

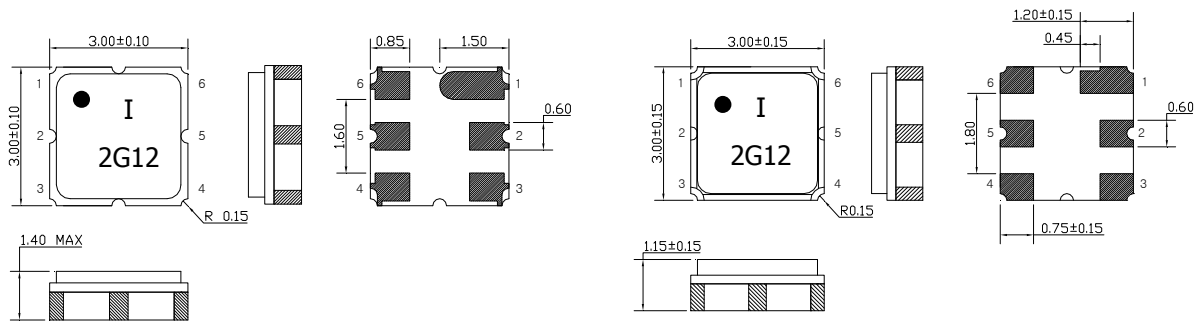
# SAW Bandpass Filter F2G12



## Features

- W-CDMA applications
- Usable bandwidth of 60 MHz
- No impedance matching require for operation at 50 Ω
- Ceramic Surface Mounted Device Package ( 3.0 mm \* 3.0 mm )
- Single-ended Operation
- RoHS Compliant

## Package Dimensions



Package A

Package B

Both packages A and B are applicable

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	℃	-30	25	85
Storage Temperature Range	℃	-40	-	85
Power Handling Capability	dBm	-	-	13

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.	F2G12	
		Rev. Date	2014-04-03	
		Rev.	NC6002-AS07	1/8

# SAW Bandpass Filter F2G12




## Specifications

	Minimum	Typical	Maximum	Unit
Center Frequency ( Fc )	-	2140.0	-	MHz
Insertion Loss (In Fc +/- 30.0 MHz)	-	2.2	3.5	dB
Amplitude Ripple (In Fc +/- 30.0 MHz)	-	0.8	1.5	dBp-p
VSWR (In Fc +/- 30.0 MHz)	-	1.8	2.4	
Group Delay (In Fc +/- 30.0 MHz)		8.6	15	ns
Group Delay Variation (In Fc +/- 30.0 MHz)		4.6	8	ns
Relative Attenuation				
0.3 MHz ~ 500.0 MHz	21.0	33.0	-	dB
500.0 MHz ~ 1900.0 MHz	20.0	28.0	-	
1900.0 MHz ~ 2050.0 MHz	25.0	30.0	-	
2215.0 MHz ~ 2300.0 MHz	20.0	32.0	-	
2300.0 MHz ~ 3000.0 MHz	25.0	32.0	-	
Temperature Range (Operational)	-30	25	85	℃
Input RF Power (In Fc +/- 30.0 MHz)			13	dBm
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

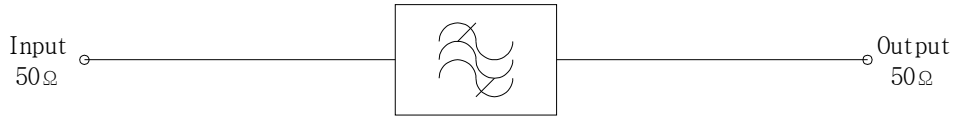
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## Matching Schematic

