

General Description

The NWBF09750-740-20 is an X-band Cavity Band-Pass filter module and provides low passband insertion loss, low VSWR and high rejection. The filter provides 740MHz of bandwidth centered at 9.75GHz while achieving a maximum of 0.4dB loss over the bandwidth at a nominal stop-band attenuation of 20dB.



Fig. 1: NWBF09750-740-20

Features

- Low insertion loss
- High Stop Band attenuation of 20dB

Applications

- Preselect filter
- Spurious and harmonic suppression
- Image rejection for receivers

Electrical Parameters

Parameter	Unit	Min	Typ	Max	Remarks
RF Power Handling (peak)	W			80	
RF Power Handling (continuous)	W			40	
RF Input Center Frequency	MHz		9750		Center frequency can be changed within X band on request.
RF bandwidth	MHz		740		
RF Lower Stopband Attenuation f < 8530MHz	dB		-14.0		
RF Upper Stopband Attenuation f > 10970MHz	dB		-31.7		
RF input return loss	dB			20	
Insertion loss over operating bandwidth	dB			0.5	
Pass band ripple	dB			0.2	

Typical Performance

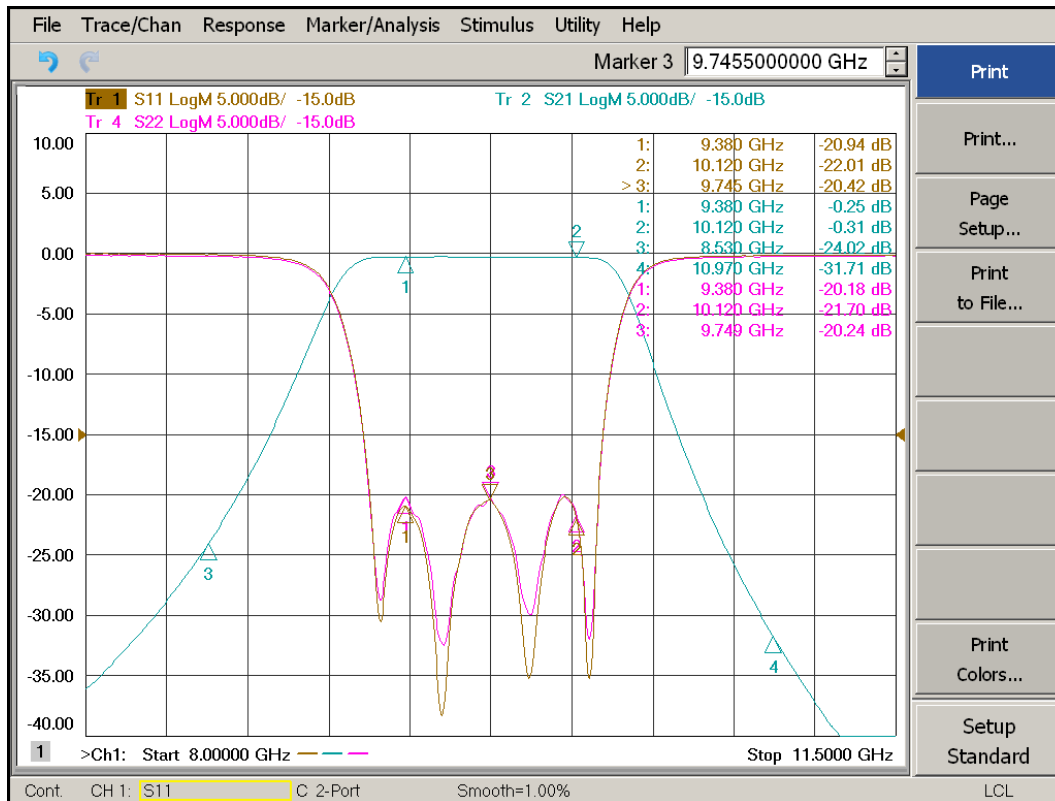


Fig. 1: Test Data for NWBF09750-740-20

Mechanical and Environmental Parameters

Parameter	Unit	Min	Typ	Max	Remarks
Operating Temperature	°C	-20		+70	Extended temperature ranges available on request.
None Operating Temperature	°C	-40		+150	
Dimensions (L W H)	in		1.9 x 0.5 x 0.5		including SMA connectors
Port Connectors			SMA-f		Feed-Thru Ø 0.018
Material		Aluminum			

Notes: Specifications subject to change without notice.

Additional features:

- Marking: the unit is marked with manufacturer part no., date code, and Serial Number.
- All plating and painting is RoHS compliant

For further information please contact NANOWAVE Technologies Inc. at sales@nanowavetech.com, or call at (+1) 416-252-5602.