

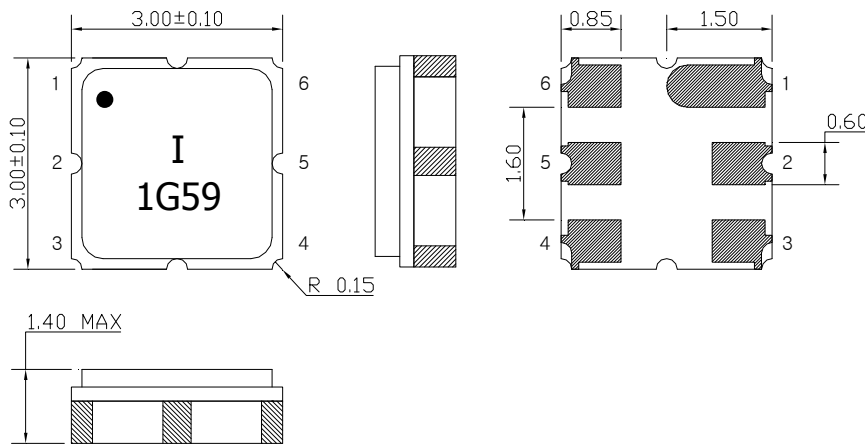
# SAW Bandpass Filter F1G59



## Features

- RF bandpass filter
- High attenuation
- Usable bandwidth 40.0MHz
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package
- 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 μm, Over a 1.27 ~ 8.89 μm 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	-55	25	85
Storage Temperature Range	°C	-55		95
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.	F1G59	
		Rev. Date	2014-03-19	
		Rev.	NC9008-AS02	1/7

# SAW Bandpass Filter F1G59



## Specifications

Fc = 1590.0 MHz


Terminating source impedance : 50Ω

Terminating load impedance : 50Ω

		Minimum	Typical	Maximum
Center Frequency ( Fc )	MHz	-	1590.0	-
Insertion Loss (Fc ± 20.0 MHz)	dB	-	3.7	4.5
Amplitude Ripple (Fc ± 20.0 MHz)	dB	-	1.0	1.8
VSWR (Fc ± 20.0 MHz)		-	1.8	2.5
Relative Attenuation				-
DC~ 1200.0 MHz		45	50	-
1200.0MHz ~ 1530.0MHz	dB	40	45	-
1700.0MHz ~ 2000.0MHz		40	45	-
2000.0MHz ~ 3000.0MHz		40	45	-

