

# SAW Bandpass Filter F3156



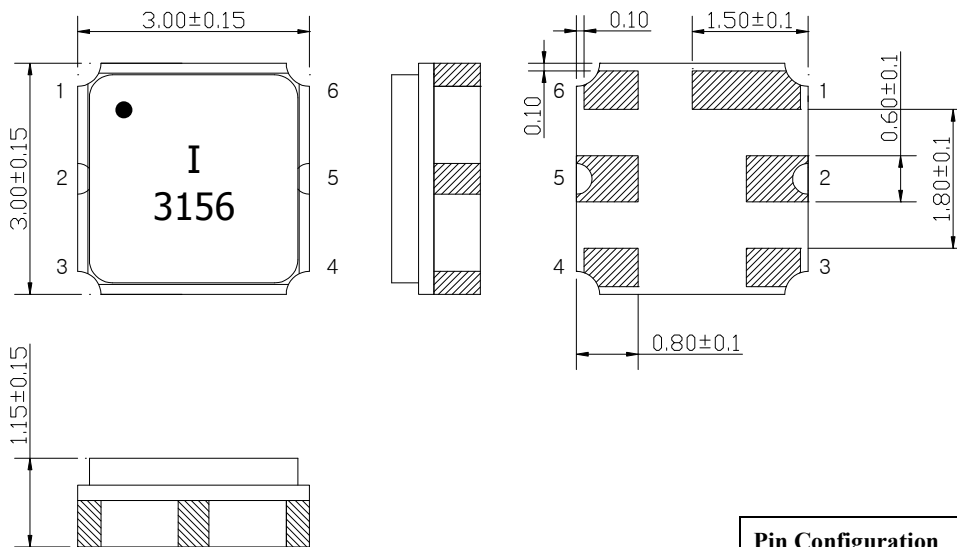
**RoHS Compliant**

Tested by SGS Testing Korea

## Features

- RF SAW Band Pass filter
- Usable Passband **0.3 MHz**
- 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 μm, Over a 1.27 ~ 8.89 μm Ni Plating

Pin Configuration	
2	Input
5	Output
1, 3, 4, 6	ground

## Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	25	85
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm		11	

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.	F3156	
		Rev. Date	2018-06-21	
		Rev.	AS01	1/7

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## Specifications

Fc = 315.0MHz

Room Temperature : +25 °C		Minimum	Typical	Maximum
Center Frequency ( Fc )	MHz	-	315.0	-
Insertion Loss ( Fc )	dB	-	2.5	3.5
Amplitude Ripple (314.85 MHz ~ 315.15 MHz)	dB	-	0.5	2.0
Amplitude Ripple (314.82 MHz ~ 315.18 MHz)	dB	-	0.6	3.0
Amplitude Ripple (314.78 MHz ~ 315.22 MHz)	dB	-	1.5	6.0
Relative Attenuation				
10.00 ~ 295.00 MHz	dB	30	35	-
295.00 ~ 307.00 MHz	dB	30	35	-
307.00 ~ 313.20 MHz	dB	25	28	-
313.20 ~ 313.50 MHz	dB	25	28	-
316.50 ~ 320.00 MHz	dB	25	29	-
320.00 ~ 339.30 MHz	dB	18	22	-
339.30 ~ 370.00 MHz	dB	40	50	-
370.00 ~ 600.00 MHz	dB	52	57	-
600.00 ~ 1500.00 MHz	dB	60	65	-
1500.00 ~ 2500.00 MHz	dB	55	65	-
Input/Output Impedance	Ohm	-	50	-

### 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

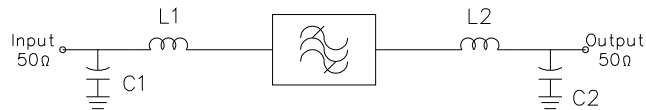
 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F3156	
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## Matching Schematic

