

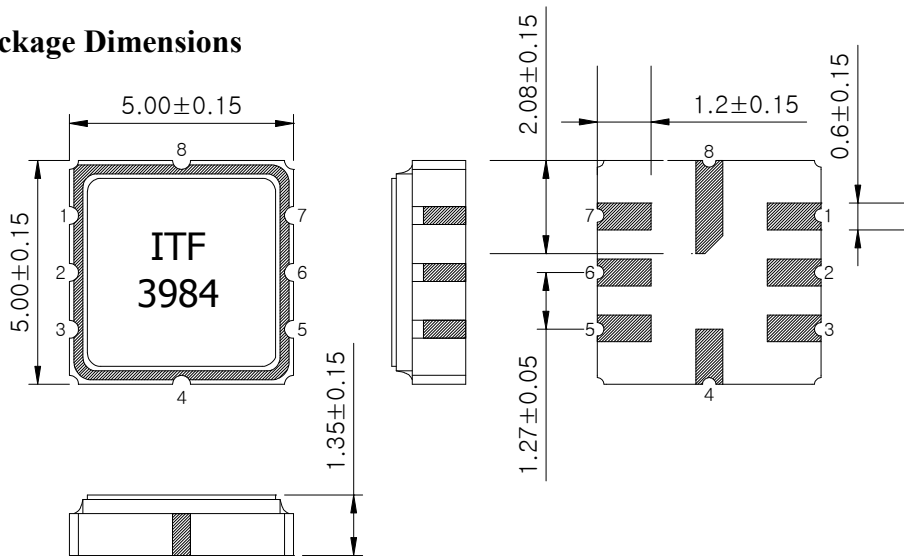
# SAW Bandpass Filter F3984



## Features

- RF bandpass filter
- High attenuation
- Usable bandwidth 4MHz
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package

## Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al<sub>2</sub>O<sub>3</sub> 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
6	Output
1, 3, 4, 5, 7, 8	Case ground

## Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-10	25	60
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	-

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.	F3984	
		Rev. Date	2011-08-04	
		Rev.	NS3004-AS03	1/7

# SAW Bandpass Filter F3984



## Specifications

$F_c = 398.0\text{MHz}$


Terminating source impedance :  $50\Omega$

Terminating load impedance :  $50\Omega$

		Minimum	Typical	Maximum
Center Frequency ( $F_c$ )	MHz	-	398.0	-
Insertion Loss ( $F_c \pm 2.0$ MHz)	dB	-	2.5	4.0
Amplitude Ripple ( $F_c \pm 2.0$ MHz)	dB	-	1.0	2.0
Absolute Group Delay at $F_c$	nsec	-	120	-
Group Delay Variation ( $F_c \pm 2.0$ MHz)	nsec	-	50	-
VSWR ( $F_c \pm 2.0$ MHz)		-	1.5	2.0
Relative Attenuation 348.0 MHz ~ 383.0 MHz 423.0 MHz ~ 448.0 MHz	dB	40 45	50 50	-
Temperature Coefficient of Frequency	ppm/ $^{\circ}\text{C}$	-	-32	-

### 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

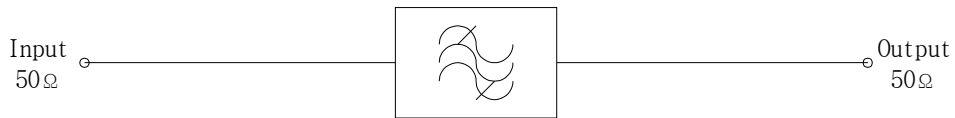
 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F3984	
		Rev. Date	2011-08-04	
		Rev.	NS3004-AS03	2/7

