

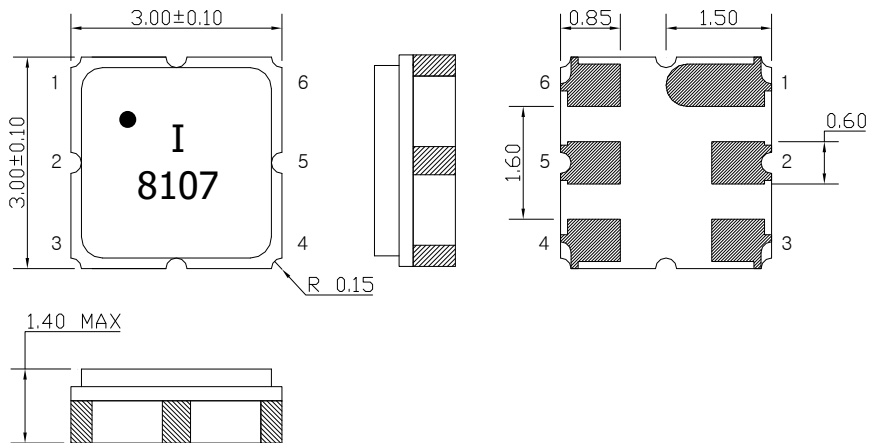
# SAW Bandpass Filter F8107



## Features

- RF SAW Bandpass Filter
- Ceramic Surface Mounted Device Package ( 3.0 mm × 3.0 mm )
- RoHS/RoHS2 (2015/863/EU) Compliant

## Package Dimension



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

## Maximum Ratings

Parameters	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	25	85
Storage Temperature Range	°C	-40	-	85

Electrostatics Sensitive Device (ESD)

	<b>ITF Co., Ltd.</b> 102-701, 22, Samjak-ro, Ojeong-gu, Bucheon-si, Gyeonggi-do, Korea, 14501	Part No.	F8107	
		Rev. Date	2022-05-18	
		Rev.	AS01	1/7

# SAW Bandpass Filter F8107




## Specifications

Fo = 810.0 MHz

		Minimum	Typical	Maximum
Center Frequency (Fc)	MHz	-	810.0	-
Insertion Loss ( 807.5~812.5MHz )	dB	-	2.5	4.0
Amplitude Ripple ( 807.5~812.5MHz )	dB	-	0.3	1.0
Group Delay Variation ( 807.5~812.5MHz )	nsec	-	60	150
Absolute Attenuation				
10.0 ~ 770.0 MHz		50	54	-
770.0 ~ 793.0 MHz		30	50	-
793.0 ~ 795.0 MHz		20	50	-
795.0 ~ 797.0 MHz		10	48	-
823.0 ~ 825.0 MHz	dB	10	43	-
825.0 ~ 827.0 MHz		20	45	-
827.0 ~ 850.0 MHz		30	50	-
850.0 ~ 1500.0 MHz		50	55	-
1500.0 ~ 2500.0 MHz		35	38	-
Input/Output Impedance	Ohms	-	50	-

### Notes :

- 1) All specifications are based on the matching schematic shown below
- 2) All specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature
- 3) All attenuation measurements are measured relative to insertion loss

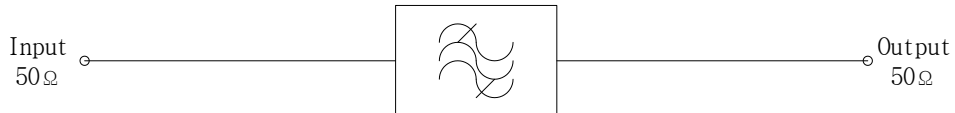
	<b>ITF Co., Ltd.</b> 102-701, 22, Samjak-ro, Ojeong-gu, Bucheon-si, Gyeonggi-do, Korea, 14501	Part No.	F8107	
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## Matching Schematic

