

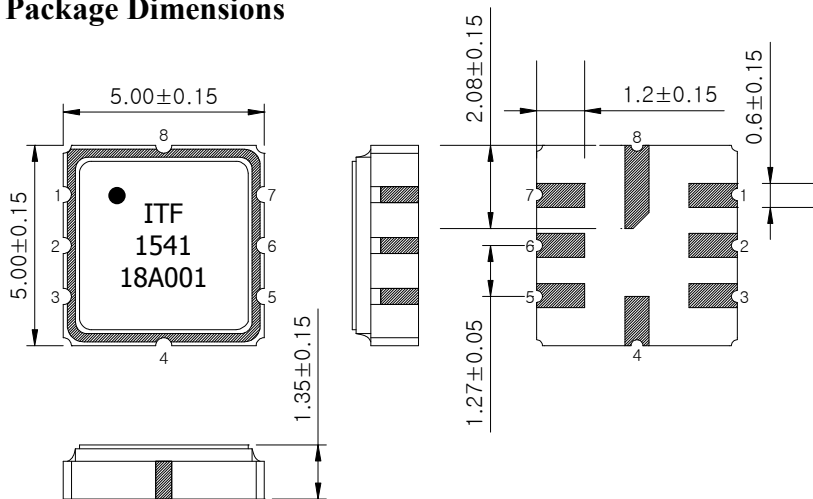
# SAW Bandpass Filter F1541



## Features

- RF bandpass filter
- Usable bandwidth 2.0 MHz
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package (5.0mm \* 5.0mm)
- RoHS/RoHS2 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 um, Over a 1.27 ~ 8.89 um Ni Plating

Pin Configuration	
2	Input
6	Output
1, 3, 4, 5, 7, 8	Ground

## Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	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.	F1541	
		Rev. Date	2018-11-01	
		Rev.	AS03	1/7

# SAW Bandpass Filter F1541




## Specifications

$F_c = 154.5 \text{ MHz}$

		Minimum	Typical	Maximum
Center Frequency ( $F_c$ )	MHz	-	154.5	-
Insertion Loss ( $F_c \pm 1.0 \text{ MHz}$ )	dB	-	2.9	4.0
Amplitude Ripple ( $F_c \pm 1.0 \text{ MHz}$ )	dB	-	1.0	1.5
Absolute Group Delay ( $F_c$ )	usec	-	0.35	-
Group Delay Variation ( $F_c \pm 1.0 \text{ MHz}$ )	usec	-	0.10	-
VSWR ( $F_c \pm 1.0 \text{ MHz}$ )		-	2.5	-
Absolute Attenuation				
D.C. ~ 142.5 MHz	dB	40	45	-
166.5 ~ 800.0 MHz		35	40	-

### 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

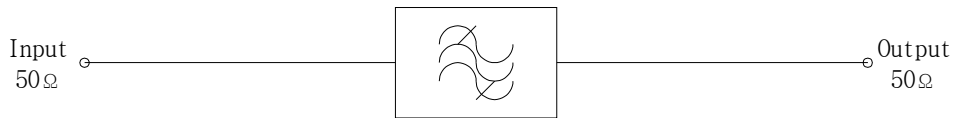
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## Matching Schematic