### 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.	F1G59	
		Rev. Date	2014-03-19	
		Rev.	NC9008-AS02	2/7

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## Matching Schematic

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



## Marking Configuration

●<sup>1)</sup>  
I<sup>2)</sup>  
1G59<sup>3)</sup>

1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

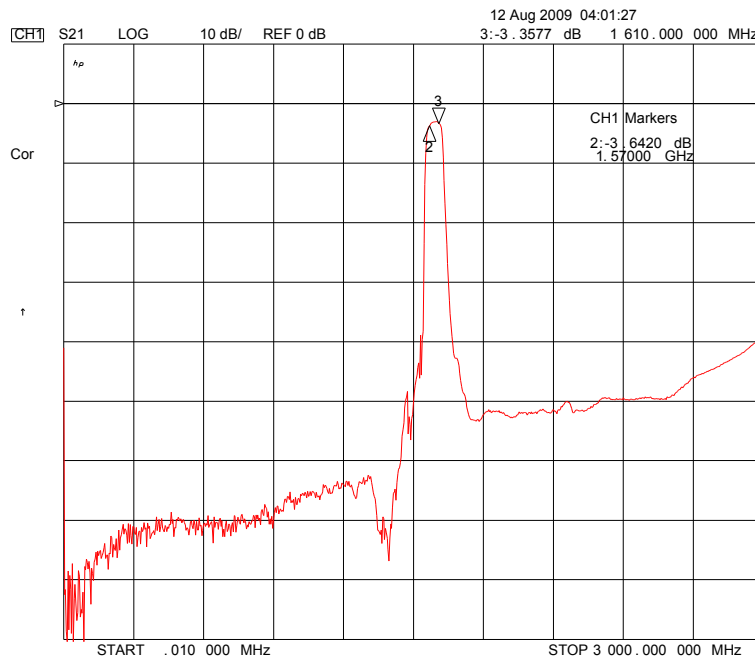
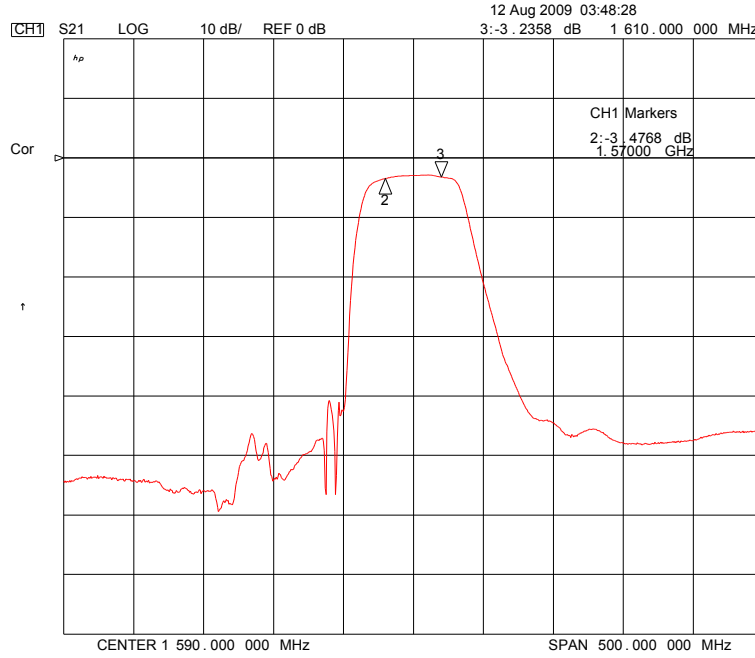
\* Ink or Laser Marking available

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		Rev. Date	2014-03-19	
		Rev.	NC9008-AS02	3/7

# SAW Bandpass Filter F1G59



## Typical Performance ( at 25°C )

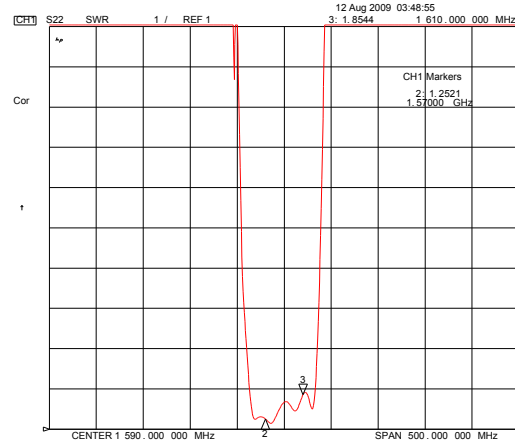
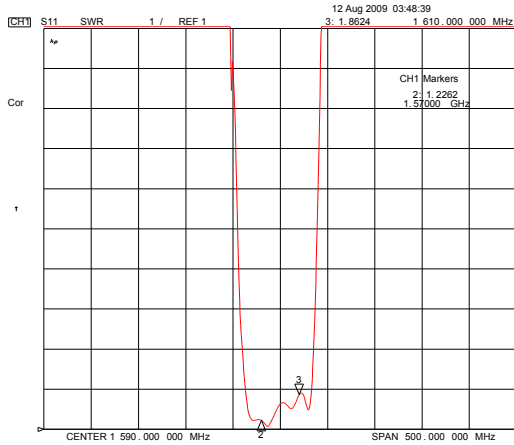


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		Rev. Date	2014-03-19	
		Rev.	NC9008-AS02	4/7

