

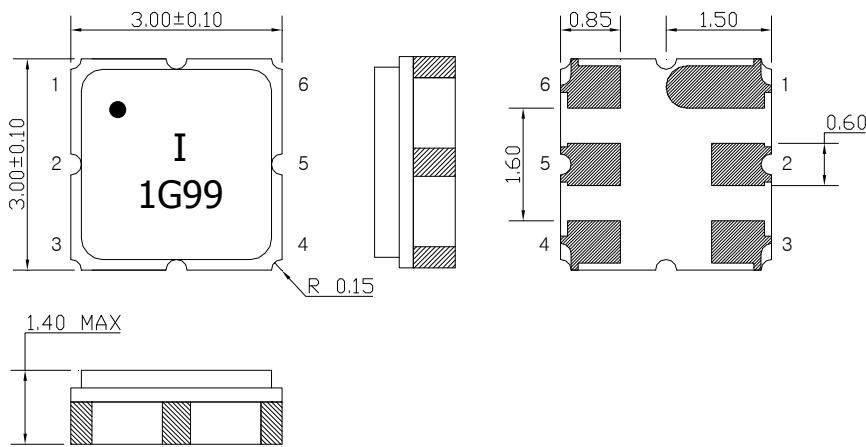
# SAW Bandpass Filter F1G99



## Features

- RF bandpass filter
- Usable bandwidth 65 MHz
- High attenuation
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device Package (3.0 mm × 3.0 mm)
- RoHS compliant

## 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 Configurations

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

## Maximum Ratings

Parameters	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-20	25	70
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	12

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.	F1G99	
		Rev. Date	2014-03-19	
		Rev.	NCLD04-AS02	1/7

# SAW Bandpass Filter F1G99




## Specifications

Fc = 1962.5 MHz

	Minimum	Typical	Maximum	Unit
Center Frequency ( Fc )	-	1962.5	-	MHz
Insertion Loss (In Fc +/- 32.5 MHz)	-	2.6	3.8	dB
Amplitude Ripple (In Fc +/- 32.5 MHz)	-	1.4	2.3	dB
VSWR (In Fc +/- 32.5 MHz)	-	2.0	2.5	
Attenuation (Reference level from 0dB)				
1710.0 MHz ~ 1755.0 MHz	10	32	-	dB
1855.0 MHz ~ 1915.0 MHz	5	11	-	
2010.0 MHz ~ 2020.0 MHz	5	8	-	
Temperature Range (Operational)	-20	25	70	°C
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

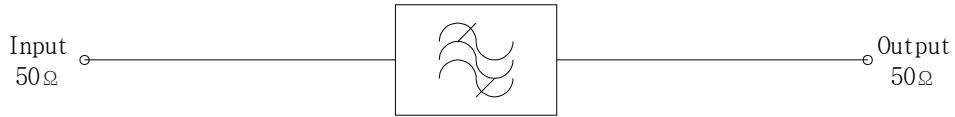
 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1G99	
		Rev. Date	2014-03-19	
		Rev.	NCLD04-AS02	2/7