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



$$L1 = L2 = 68\text{nH} , C1 = C2 = 5.6\text{pF}$$

## Marking Configuration

- <sup>1)</sup>  
**I** <sup>2)</sup>  
**3156** <sup>3)</sup>

1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

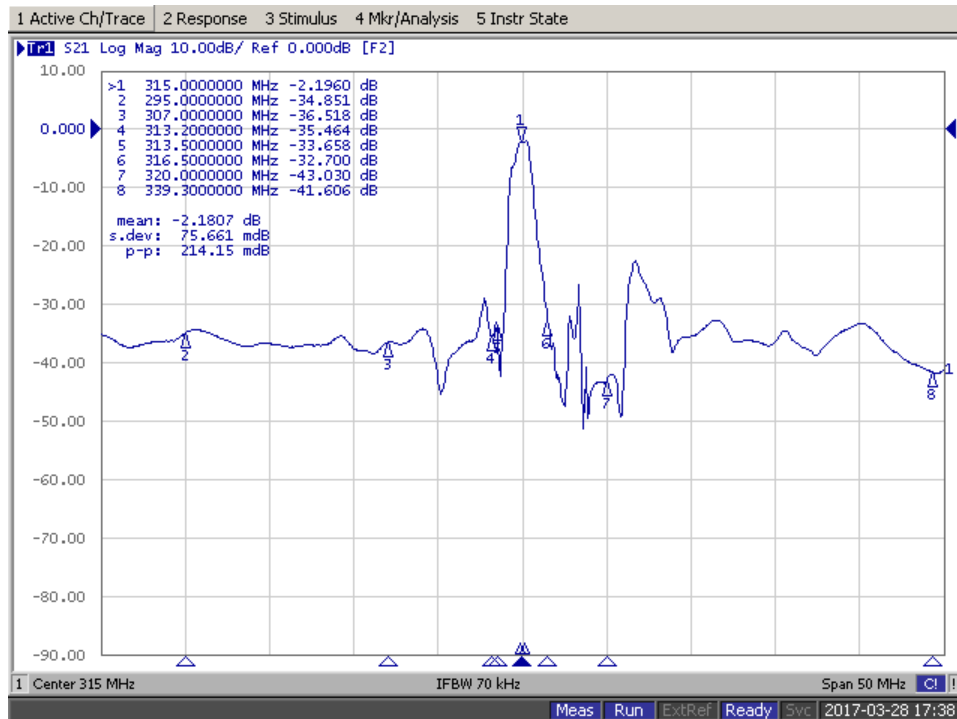
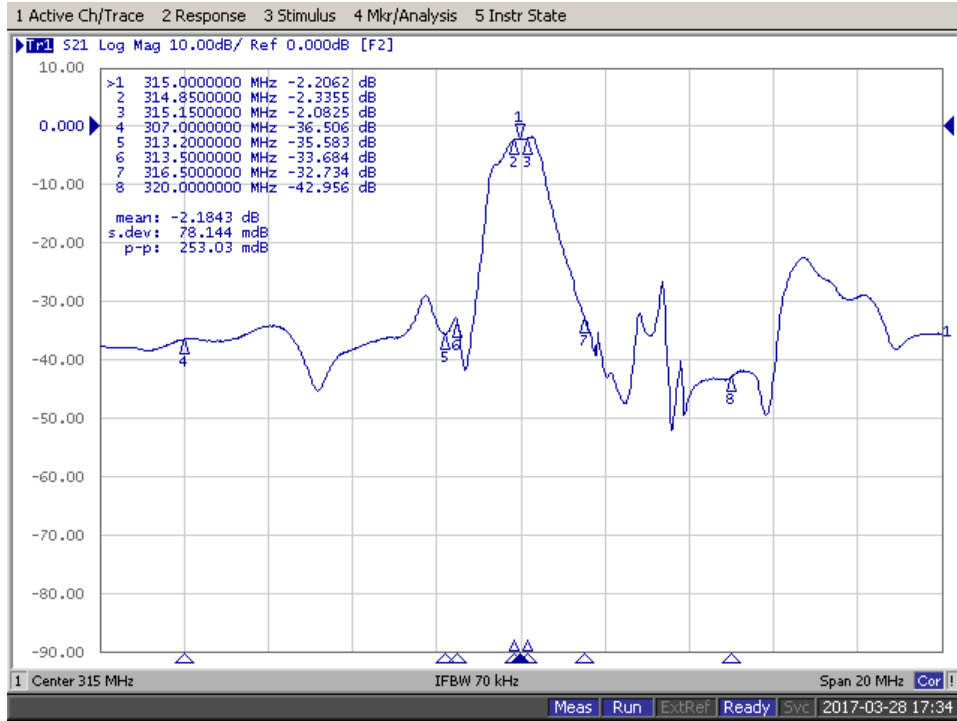
\* Ink or Laser Marking available

