

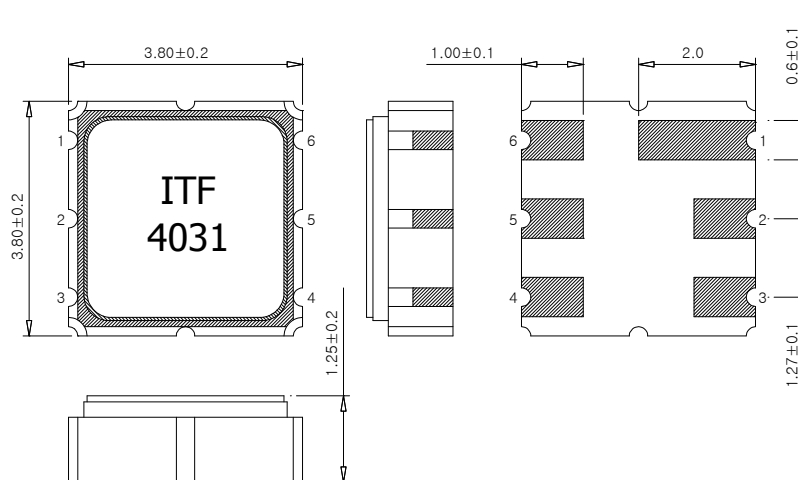
# SAW Bandpass Filter F4031



## Features

- RF bandpass filter
- High attenuation
- Usable bandwidth 4MHz
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package

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

## Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-10	25	60
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	-

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.	F4031	
		Rev. Date	2015-4-3	
		Rev.	AS04	1/7

# SAW Bandpass Filter F4031




## Specifications

$F_c = 403.5\text{MHz}$

		Minimum	Typical	Maximum
Center Frequency ( $F_c$ )	MHz	-	403.5	-
Insertion Loss ( $F_c \pm 2.0$ MHz)	dB	-	2.5	3.5
Amplitude Ripple ( $F_c \pm 2.0$ MHz)	dB	-	0.5	1.0
VSWR ( $F_c \pm 2.0$ MHz)		-	1.5	2.0
Relative Attenuation 353.5 MHz ~ 388.5 MHz 423.5 MHz ~ 453.5 MHz	dB	35 12	45 17	-
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

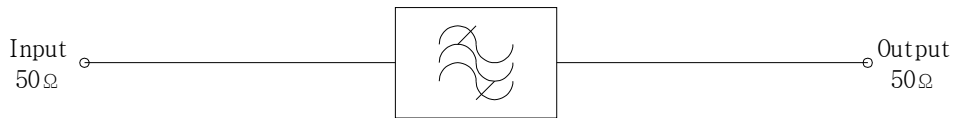
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## Matching Schematic