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



## Marking Configuration



I  
8107

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

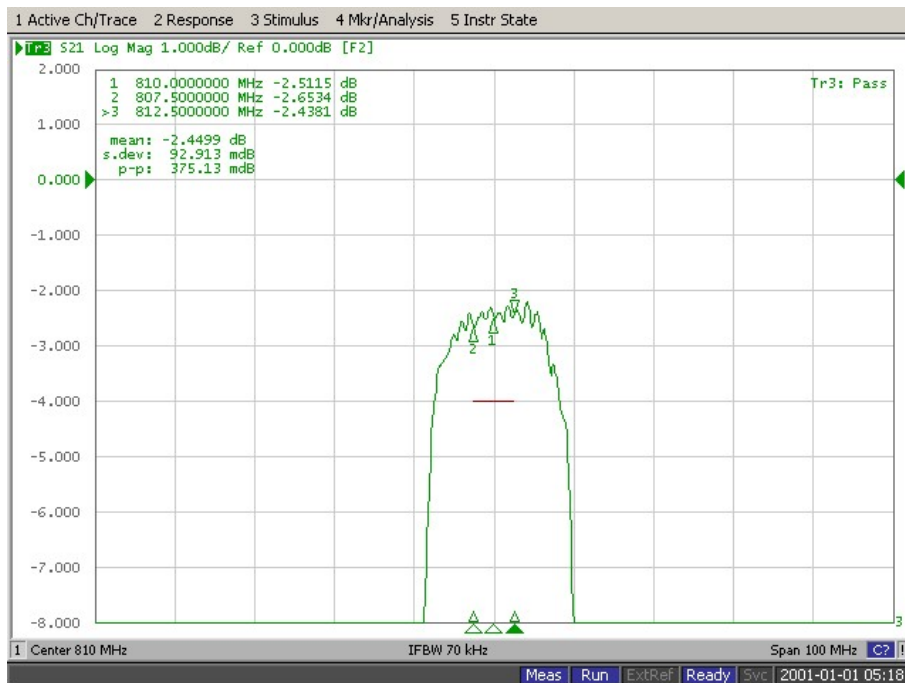
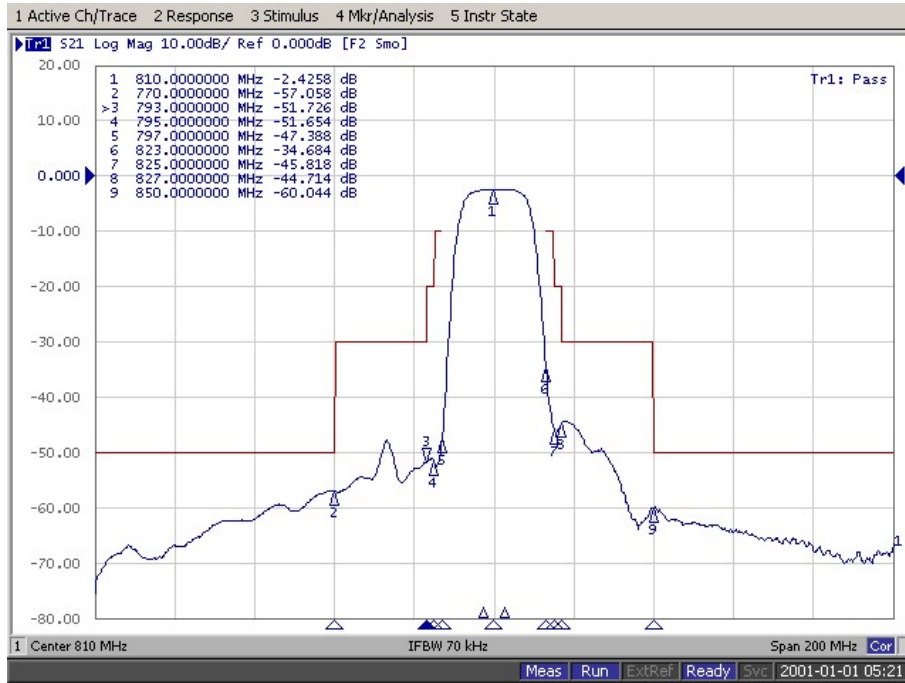
\* Ink or Laser Marking available

