

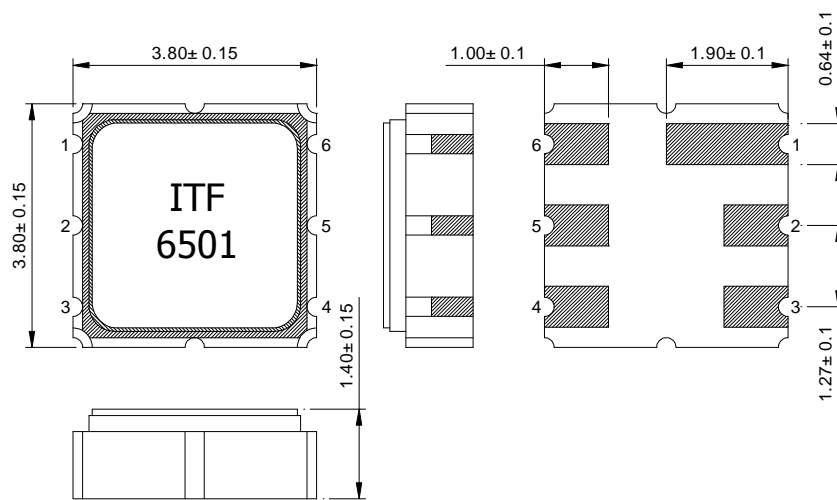
# SAW Bandpass Filter F6501



## Features

- RF bandpass filter
- High attenuation
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package
- RoHS Compliant

## Package Dimensions



Dimensions shown are nominal in millimeters

Body :  $\text{Al}_2\text{O}_3$  Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 um, Over a 1.27 ~ 8.89 um Ni Plating

Pin Configuration	
2	Input
5	Output
1, 3, 4, 6	Case ground

## Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	25	85
Storage Temperature Range	°C	-40	25	85
Power Handling Capability	dBm	-	-	10

Electrostatics Sensitive Device (ESD)

	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F6501	
		Rev. Date	2012-09-27	
		Rev.	NSNI04-AS01	1/8

# SAW Bandpass Filter F6501




## Specifications

Fc = 650 MHz

	Minimum	Typical	Maximum	Unit
Center Frequency ( Fc )	-	650	-	MHz
Insertion Loss (648 ~ 652 MHz)	-	2.5	4.0	dB
Amplitude Ripple (648 ~ 652 MHz)	-	0.5	1.0	dBp-p
Absolute Group Delay (Fc)	-	100	-	nsec
Group Delay Variation (648 ~ 652 MHz)	-	50	-	nsec
VSWR (648 ~ 652 MHz)	-	1.5	2.0	
Relative Attenuation				
0.3 ~ 600 MHz	40	55	-	dB
668 ~ 1150 MHz	40	50	-	
1150 ~ 1500 MHz	35	45	-	
1500 ~ 2500 MHz	30	40	-	
Input/Output Impedance		50		Ohms

### Notes :

- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- 3) All attenuation measurements are measured relative to insertion loss

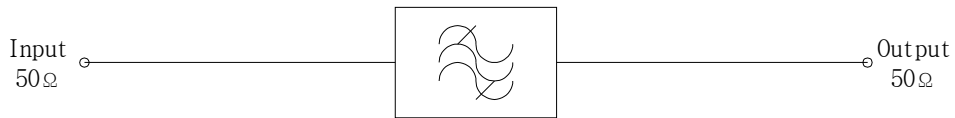
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		Rev. Date	2012-09-27	
		Rev.	NSNI04-AS01	2/8

# SAW Bandpass Filter F6501



## Matching Schematic


( Actual matching values may vary due to PCB layout and parasitics )