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



## Marking Configuration

- <sup>1)</sup>  
ITF <sup>2)</sup>  
1541 <sup>3)</sup>  
18A001 <sup>4)</sup>


1) Pad Number 1 Index

2) Manufacturer name

3) Part Number

4) Lot Number

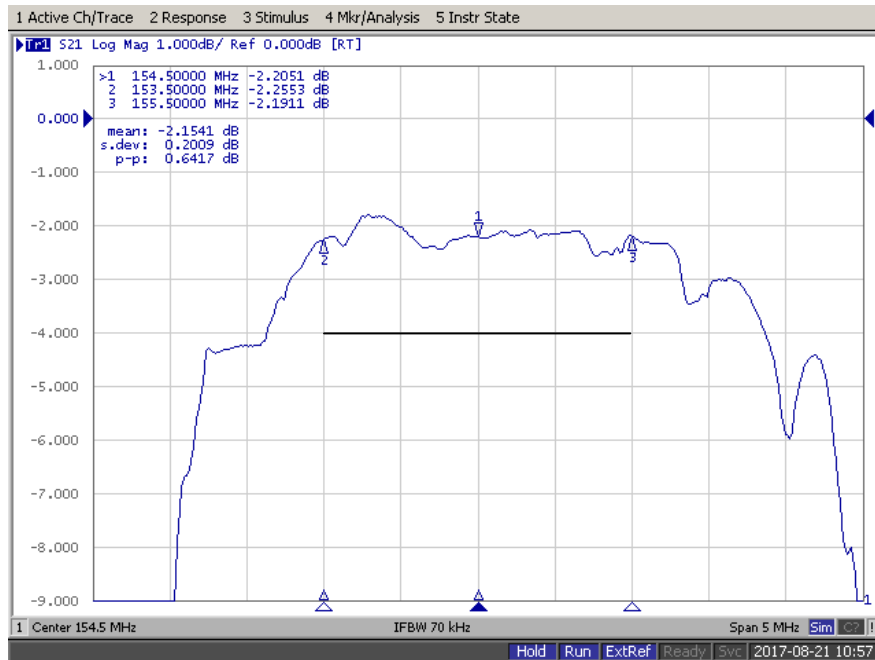
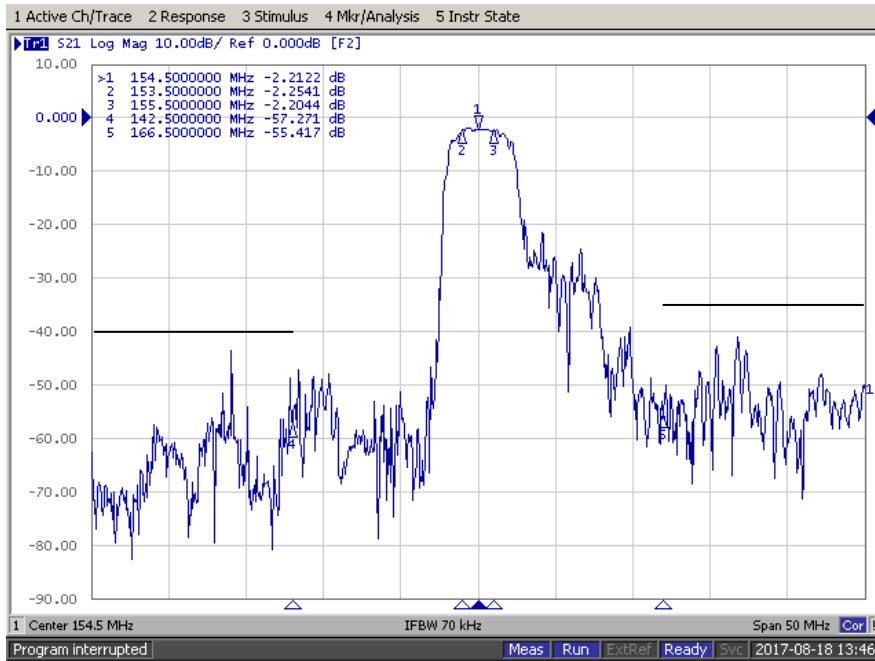
\* Ink or Laser Marking available