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




## Marking Configuration

●<sup>1)</sup>  
I<sup>2)</sup>  
2G12<sup>3)</sup>

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

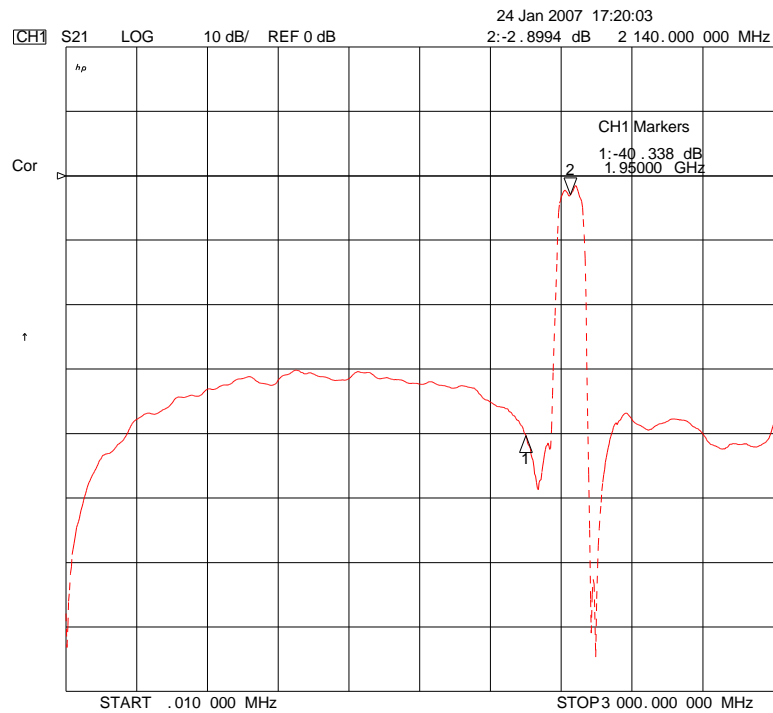
\* Ink or Laser Marking available


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# SAW Bandpass Filter F2G12



## Typical Performance ( at 25°C )

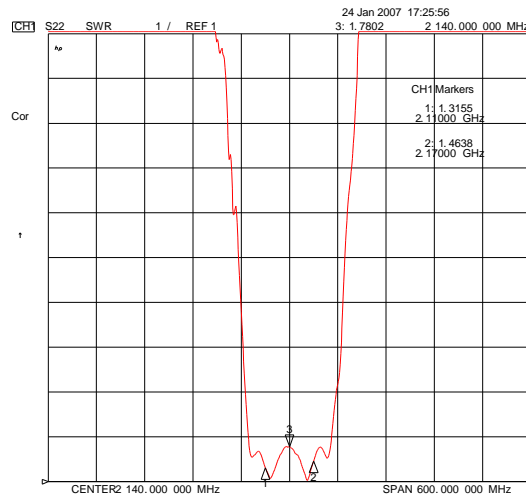
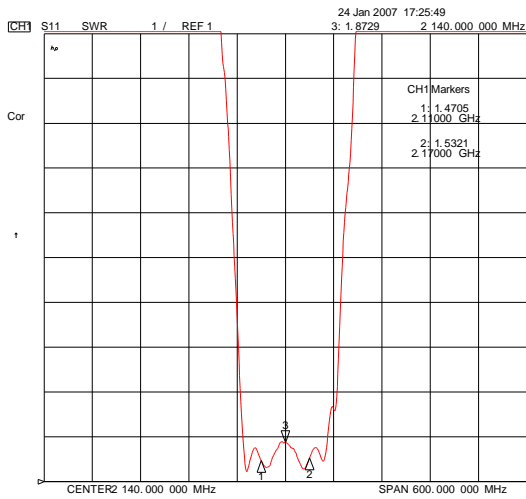


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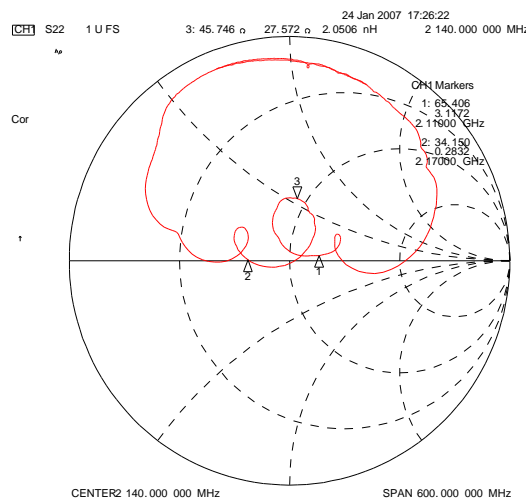
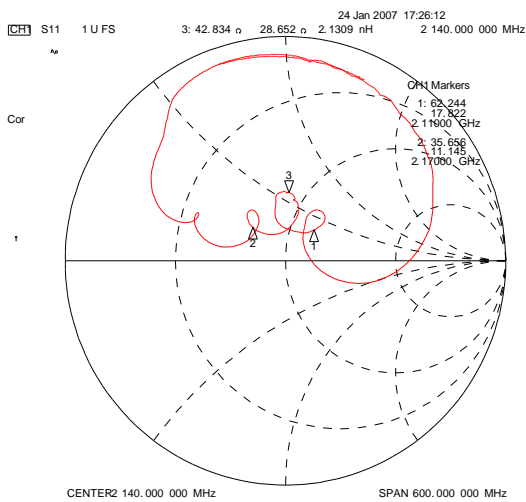
# SAW Bandpass Filter F2G12