## Marking Configuration

ITF<sup>1)</sup>  
6501<sup>2)</sup>

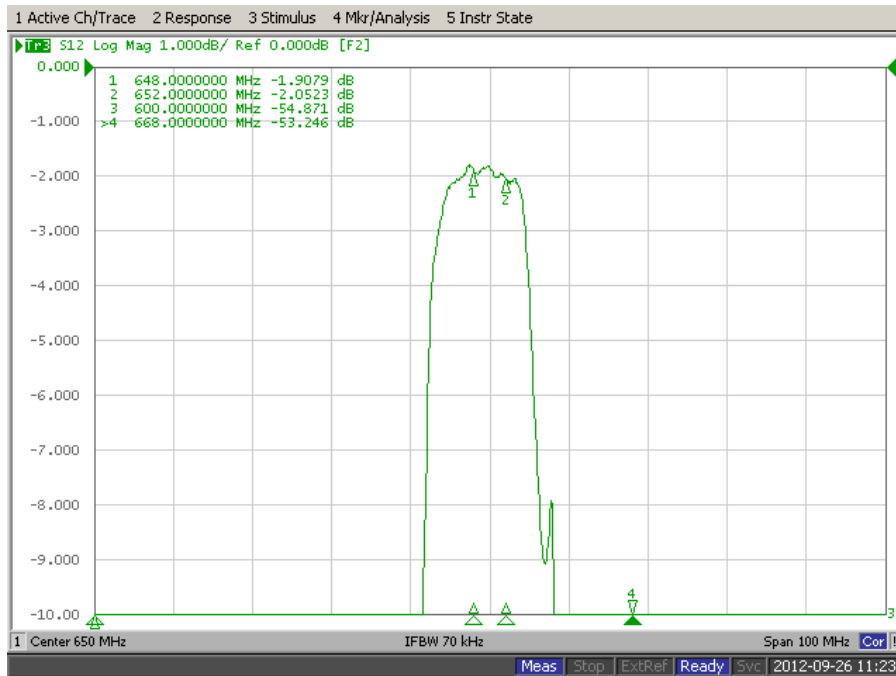
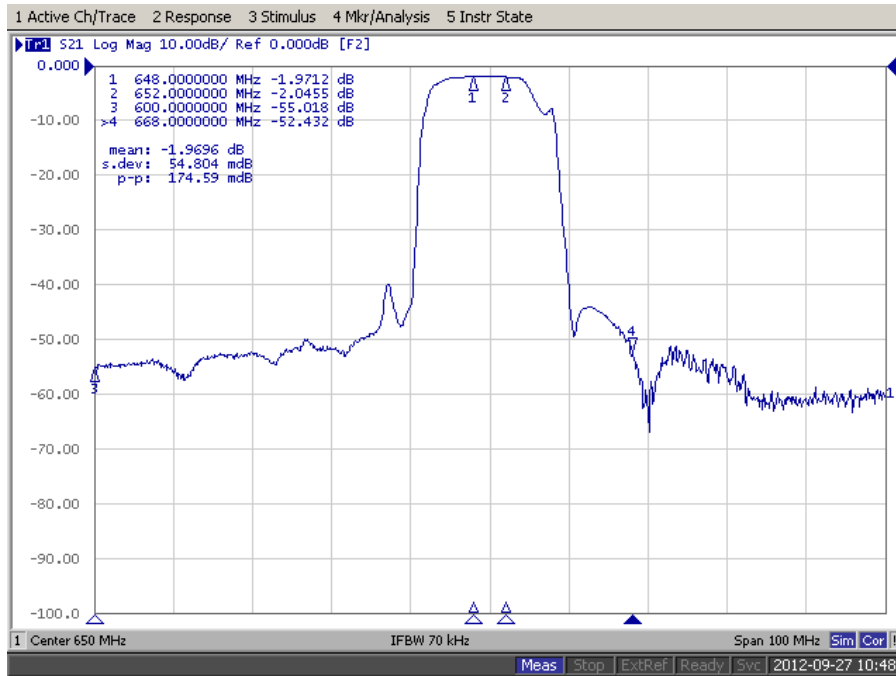
- 1) Manufacturer name
- 2) Marking Number

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		Rev. Date	2012-09-27	
		Rev.	NSNI04-AS01	3/8