# SAW Bandpass Filter F1G99



## Matching Schematic

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



## Marking Configuration

●<sup>1)</sup>  
I<sup>2)</sup>  
1G99<sup>3)</sup>

- 1) Pad Number 1 Index
- 2) Manufacturer name
- 3) Marking Number

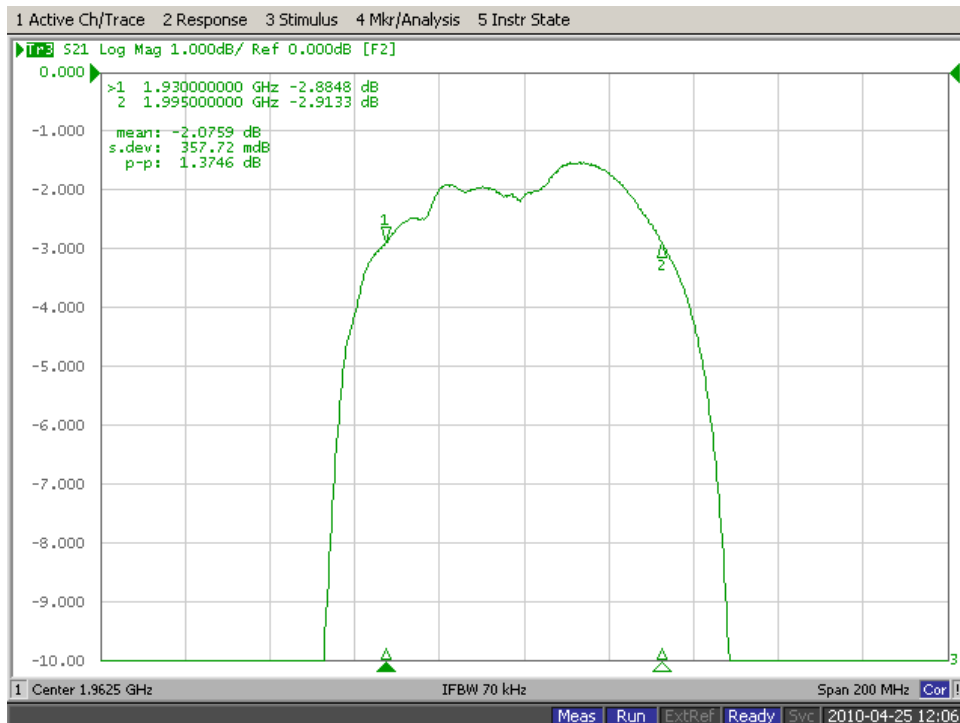
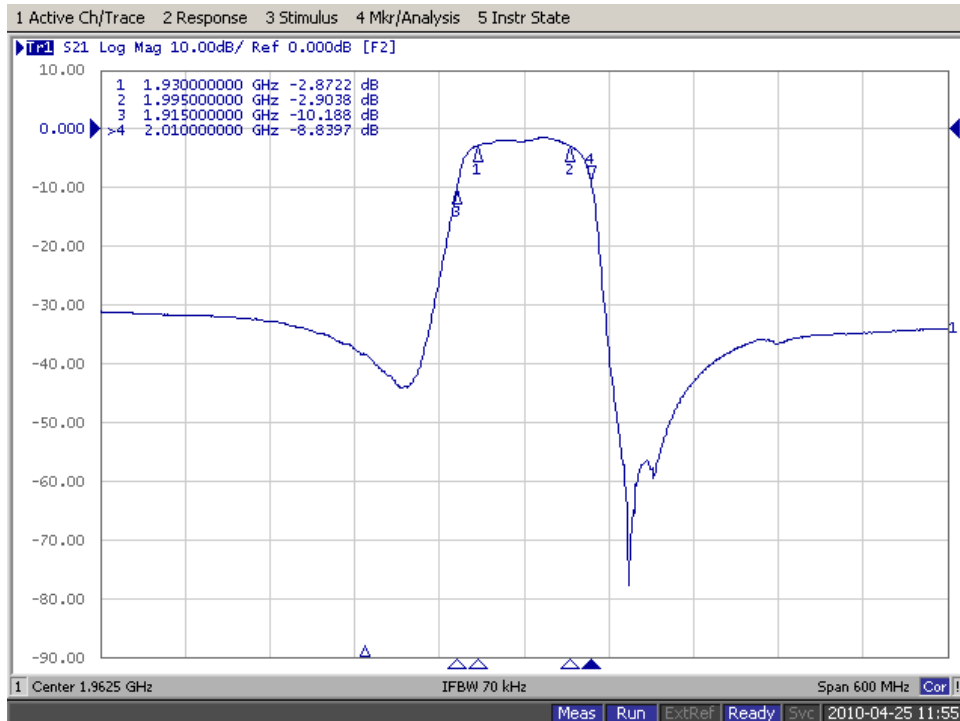
\* Ink or Laser Marking available

	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1G99	
		Rev. Date	2014-03-19	
		Rev.	NCLD04-AS02	3/7

# SAW Bandpass Filter F1G99



## Typical Performance ( at 25°C )



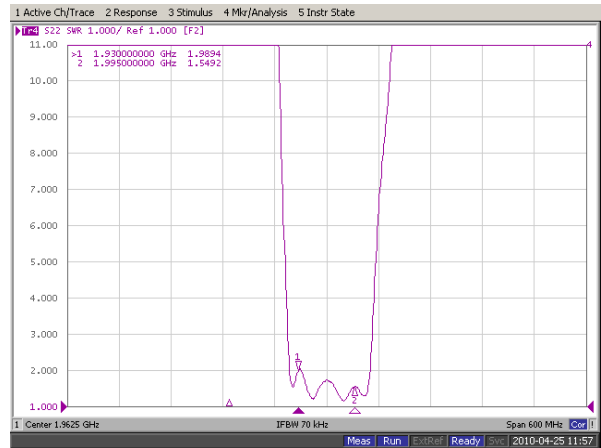
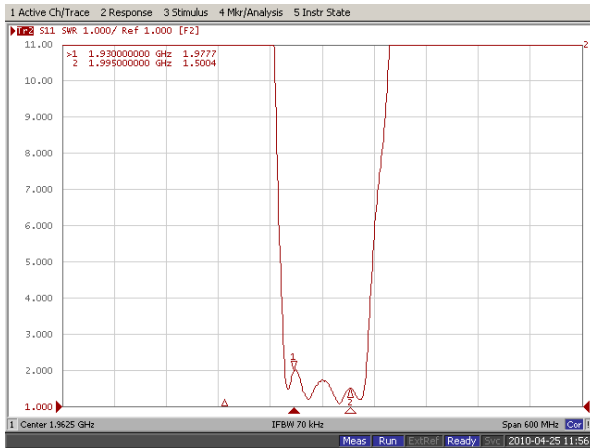
**ITF Co., Ltd.**  
102-901, Bucheon Technopark 364,  
Samjeong-Dong, Ojeong-Gu, Bucheon-City,  
Gyeonggi-Do, Korea 421-809