# SAW Bandpass Filter F3984



## Matching Schematic

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




## Marking Configuration

ITF<sup>1)</sup>  
3984<sup>2)</sup>

1) Manufacturer name

2) Marking Number

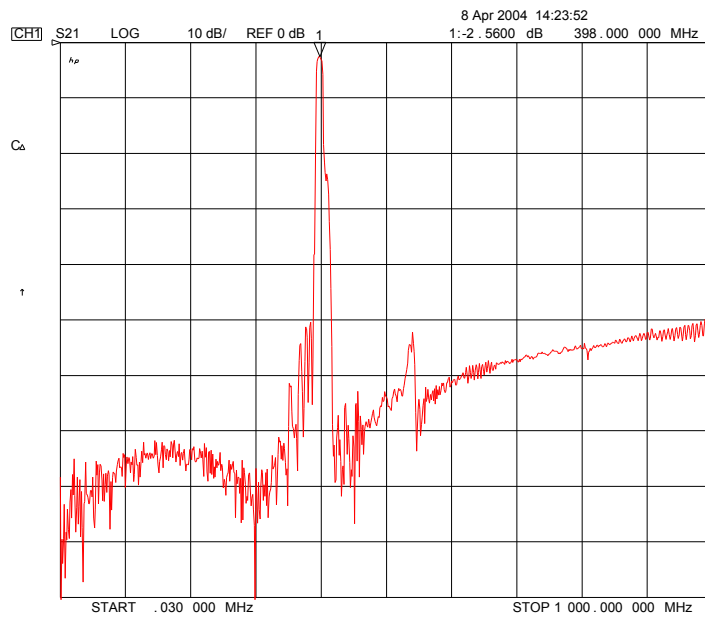
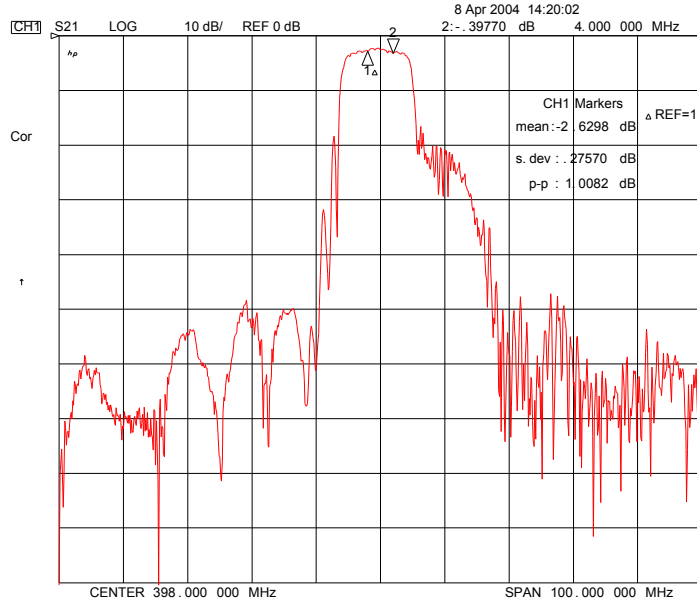
\* Ink or Laser Marking available

 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F3984	
		Rev. Date	2011-08-04	
		Rev.	NS3004-AS03	3/7

# SAW Bandpass Filter F3984



## Typical Performance ( at 25°C )

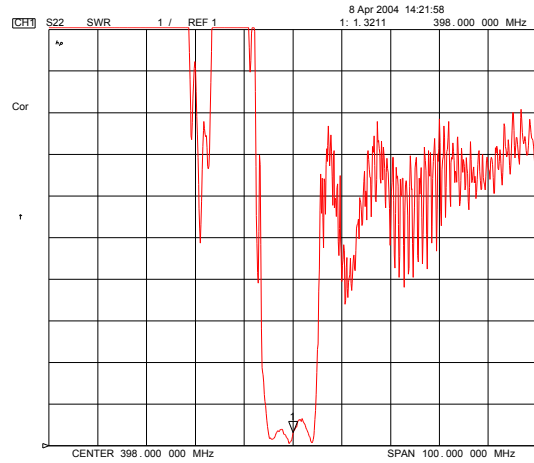
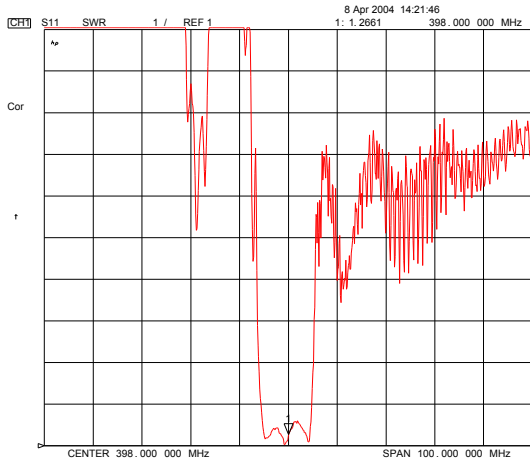


