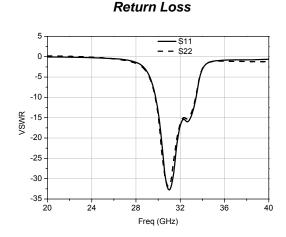


## Features

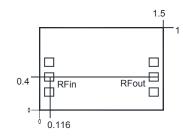
Pass Band: 30.5~32.5GHz Insertion Loss: 1.7 dB Stop Band Rejection: 30dB@22.6GHz, 30.7dB@36GHz Return Loss: 15dB/15dB Chip Size: 1.5mm×1mm×0.1mm

## **General Description**

The HG118L is a GaAs pHEMT band pass filter. Pass band Covers 30.5 to 32.5 GHz, this filter offers very low insertion loss of 1.7dB in pass band, and the return loss is 15dB.



# Outline Drawing (mm)



## Assembly Diagram



#### Absolute Maximum Ratings

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

#### 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  $^\circ\!C$ , 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  $\Phi25\mu m$  double gold wire bonding, suggested length of gold wire  $250{\sim}400\mu m.$ 

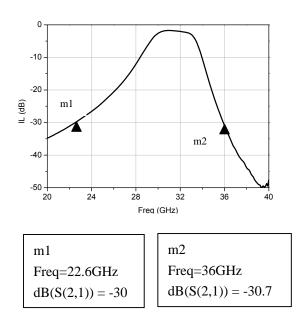
5. Chip microwave port without DC blocking capacitor.

6. The chip is sensitive to static electricity, and should be protected against static electricity during storage and use.

## Electrical Specifications( $T_A=25 \ C$ )

<u> </u>		,	
Parameter	Min.	Тур.	Max.
Frequency Range(GHz)	30.5~32.5		
Input Return Loss	-	15	-
Output Return Loss	-	15	-
Pass Band Insertion			1.7
Loss(dB)	-	-	1.7
Stop Band Rejection(dB)	-	30@22.6GHz	-
	-	30.7@36GHz	-

#### **Insertion Loss**



# GaAs MMIC BAND PASS FILTER , 30.5 - 32.5GHz