Part No.	F1G99	
Rev. Date	2014-03-19	
Rev.	NCLD04-AS02	4/7

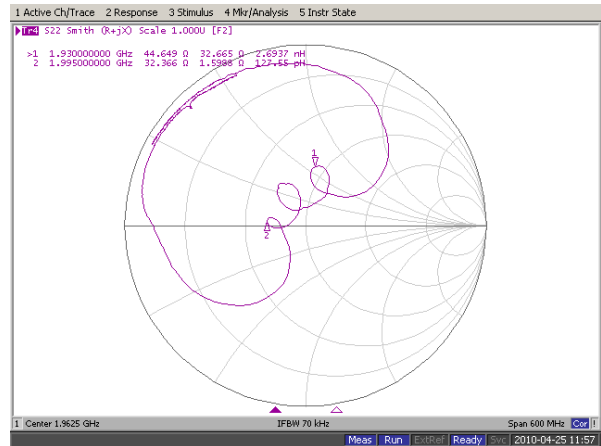
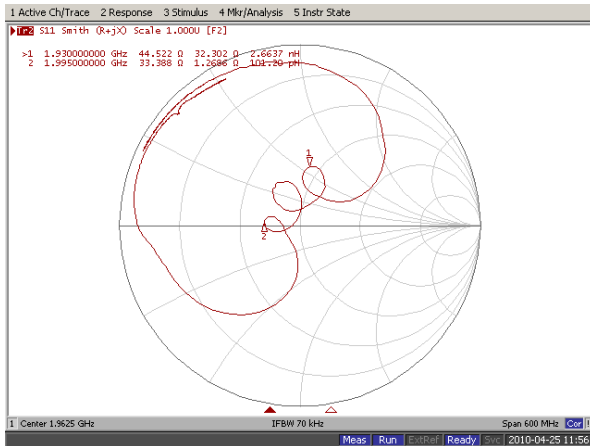
# SAW Bandpass Filter F1G99



## Input / Output VSWR Charts



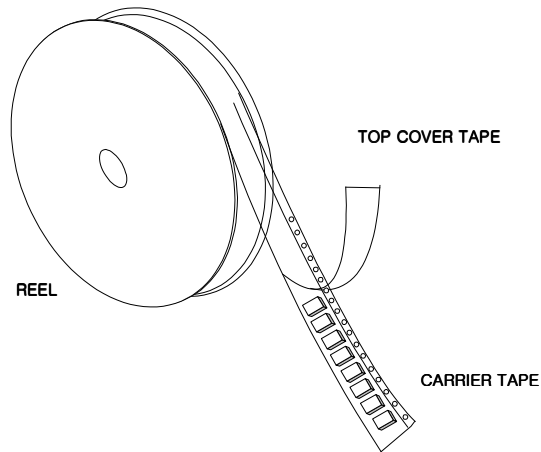
## Input / Output Smith Charts



	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	FIG99	
		Rev. Date	2014-03-19	
		Rev.	NCLD04-AS02	5/7