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# SAW Bandpass Filter F1541



## Typical Performance ( at 25°C )



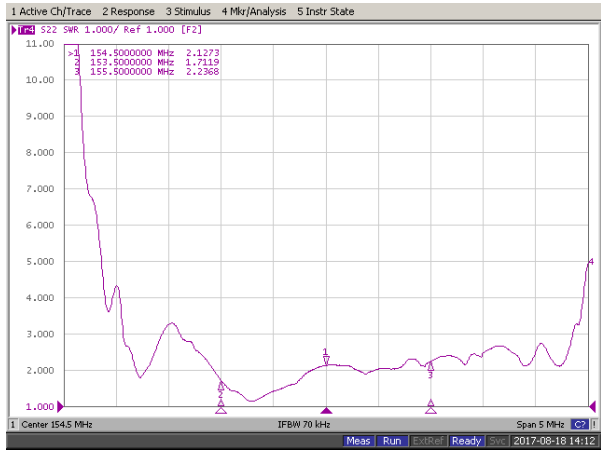
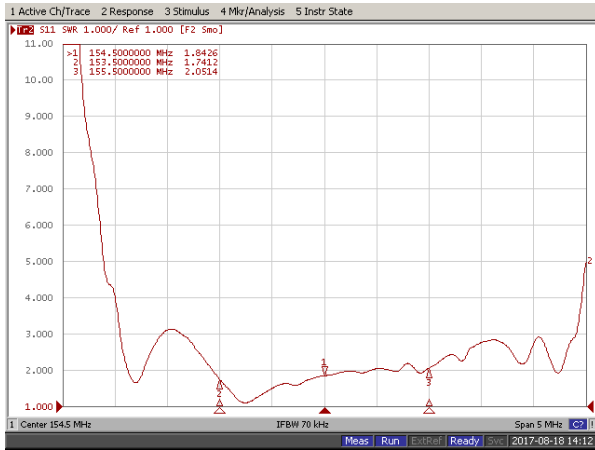
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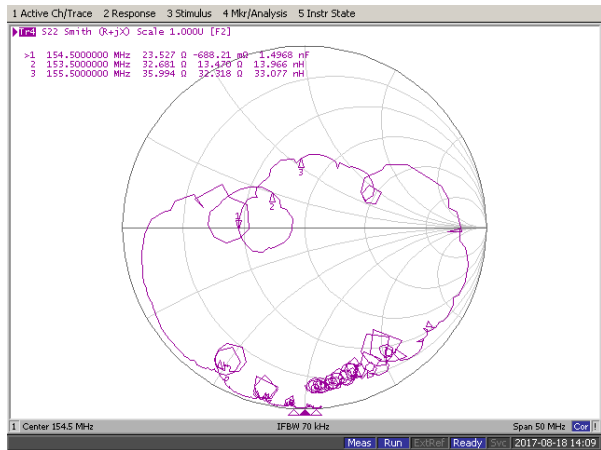
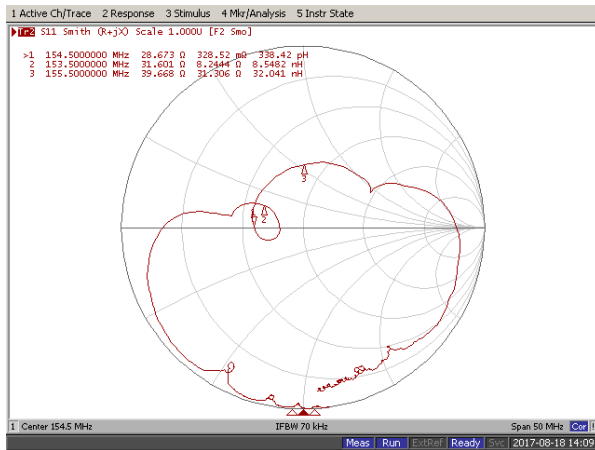
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## Input / Output VSWR Charts



## Input / Output Smith Charts



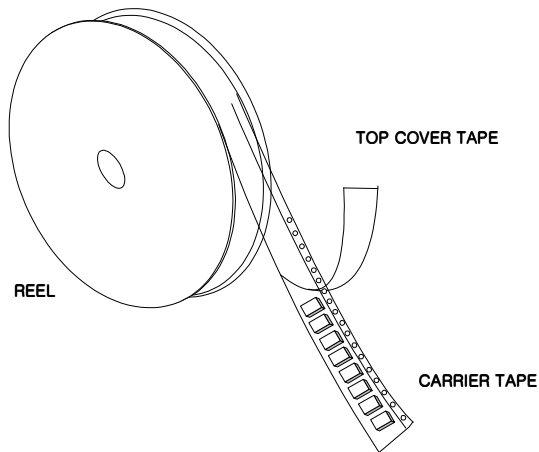
	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1541	
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# SAW Bandpass Filter F1541



