

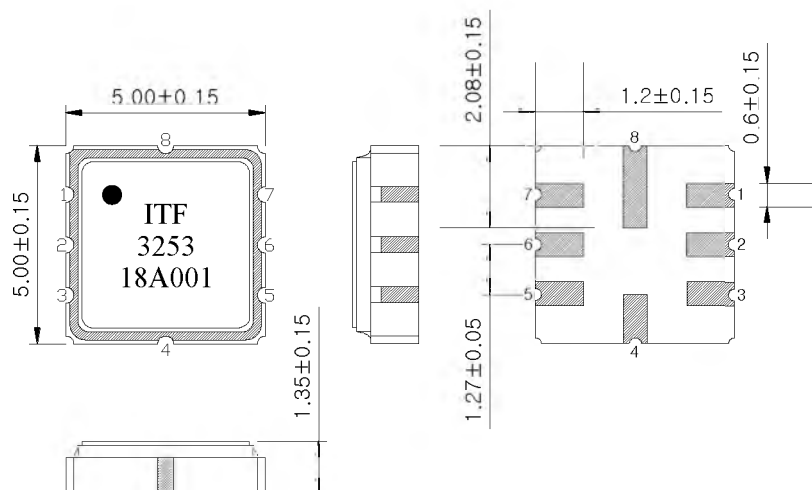
# SAW Bandpass Filter F3253



## Features

- RF bandpass filter
- Usable bandwidth 4.0 MHz
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package (5.0mm \* 5.0mm)
- RoHS/RoHS2 (2015/863/EU) 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
6	Output
1, 3, 4, 5, 7, 8	Ground

## Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	25	80
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	10

Electrostatics Sensitive Device (ESD)

# SAW Bandpass Filter F3253



## Specifications

$F_c = 325.0 \text{ MHz}$

		Minimum	Typical	Maximum
Center Frequency ( $F_c$ )	MHz	-	325	-
Insertion Loss ( $F_c \pm 2.0 \text{ MHz}$ )	dB	-	2.0	3.5
Amplitude Ripple ( $F_c \pm 2.0 \text{ MHz}$ )	dB	-	0.6	1.5
VSWR ( $F_c \pm 2.0 \text{ MHz}$ )		-	1.5	2.0
Absolute Attenuation				
225.0 ~ 305.0 MHz	dB	35	45	-
350.0 ~ 425.0 MHz		35	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

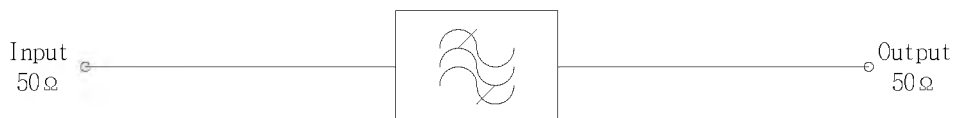
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## Matching Schematic

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



## Marking Configuration

1)  
●  
ITF 2)  
3253 3)  
18A001 4)