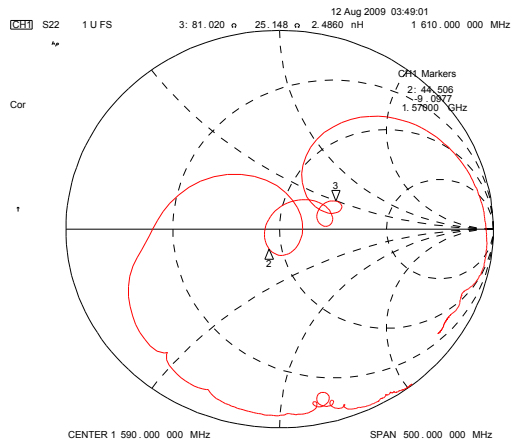
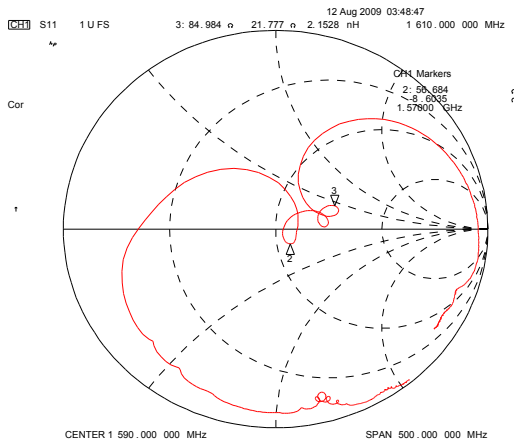
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## Input / Output VSWR Charts



## Input / Output Smith Charts



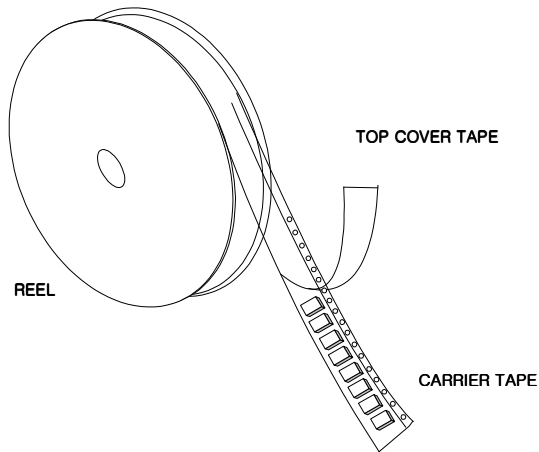
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		Rev. Date	2014-03-19	
		Rev.	NC9008-AS02	5/7