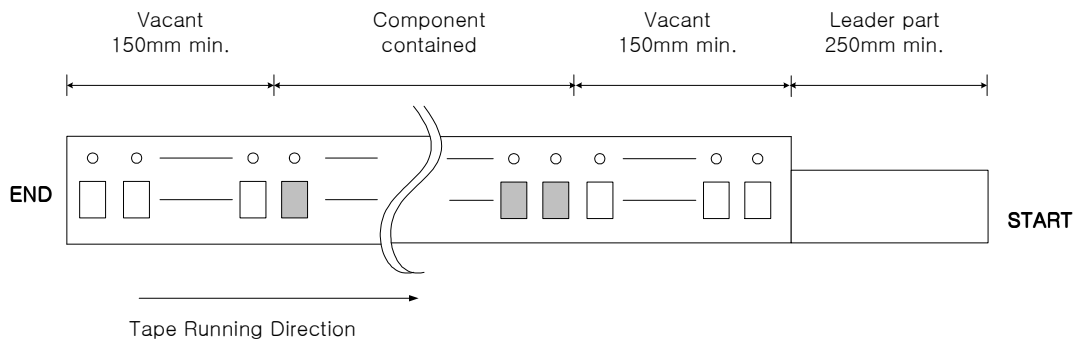
## Packing Specification

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

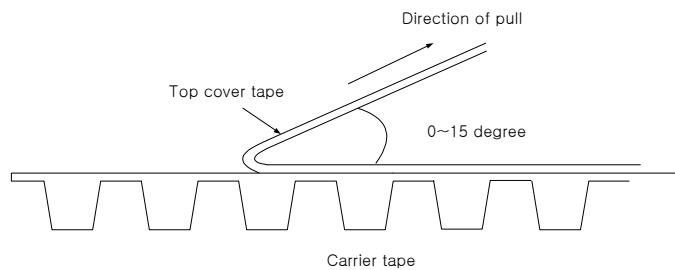


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

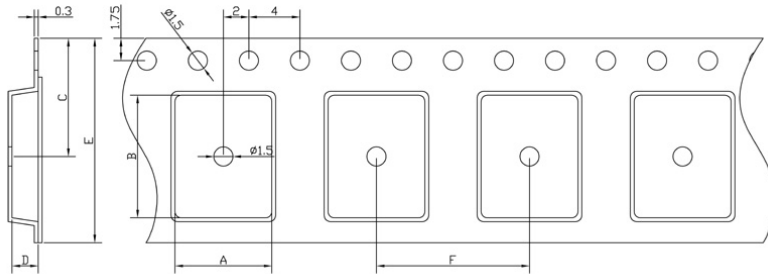


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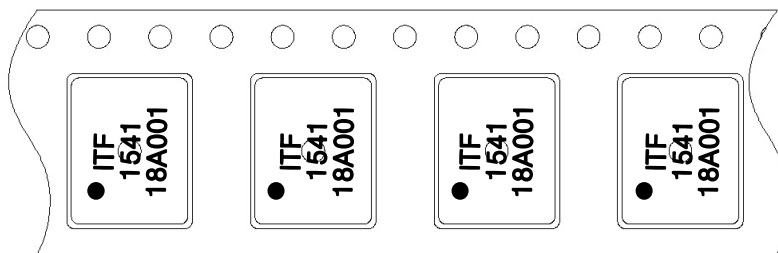


## Carrier Tape Dimensions [unit : mm]



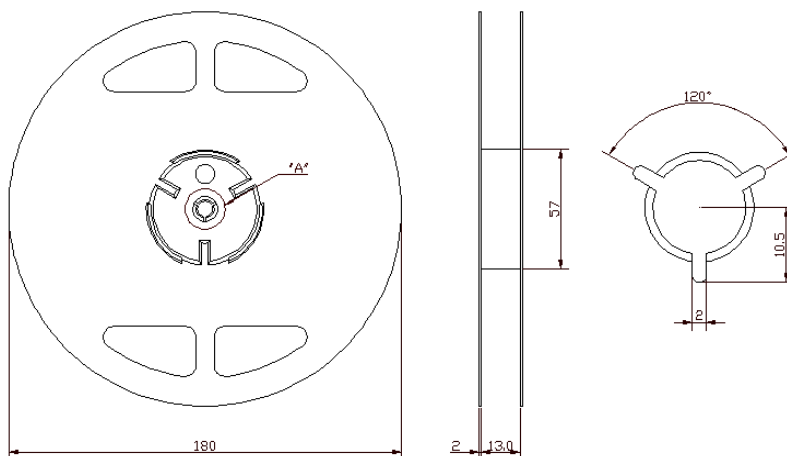
A	5.50 ± 0.1
B	5.50 ± 0.1
C	7.25 ± 0.1
D	1.95 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1


## Part Direction



→  
Tape Running Direction

## Reel Dimensions [unit : mm]



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