1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

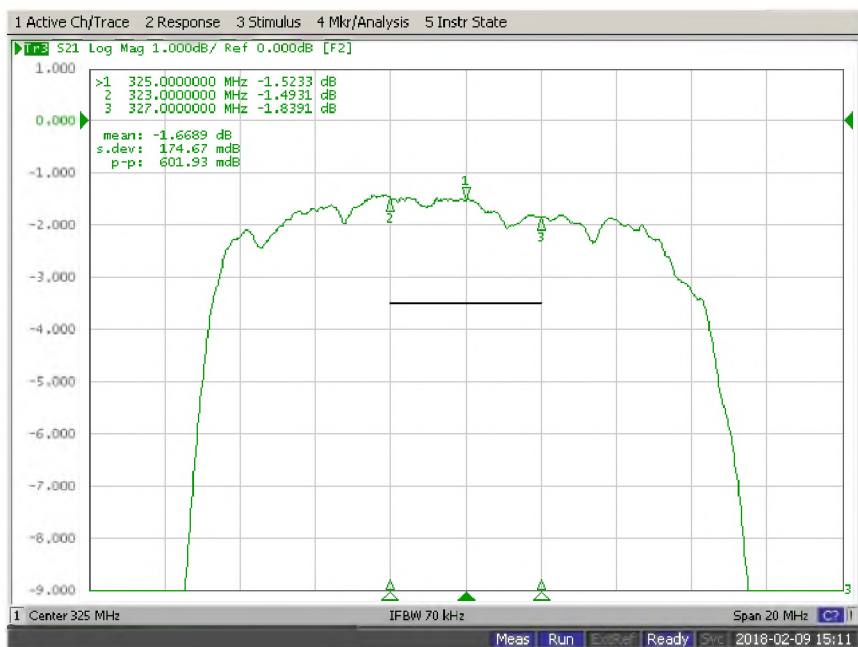
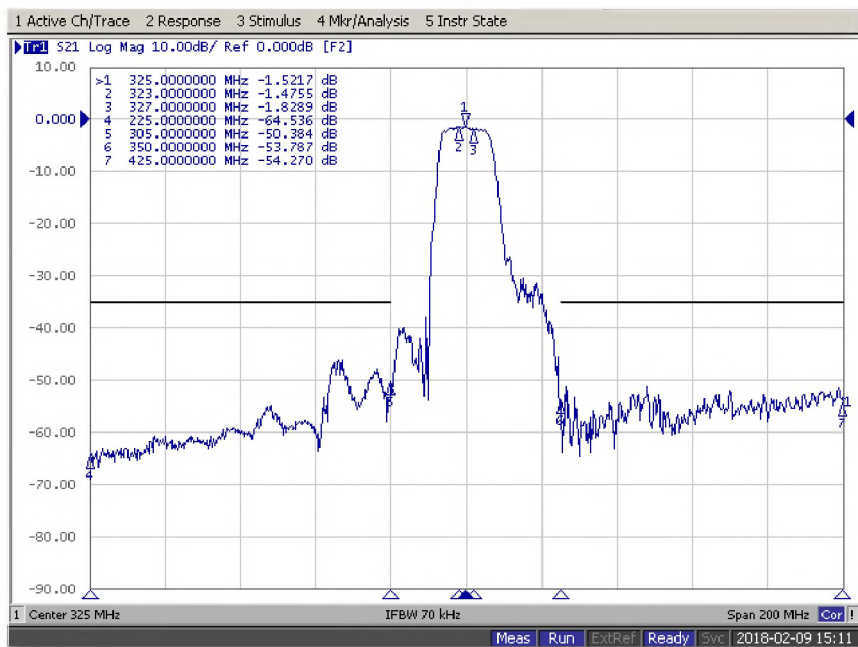
4) Lot Number

\* Ink or Laser Marking available

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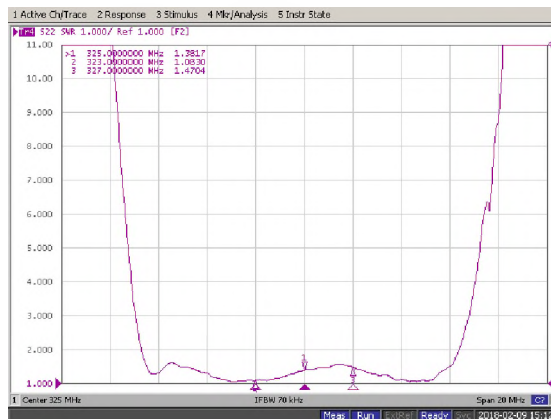
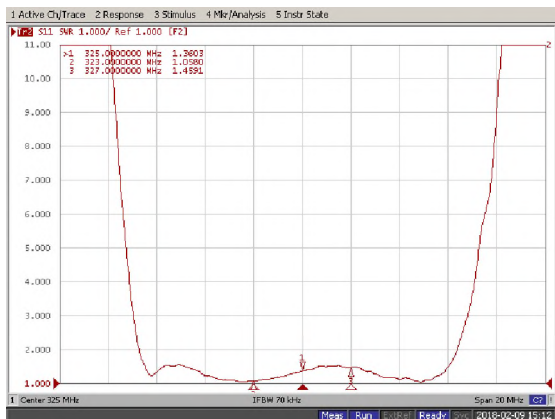
## Typical Performance ( at 25°C )