	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F3984	
		Rev. Date	2011-08-04	
		Rev.	NS3004-AS03	4/7

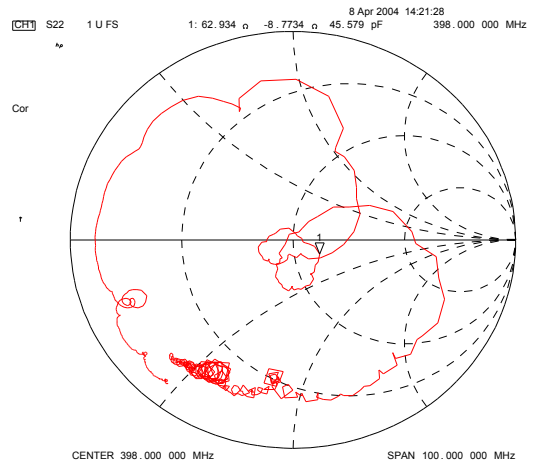
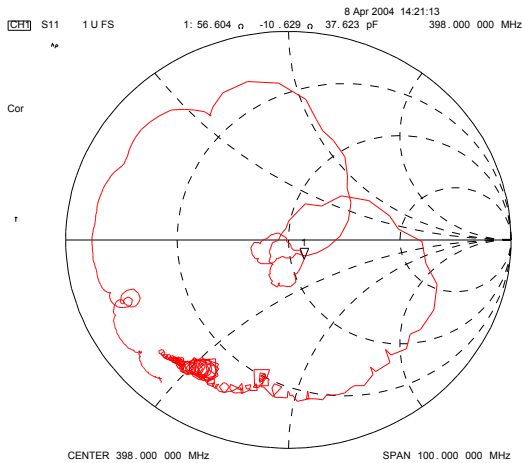
# SAW Bandpass Filter F3984



## Input / Output VSWR Charts



## Input / Output Smith Charts



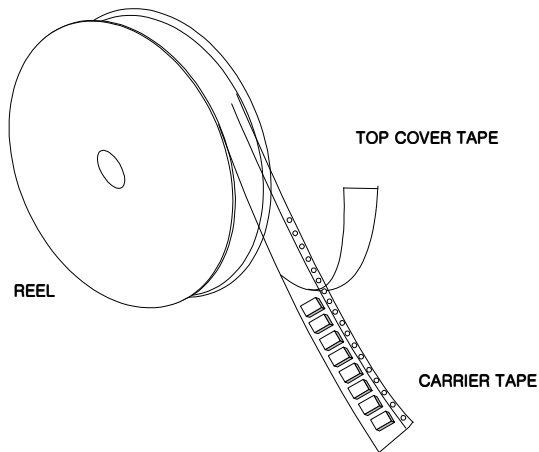
	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F3984	
		Rev. Date	2011-08-04	
		Rev.	NS3004-AS03	5/7

