

Features

Pass Band: DC~4.5GHz
 Insertion Loss: 1.6dB
 Stop Band Rejection: 32dB@6.5GHz,
 71dB@8.1GHz
 Return Loss: 25/25dB
 Chip Size: 1.8mm×0.7mm×0.1mm

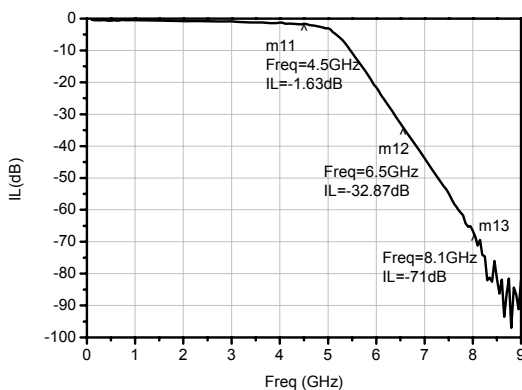
General Description

The HG124L is a GaAs pHEMT low pass filter. Pass band Covers DC to 4.5 GHz, this filter offers very low insertion loss of 1.6dB in pass band, and the return loss is 25/25dB.

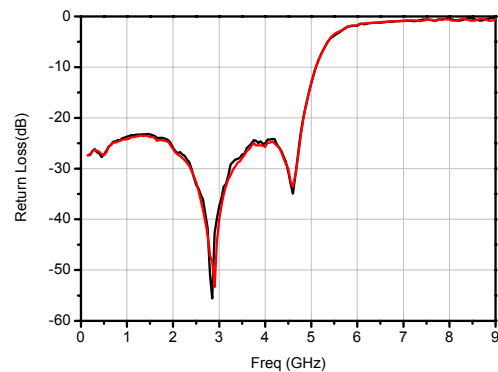
Electrical Specifications($T_A=25^\circ\text{C}$)

Parameter	Min.	Typ.	Max.
Frequency Range(GHz)	DC~4.5		
Input Return Loss	-	25	-
Output Return Loss	-	25	-
Pass Band Insertion Loss(dB)	-	1.6	-
Stop Band Rejection(dB)	-	32@6.5GHz	-
	-	71@8.1GHz	-

Insertion Loss



Return Loss



Outline Drawing (mm)



Absolute Maximum Ratings

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

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 μm .
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.