## Input / Output VSWR Charts

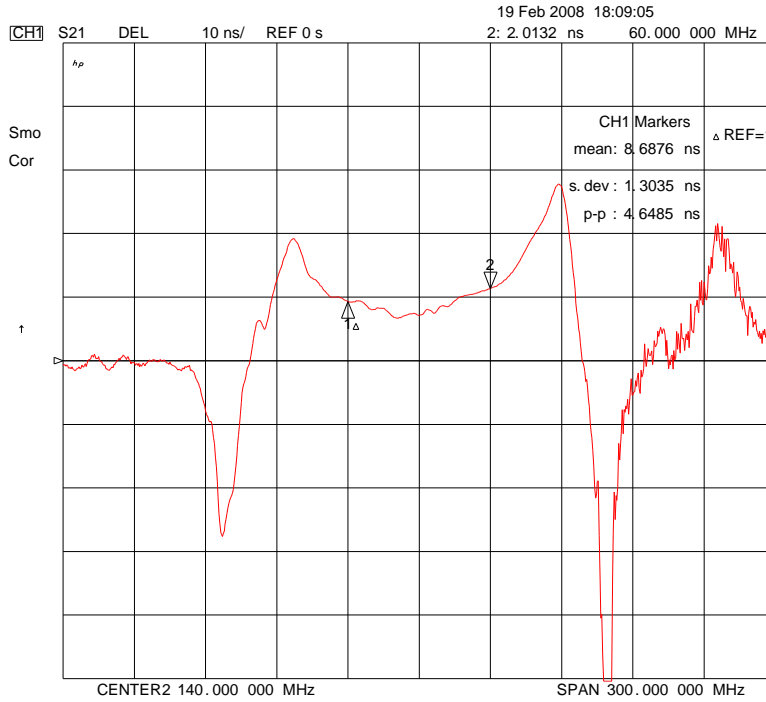



## Input / Output Smith Charts



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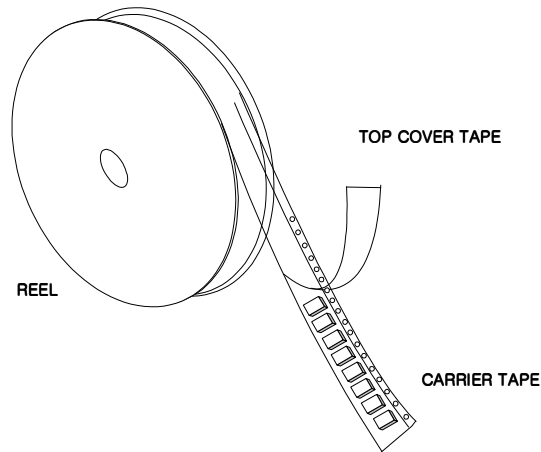
## Group Delay Variation



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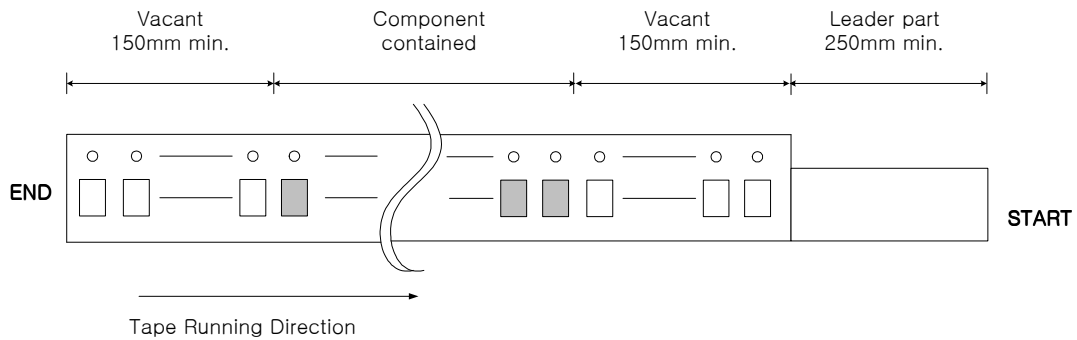
## Packing Specification