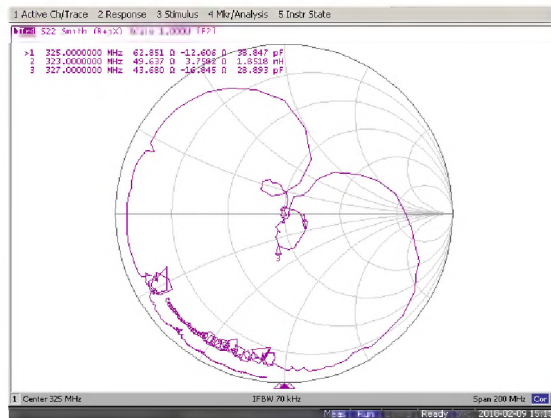
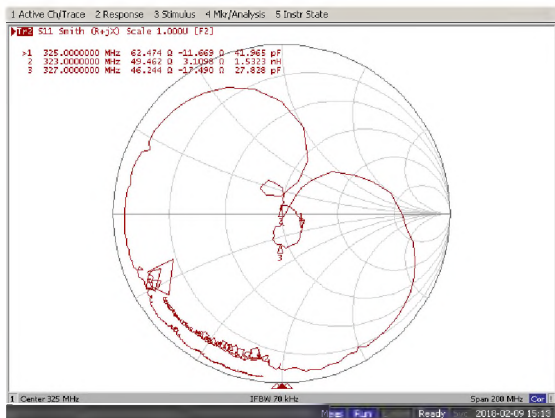
# SAW Bandpass Filter F3253