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## Typical Performance ( at 25°C )



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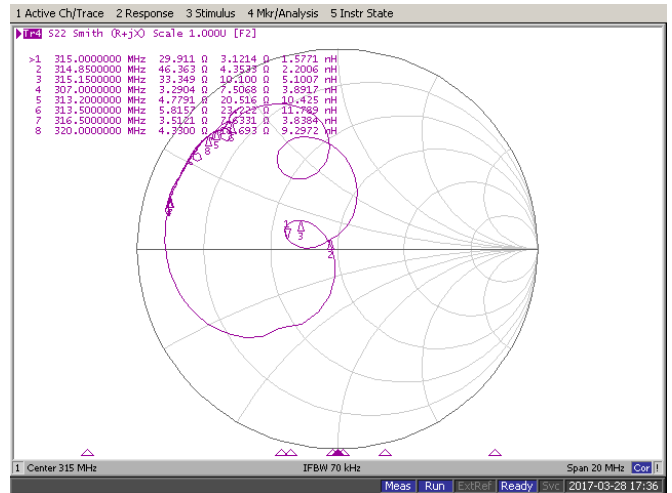
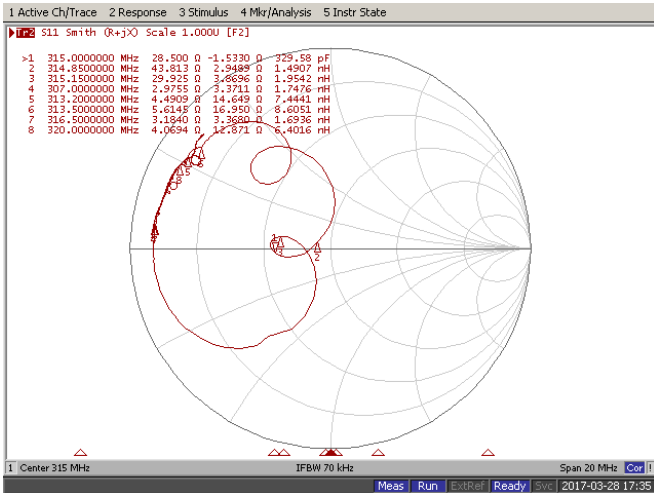
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## Input / Output VSWR Charts



## Input / Output Smith Charts



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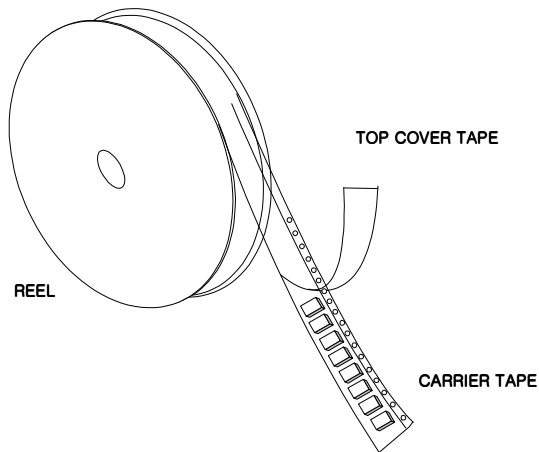
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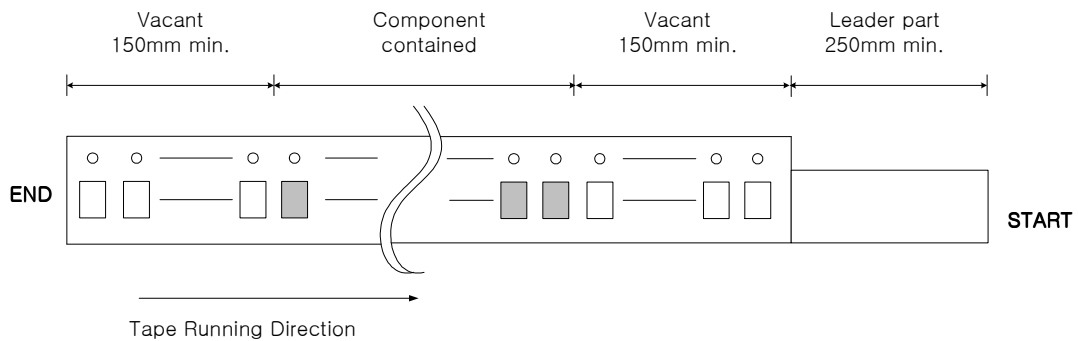
## Packing Specification