# SAW Bandpass Filter F6501



## Typical Performance ( at 25°C )



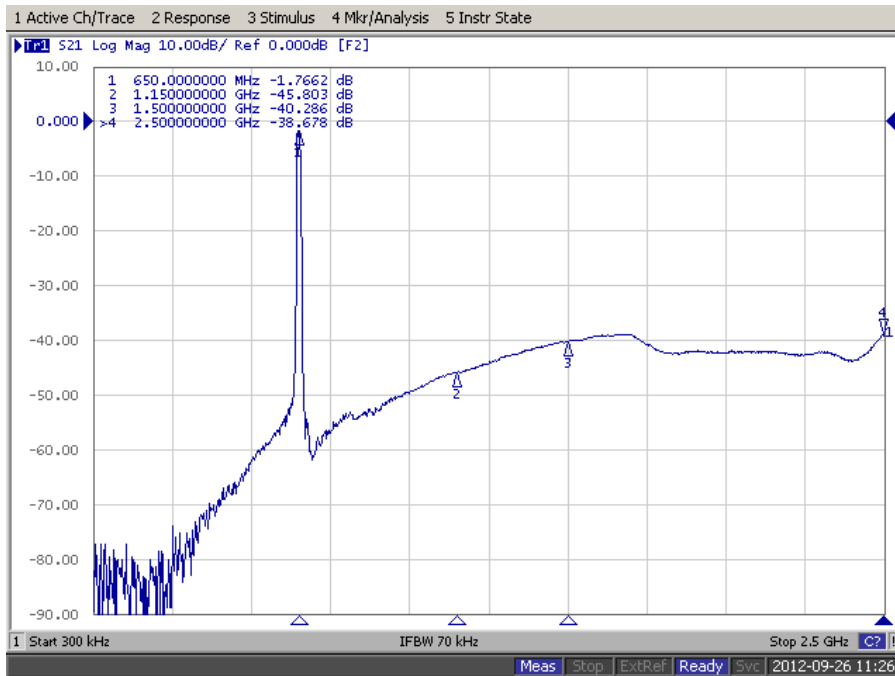
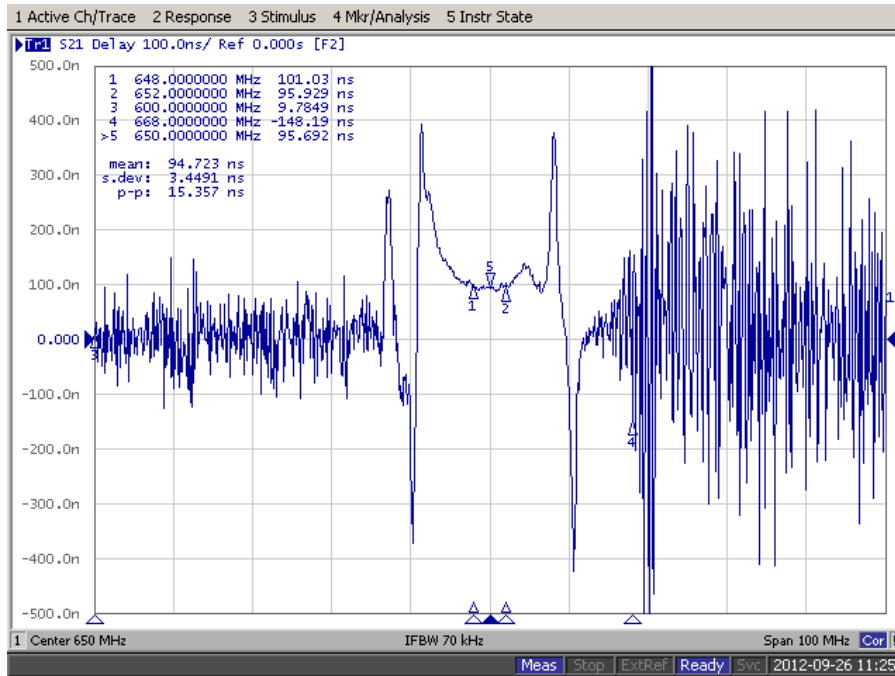
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Part No.	F6501	
Rev. Date	2012-09-27	
Rev.	NSNI04-AS01	4/8

# SAW Bandpass Filter F6501



## Typical Performance ( at 25°C )



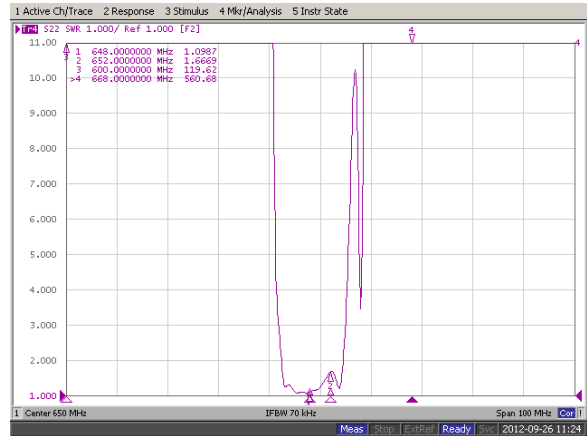
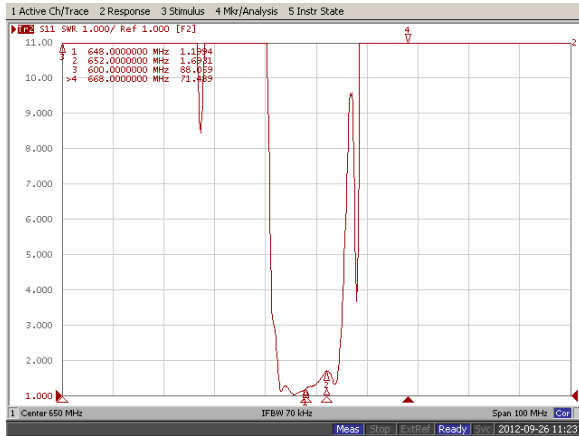
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Rev. Date	2012-09-27	
Rev.	NSNI04-AS01	5/8