# SAW Bandpass Filter F3984



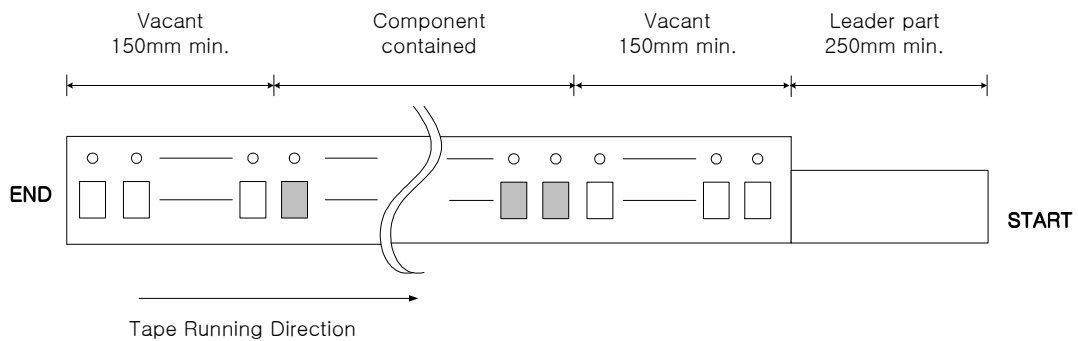
## Packing Specification

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

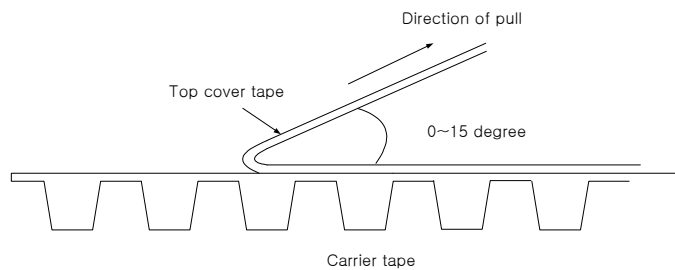


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

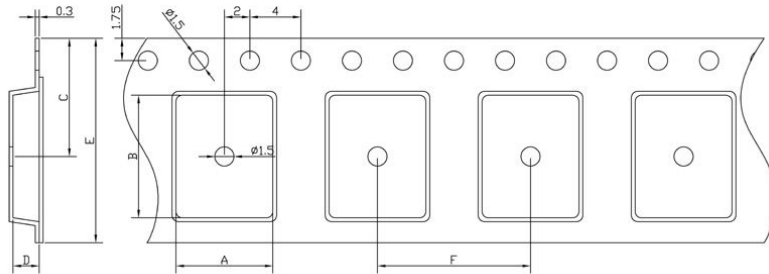


	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F3984	
		Rev. Date	2011-08-04	
		Rev.	NS3004-AS03	6/7

# SAW Bandpass Filter F3984

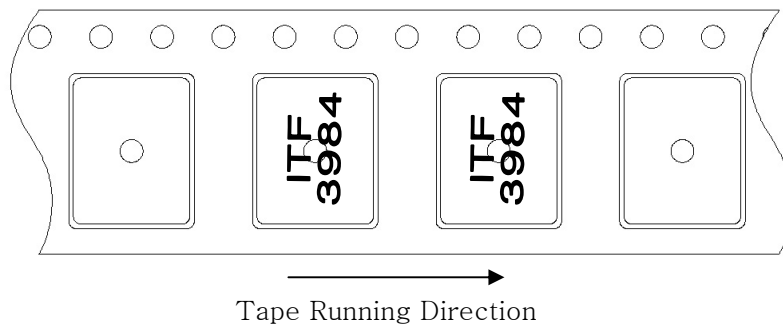


## Carrier Tape Dimensions [unit : mm]

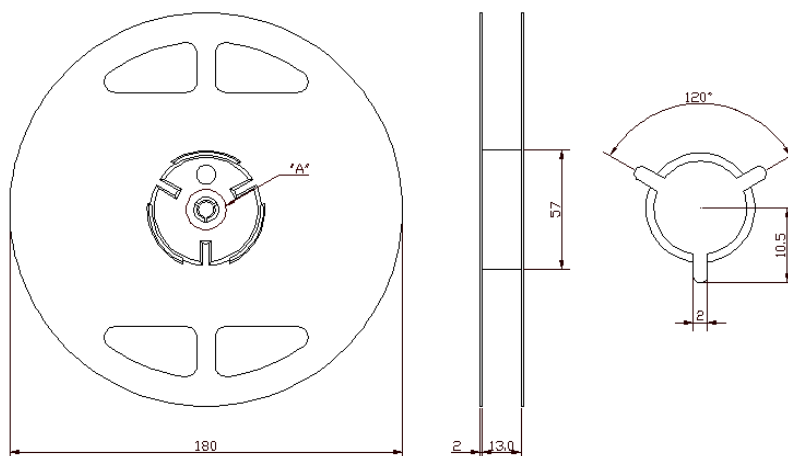


A	5.50 ± 0.1
B	5.50 ± 0.1
C	7.25 ± 0.1
D	1.95 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

## Part Direction



## Reel Dimensions [unit : mm]



**ITF Co., Ltd.**  
 102-901, Bucheon Technopark 364,  
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,  
 Gyeonggi-Do, Korea 421-809

Part No.	F3984	
Rev. Date	2011-08-04	
Rev.	NS3004-AS03	7/7