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

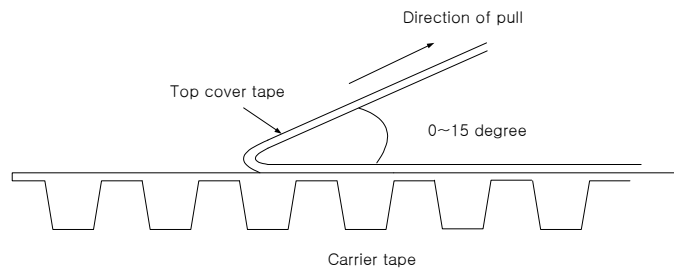


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

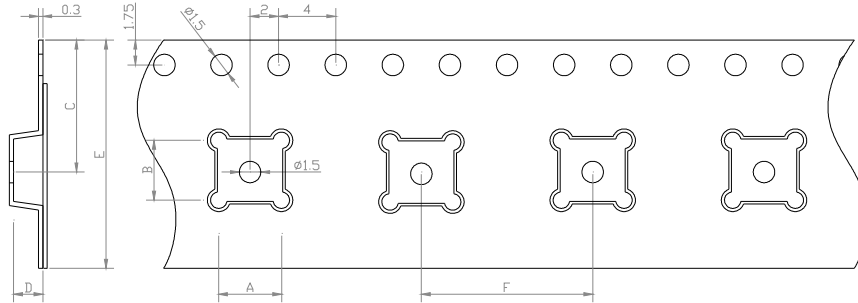


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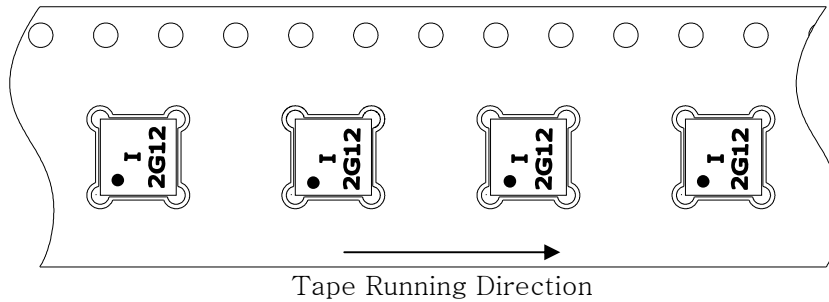


## Carrier Tape Dimensions [unit : mm]

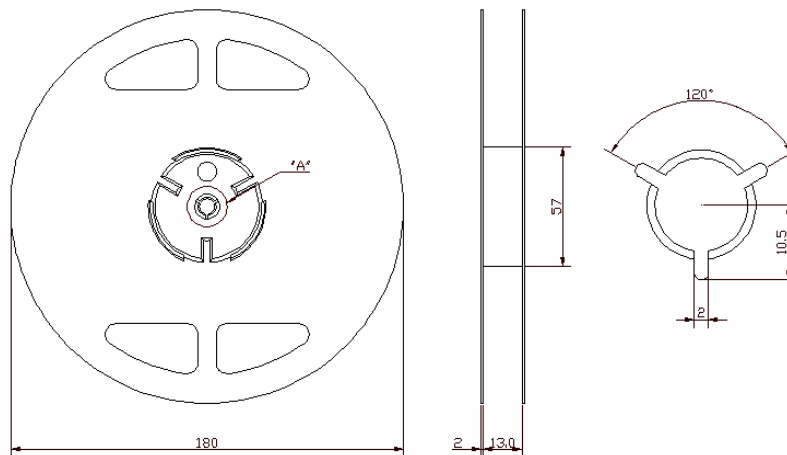



A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

## Part Direction



## Reel Dimensions [unit : mm]



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