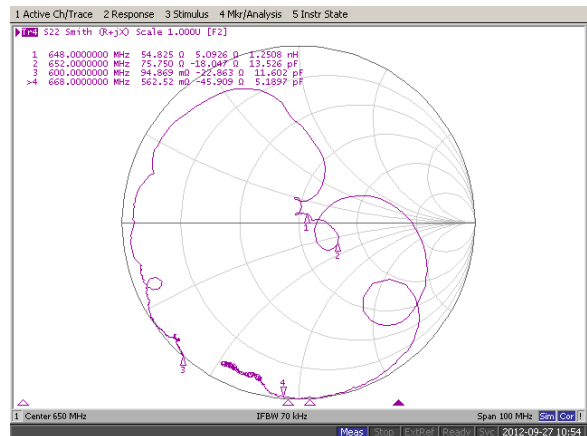
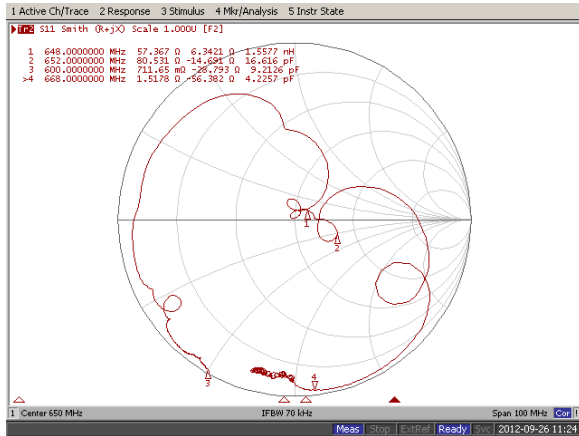
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## Input / Output VSWR Charts



## Input / Output Smith Charts



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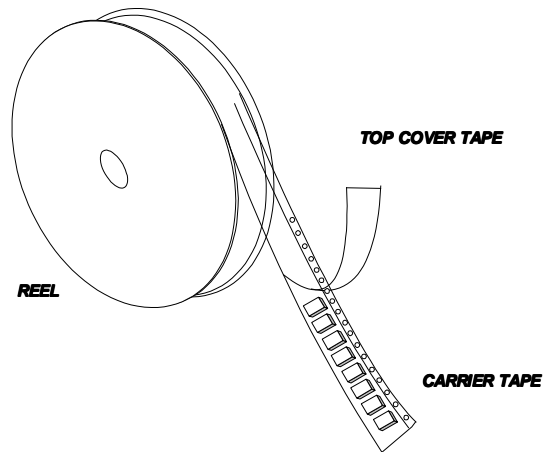
Part No.	F6501	
Rev. Date	2012-09-27	
Rev.	NSNI04-AS01	6/8

# SAW Bandpass Filter F6501



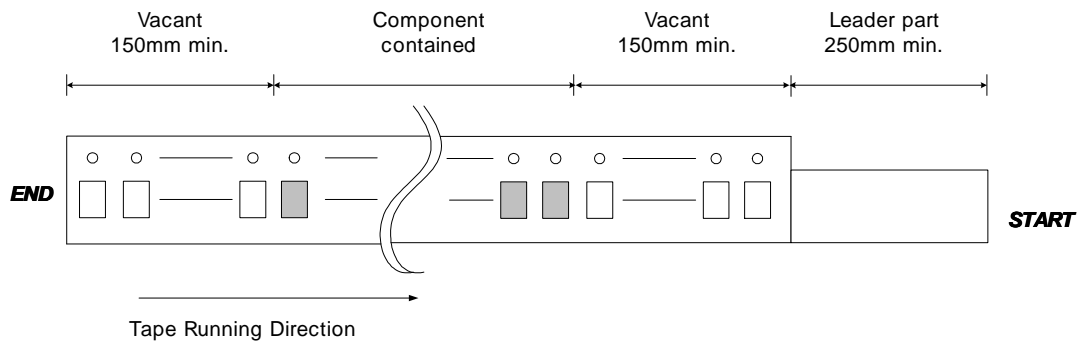
## Packing Specification

1. Reeling Quantity : 1000 pcs / reel
2. Taping Structure : The tape shall be wound around the reel in the direction shown below.