## Input / Output VSWR Charts



## Input / Output Smith Charts

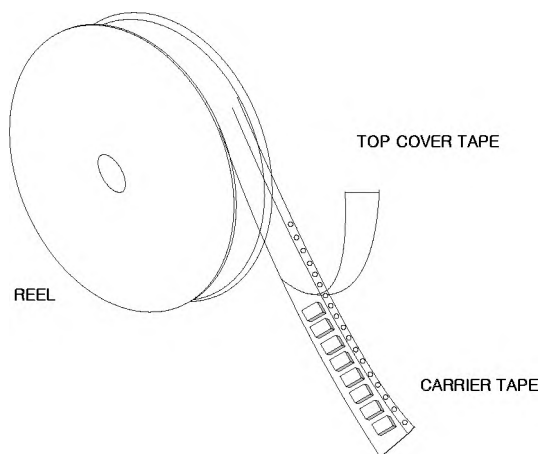


# SAW Bandpass Filter F3253



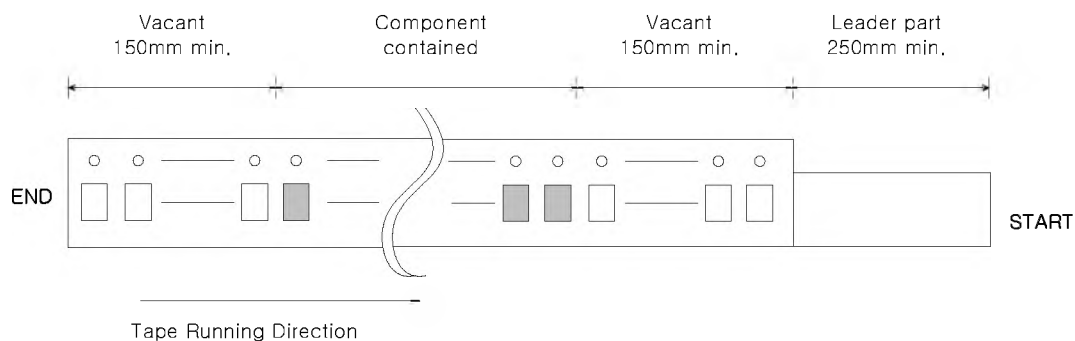
## Packing Specification

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

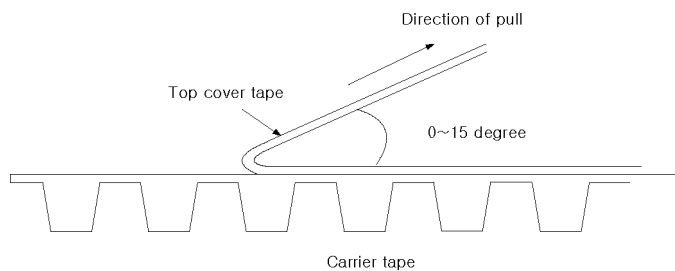
4.4N/mm width

3. Top cover tape adhesion

1) pull off angle : 0~15°

2) speed : 300mm/min

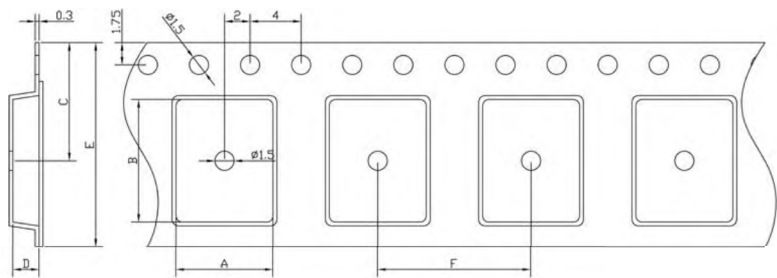
3) force : 20~70g



# SAW Bandpass Filter F3253

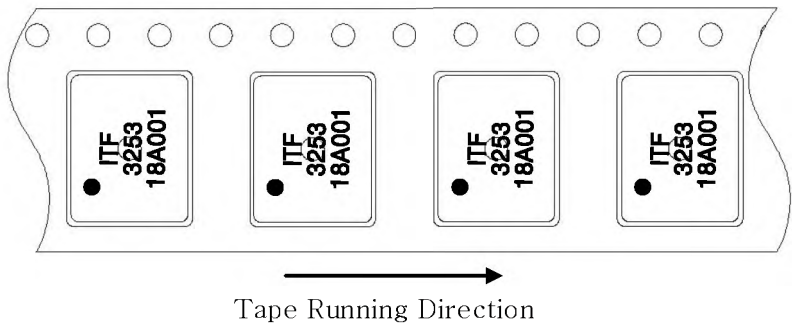


## Carrier Tape Dimensions [unit : mm]

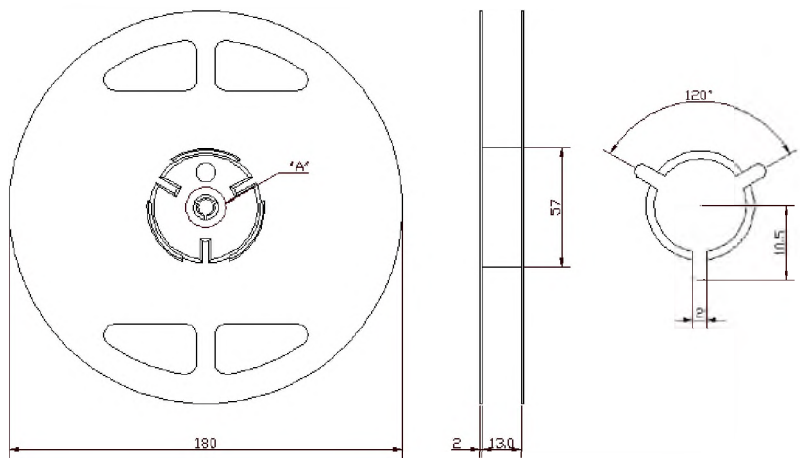


A	5.50 ± 0.1
B	5.50 ± 0.1
C	7.25 ± 0.1
D	1.95 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