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## Typical Performance ( at +25°C )



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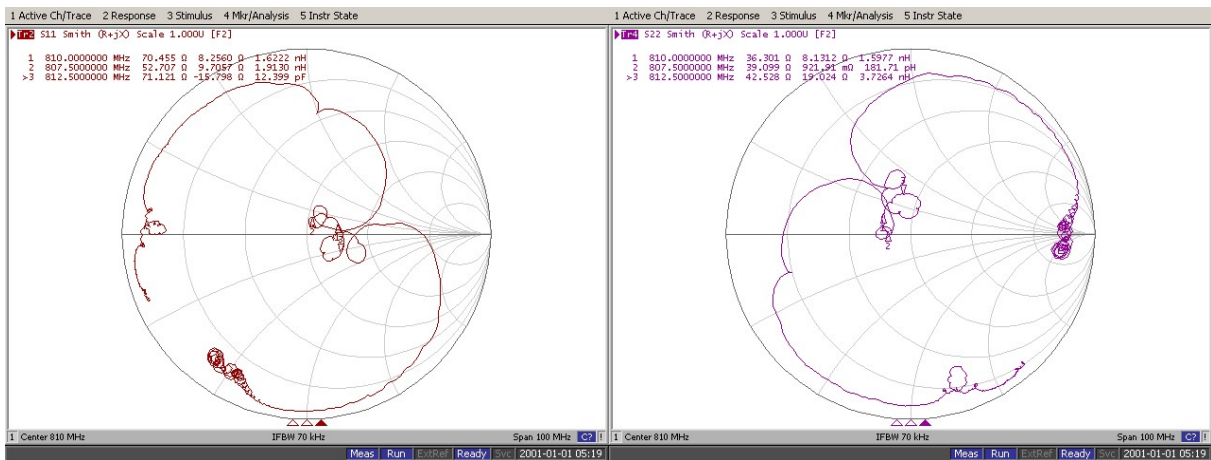
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## Input / Output VSWR Charts



## Input / Output Smith Charts



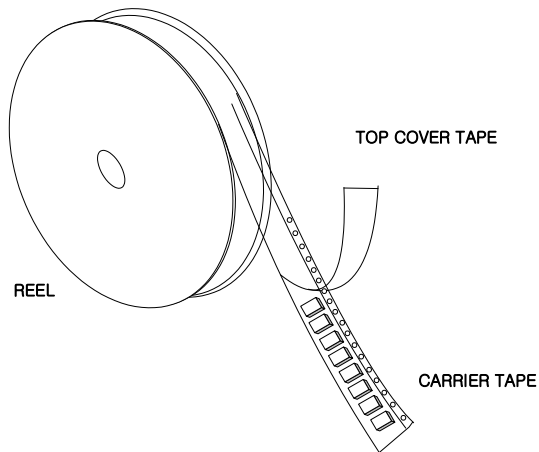
	<b>ITF Co., Ltd.</b> 102-701, 22, Samjak-ro, Ojeong-gu, Bucheon-si, Gyeonggi-do, Korea, 14501	Part No.	F8107	
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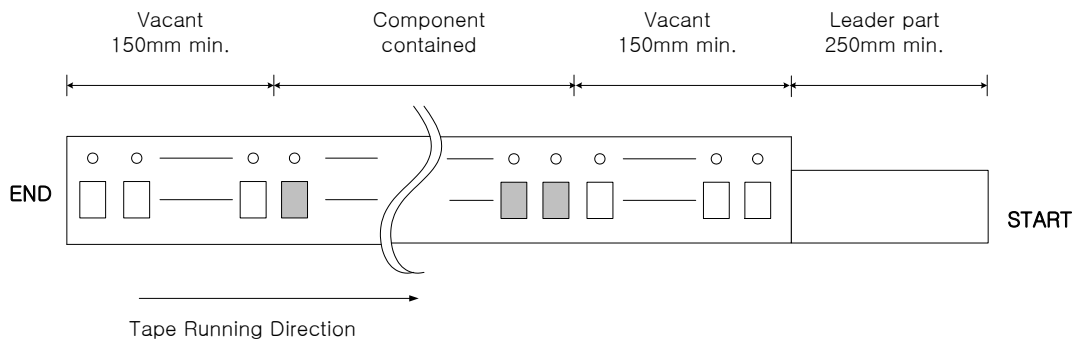
## Packing Specification