# SAW Bandpass Filter F1G59



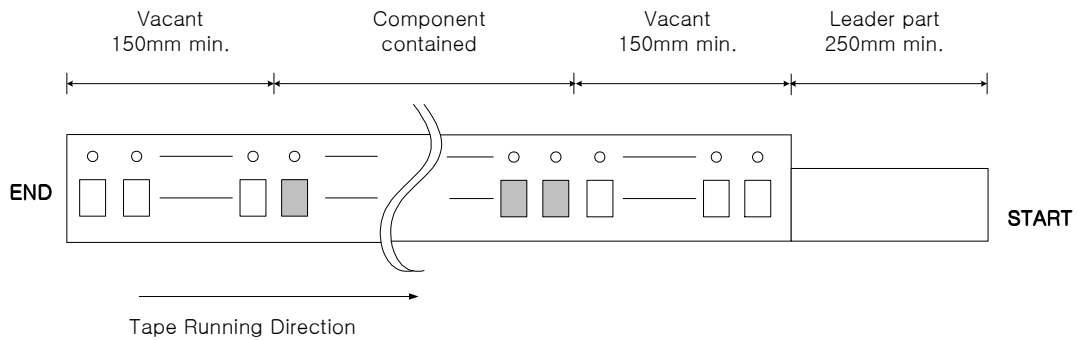
## Packing Specification

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

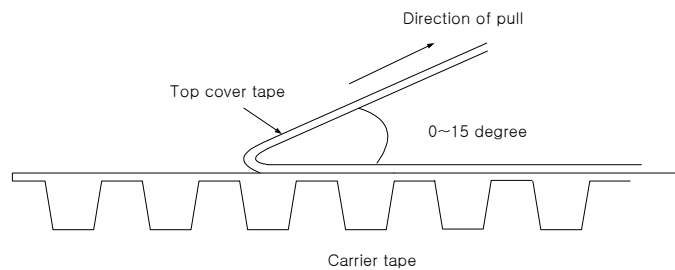


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

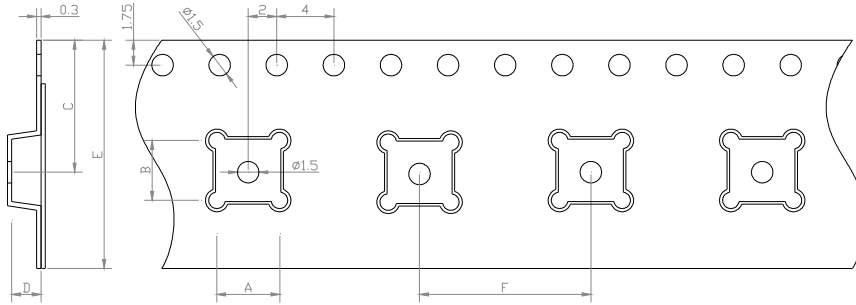


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		Rev.	NC9008-AS02	6/7

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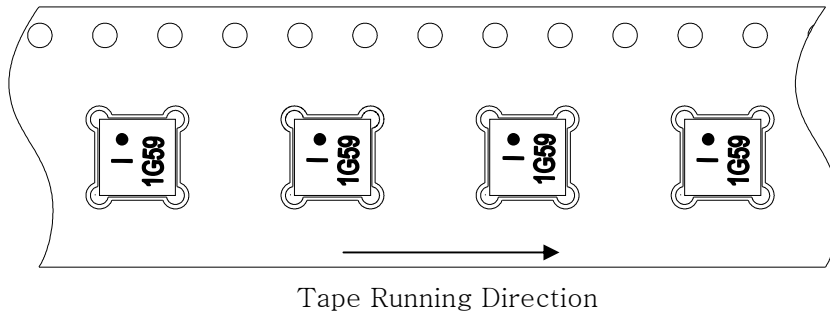


## Carrier Tape Dimensions [unit : mm]

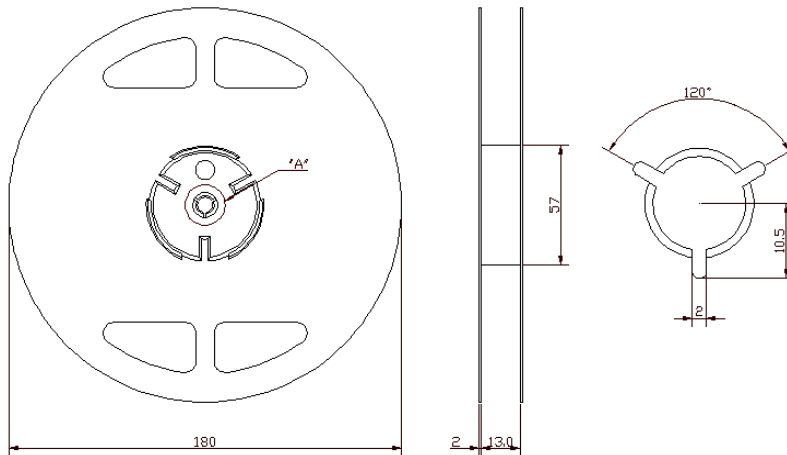



A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

## Part Direction



## Reel Dimensions [unit : mm]



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