## Part Direction



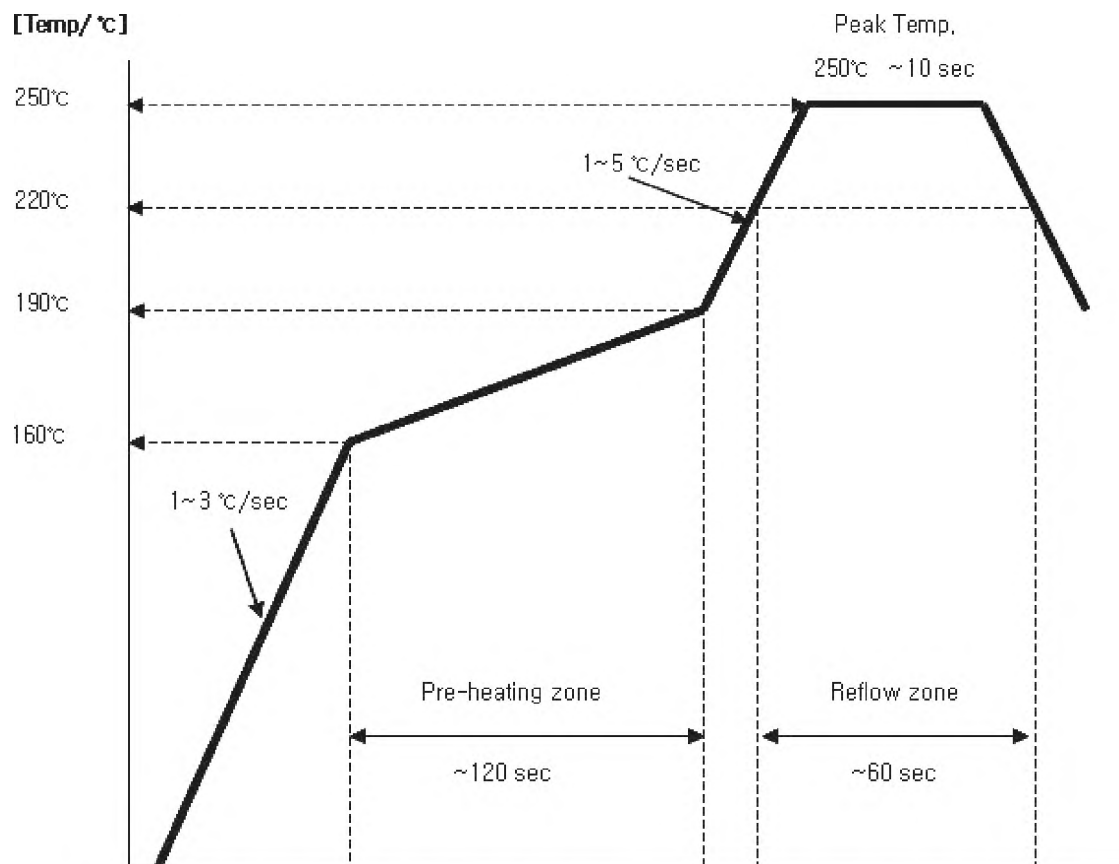
## Reel Dimensions [unit : mm]



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## Reflow Condition



Comment) The quality is guaranteed under this temperature conditions on 2 times solder reflows

## Cautions

1. This is a hermetic device.
- MSL (Moisture Sensitive Level) is the 1st level
2. This is an electrostatic sensitive device. Please avoid static voltage during operation and storage.
- ESD (Electrostatic Discharge ) Rating is class 0. (Test : HBM-Human Body Model)
3. Ultrasonic cleaning shall be avoided.
4. This device should not be used in any type of fluid such as water, oil , organic solvent ,etc.