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

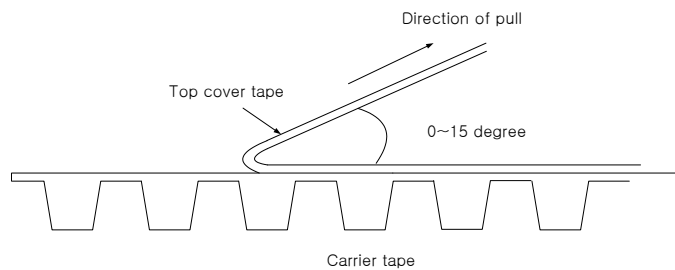



2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

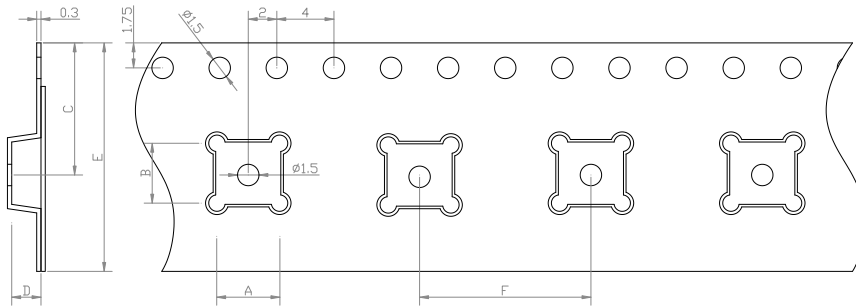


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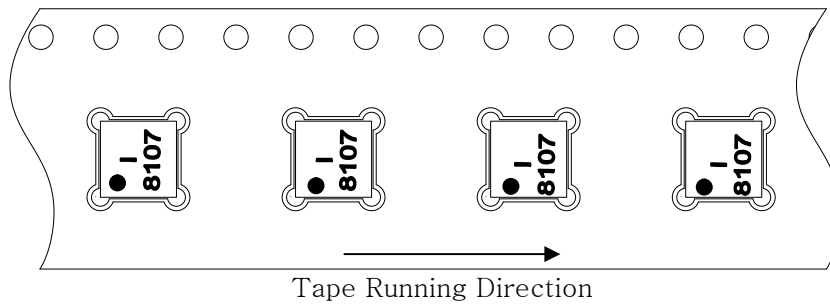


## Carrier Tape Dimensions [unit : mm]

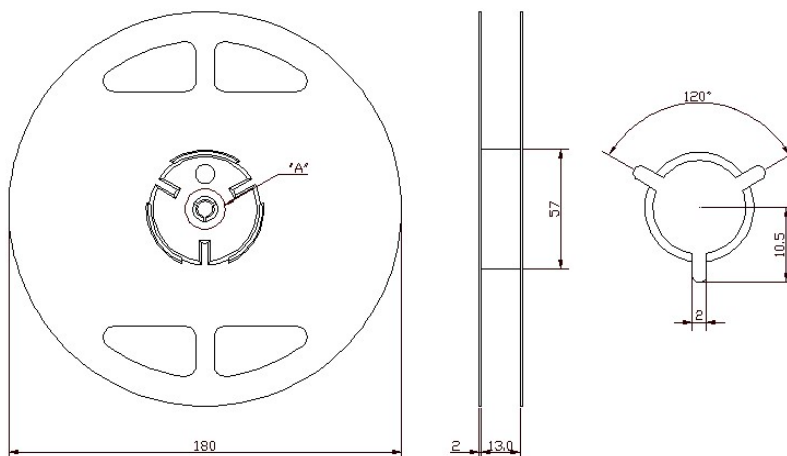



A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

## Part Direction



## Reel Dimensions [unit : mm]



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