

Features

Pass Band: DC~3GHz
 Insertion Loss: 2.1 dB
 Stop Band Rejection: 15.5dB@4.5GHz,
 52dB@7GHz
 Return Loss: 20dB
 Chip Size: 1.8mm×0.8mm×0.1mm

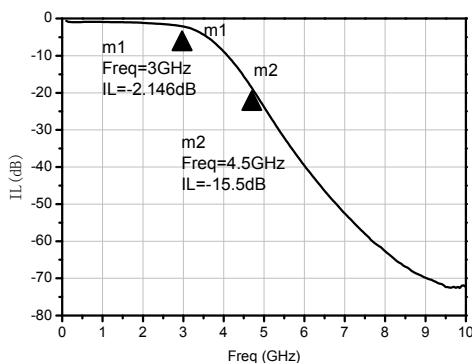
General Description

The HG123LA is a GaAs pHEMT low pass filter. Pass band Covers DC to 3 GHz, this filter offers very low insertion loss of 2.1dB in pass band, and the return loss is 20dB.

Electrical Specifications(T_A=25 °C)

Parameter	Min.	Typ.	Max.
Frequency Range(GHz)	DC~3		
Input Return Loss	-	-	20
Output Return Loss	-	-	20
Pass Band Insertion Loss(dB)	-	2.1	-
Stop Band Rejection(dB)	-	15.5@4.5GHz	-
	-	52@7GHz	-

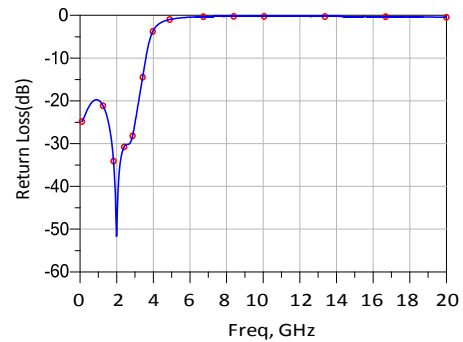
Insertion Loss



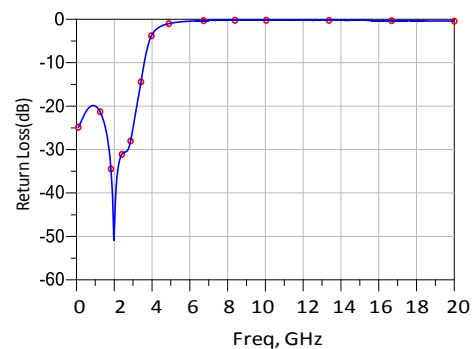
Absolute Maximum Ratings

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

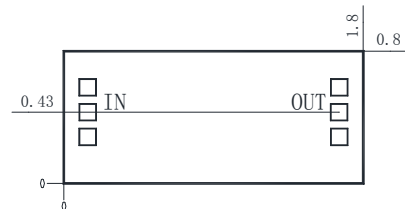
Input Return Loss



Output Return Loss



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 Φ25μm double gold wire bonding, suggested length of gold wire 250~400μm.
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.