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



## Marking Configuration


ITF<sup>1)</sup>

4031<sup>2)</sup>

1) Manufacturer name

2) Marking Number

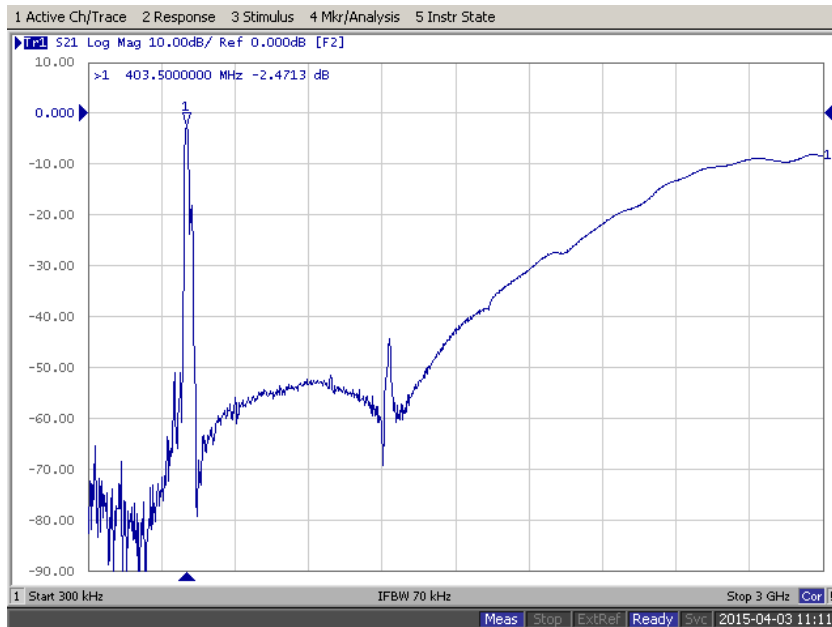
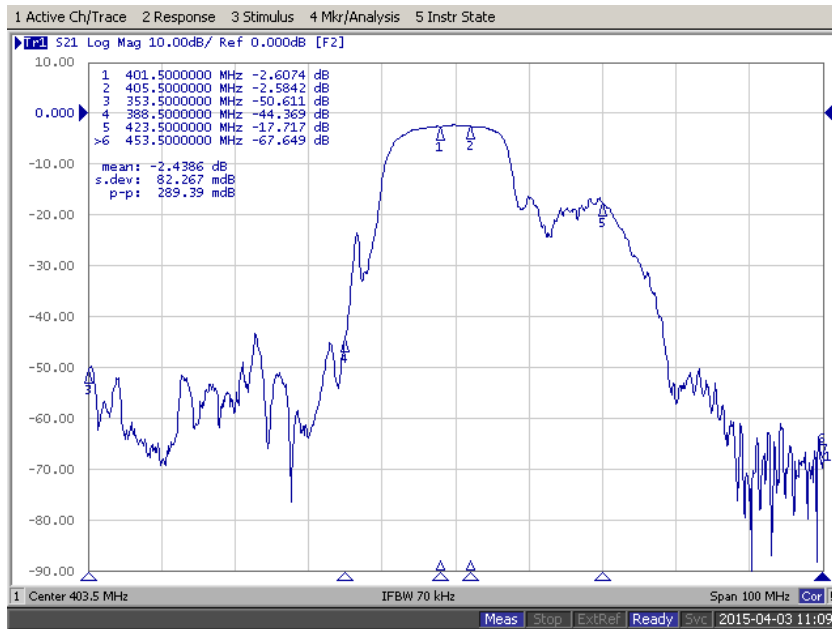
\* Ink or Laser Marking available

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## Typical Performance ( at 25°C )



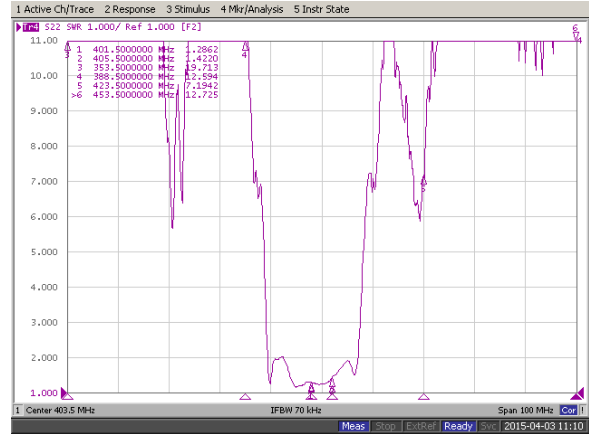
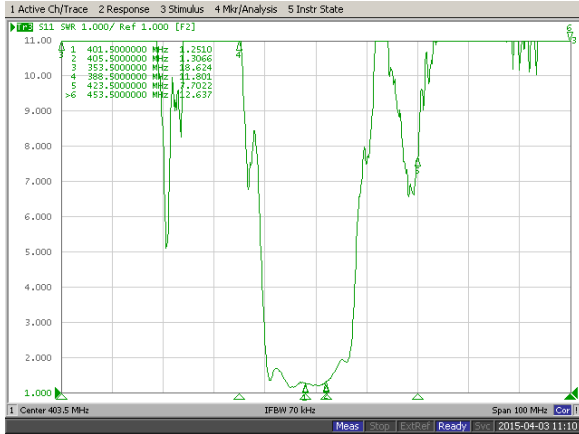
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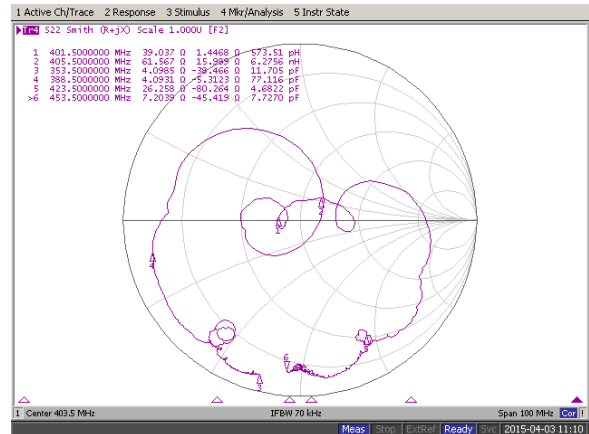
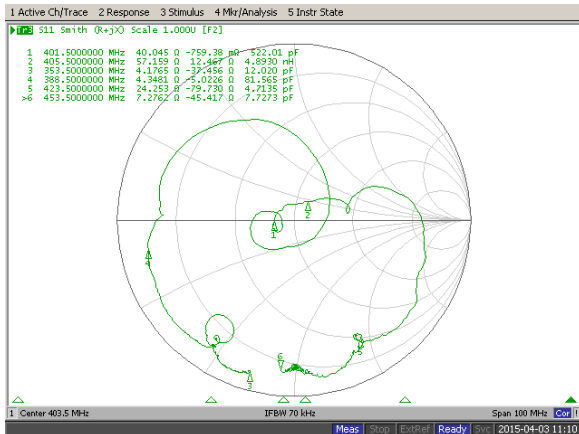
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## Input / Output VSWR Charts