## Tape Specification

1. Leader part and vacant position specification

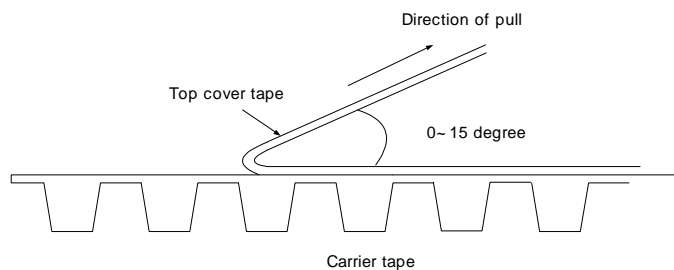


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

- 1) pull off angle : 0~15°
- 2) speed : 300mm/min
- 3) force : 20~70g

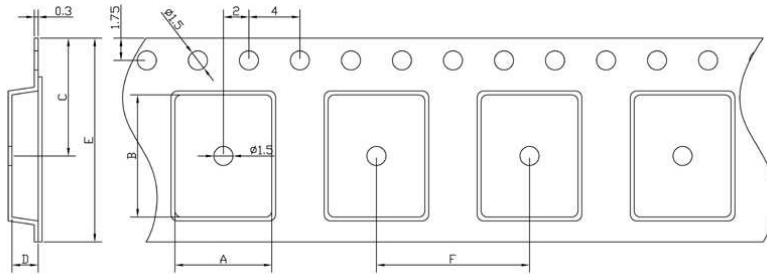


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		Rev.	NSNI04-AS01	7/8

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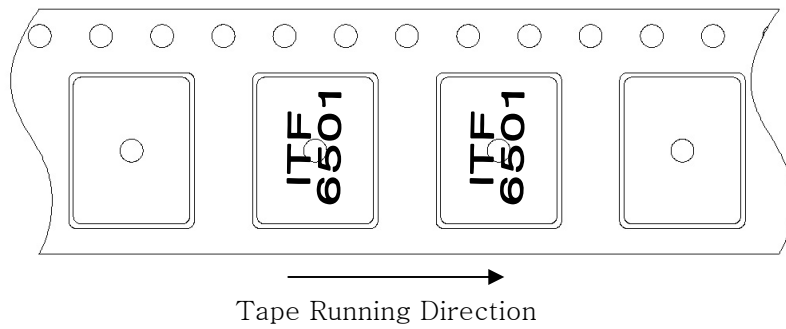


## Carrier Tape Dimensions [unit : mm]

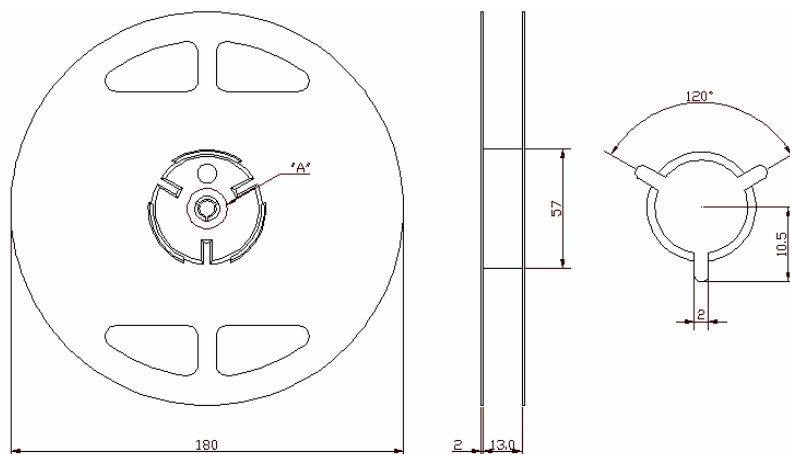



A	$4.30 \pm 0.1$
B	$4.30 \pm 0.1$
C	$7.25 \pm 0.1$
D	$1.70 \pm 0.1$
E	$12.00 \pm 0.1$
F	$8.00 \pm 0.1$

## Part Direction



## Reel Dimensions [unit : mm]



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