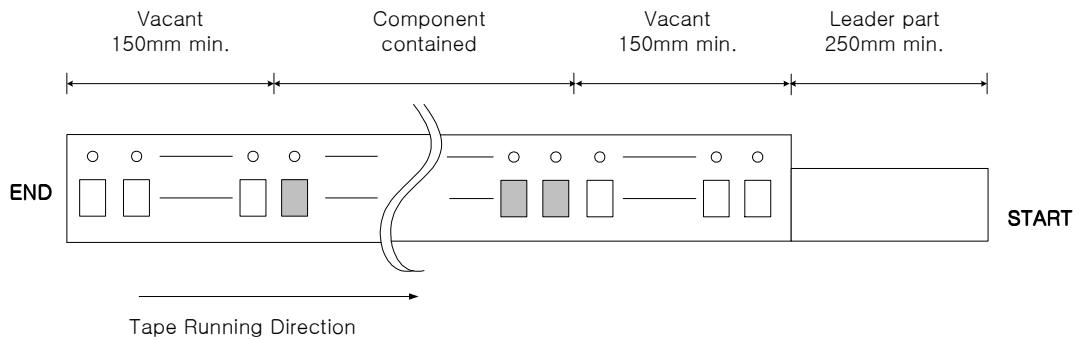
## Packing Specification

1. Reeling Quantity : 3000 pcs / 13" reel ( or 1000 pcs / 7" 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

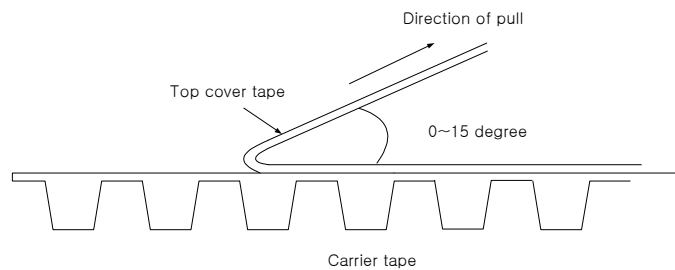


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

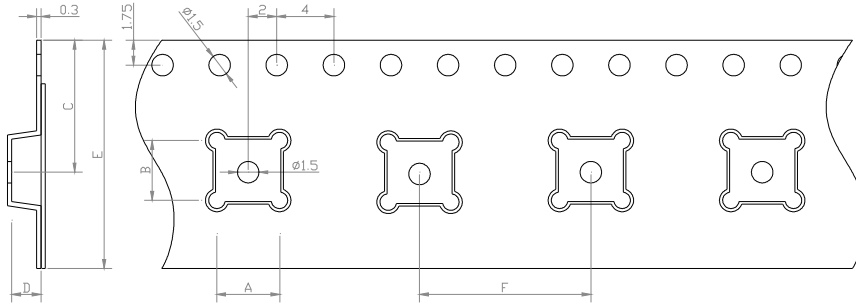


	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1G99	
		Rev. Date	2014-03-19	
		Rev.	NCLD04-AS02	6/7

# SAW Bandpass Filter F1G99

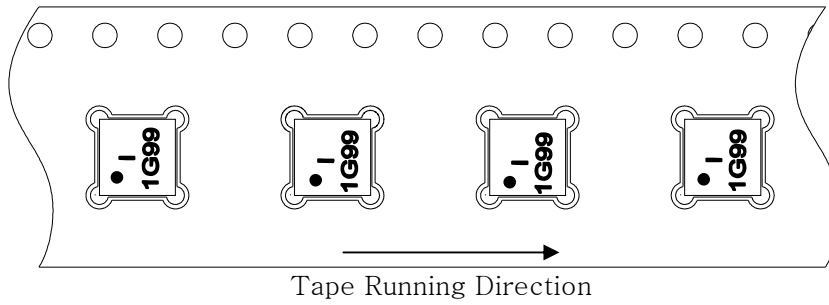


## Carrier Tape Dimensions [unit : mm]

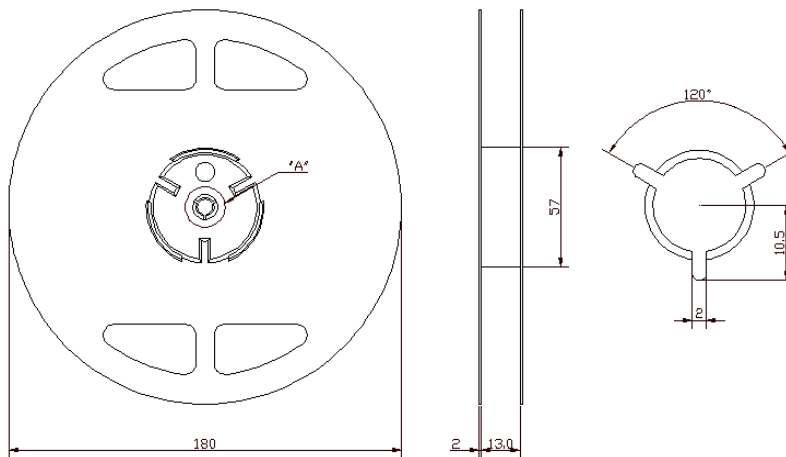


A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

## Part Direction



## Reel Dimensions [unit : mm]



	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1G99	
		Rev. Date	2014-03-19	
		Rev.	NCLD04-AS02	7/7