	0.4~3.9	-
Slope(dB)	-	3.5	-

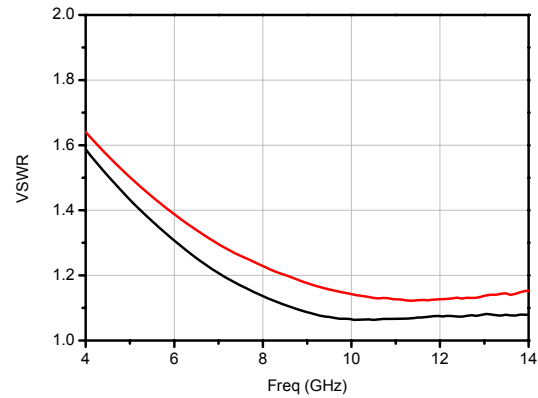
### Absolute Maximum Ratings

RF Input Power	+27dBm
Operating Temperature	-55°C~125°C
Storage Temperature	-65°C~150°C

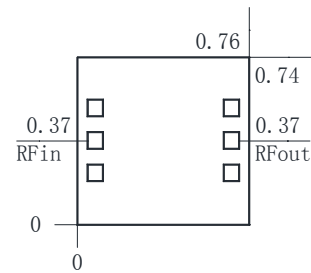
### Insertion Loss



### Input and Output VSWR



### Outline Drawing (mm)



### Notes:

1. The chip should be stored in a dry and nitrogen environment, and used in a clean environment.
2. GaAs material is brittle, can not touch the surface of the chip, must be careful when using.
3. The chip is welding with conductive adhesive or alloy (alloy temperature should not exceed 300°C, and no more than 30 sec. ), and should make it fully grounded.
4. The chip microwave port and substrate gap is not exceeding 0.05mm, with  $\Phi 25\mu\text{m}$  double gold wire bonding, suggested length of gold wire 250~400 $\mu\text{m}$ .
5. Chip microwave port without DC blocking capacitor.
6. The chip is sensitive to static electricity, and should be protected against static electricity during storage and use.