## Input / Output Smith Charts



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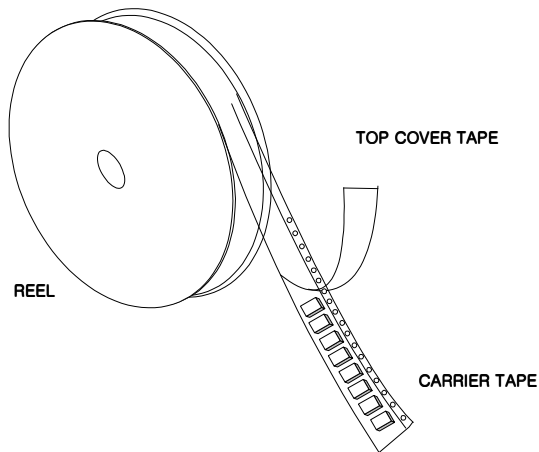
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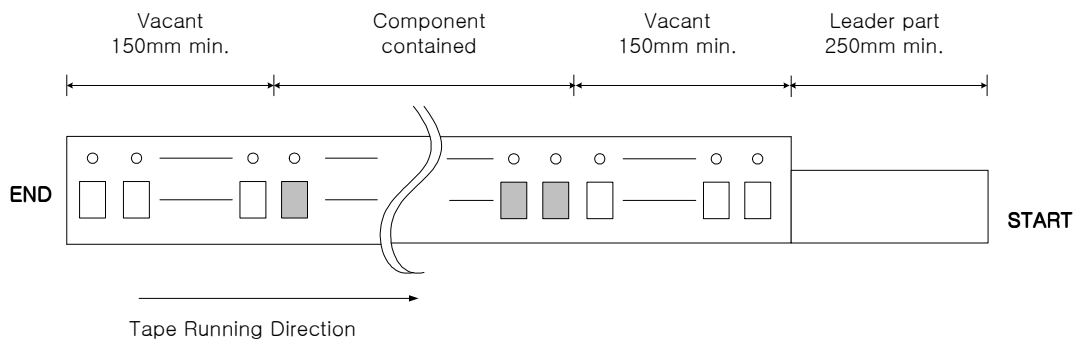
## Packing Specification

1. Reeling Quantity : 1000 pcs / 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

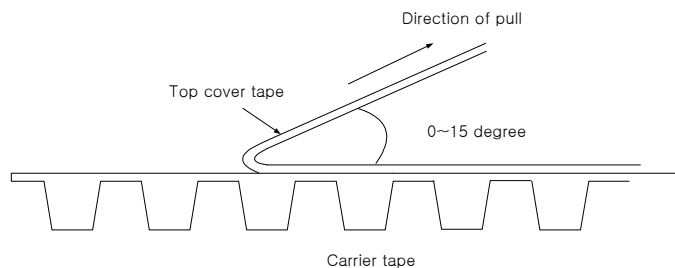



2. Tensile strength of carrier tape

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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