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

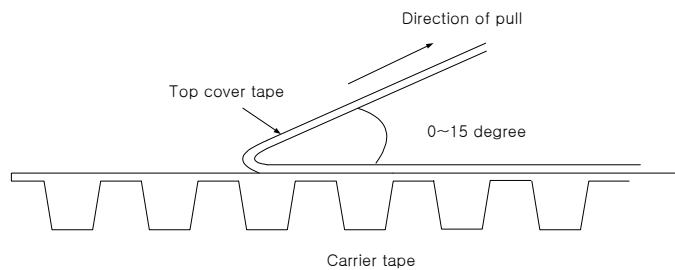


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

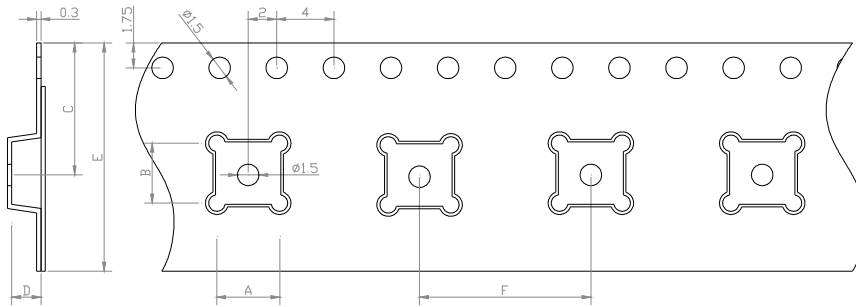


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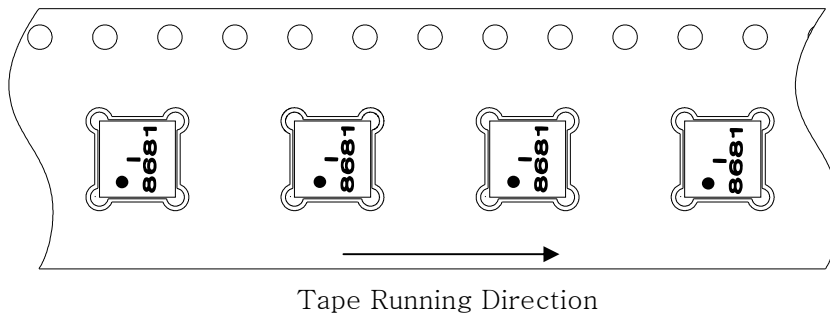


## Carrier Tape Dimensions [unit : mm]

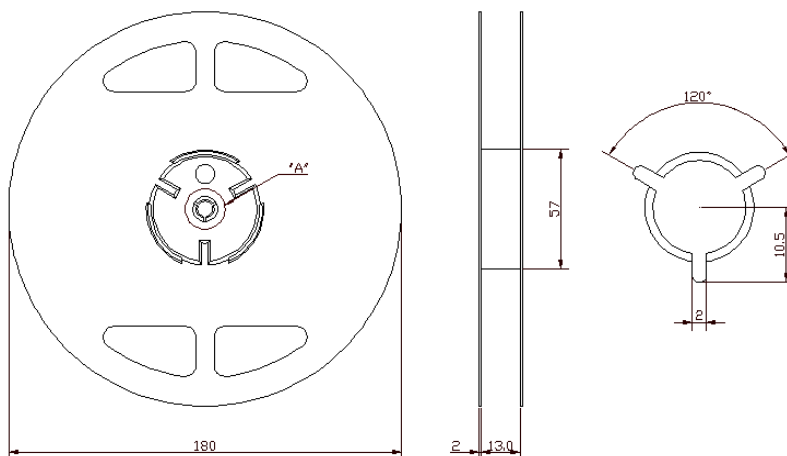



A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

## Part Direction



## Reel Dimensions [unit : mm]



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