

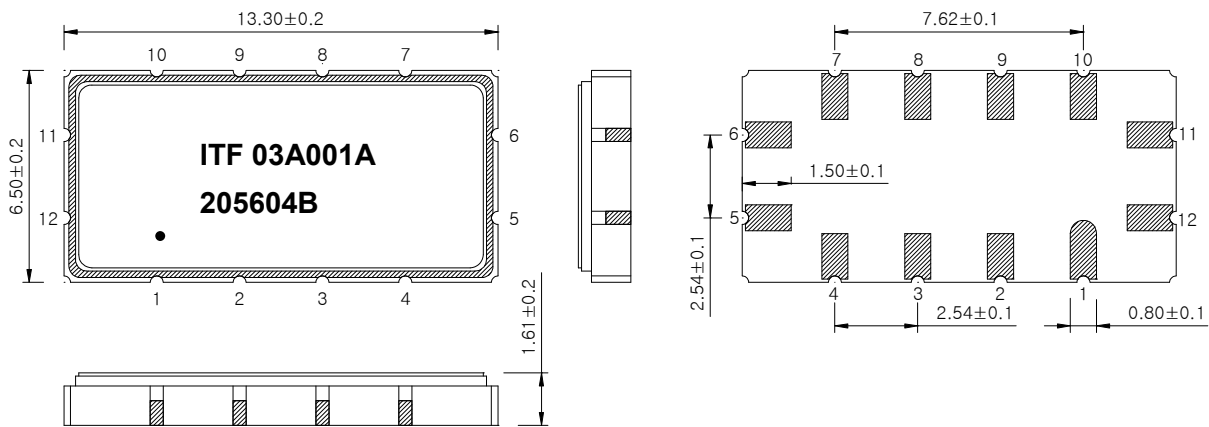
# SAW Bandpass Filter 205604B



## Features

- For IF bandpass filter
- High attenuation
- Single-ended operation
- SMD Package 13.3mm × 6.5mm × 1.6mm

## Package Dimension



## Package S1365

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

11	Input
5	Output
6, 12	Ground
1, 2, 3, 4, 7, 8, 9, 10	Case ground

## Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-10	25	60
Storage Temperature Range	°C	-40	-	85

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.	205604B	
		Rev. Date	2010-03-17	
		Rev.	NI2010-AS03	1/8

# SAW Bandpass Filter 205604B



## Electrical Specification

Fc = 100MHz


Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

		Minimum	Typical	Maximum
Center Frequency at room temp.	MHz	99.925	100.000	100.075
Insertion Loss	dB	-	4.0	5.5
3dB Bandwidth	MHz	0.03	0.06	-
Absolute Delay	usec	-	10	15
Relative Attenuation 98.0 ~ 99.5 MHz	dB	50	55	-
101.0 ~ 102.0 MHz		50	55	-
Temperature Coefficient of Frequency	ppm/°C <sup>2</sup>	-	-0.03	-

### 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

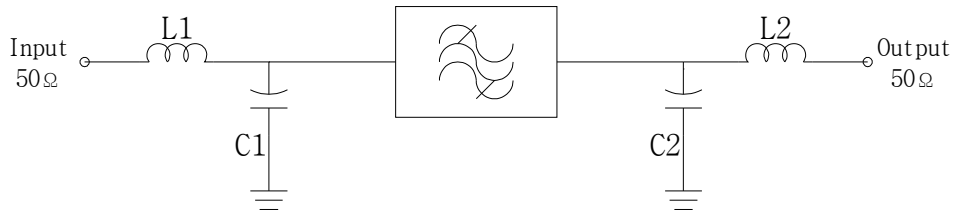
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## Matching Schematic

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




$$L1=L2=330\text{nH}, \quad C1=C2=2\text{pF}$$

## Marking Configuration

ITF<sup>1)</sup> 03A001<sup>2)</sup> A<sup>3)</sup>  
205604B<sup>4)</sup>

- 1) Manufacturer name
- 2) Lot Number
- 3) Group Name ( \*\*refer to the next page )
- 4) Part Number


 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.	205604B	
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## Marking Example

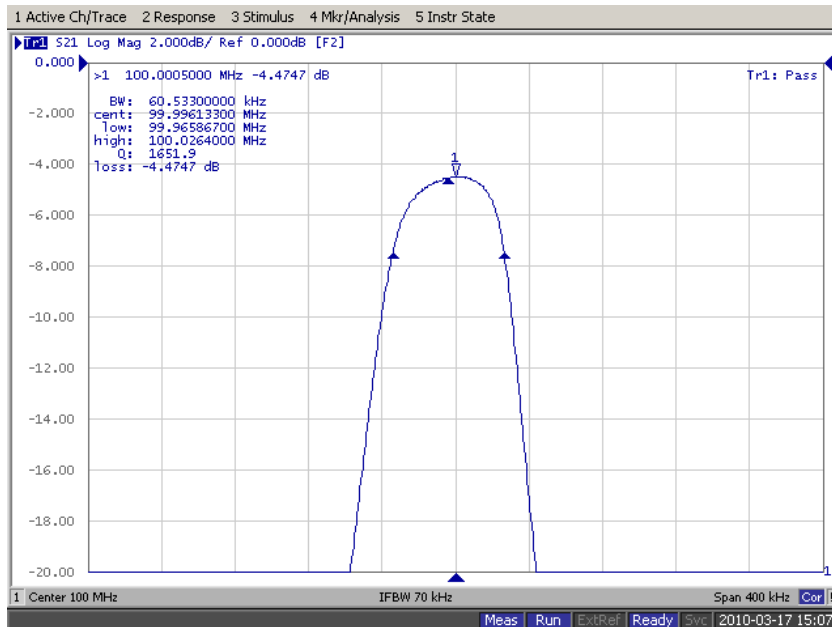
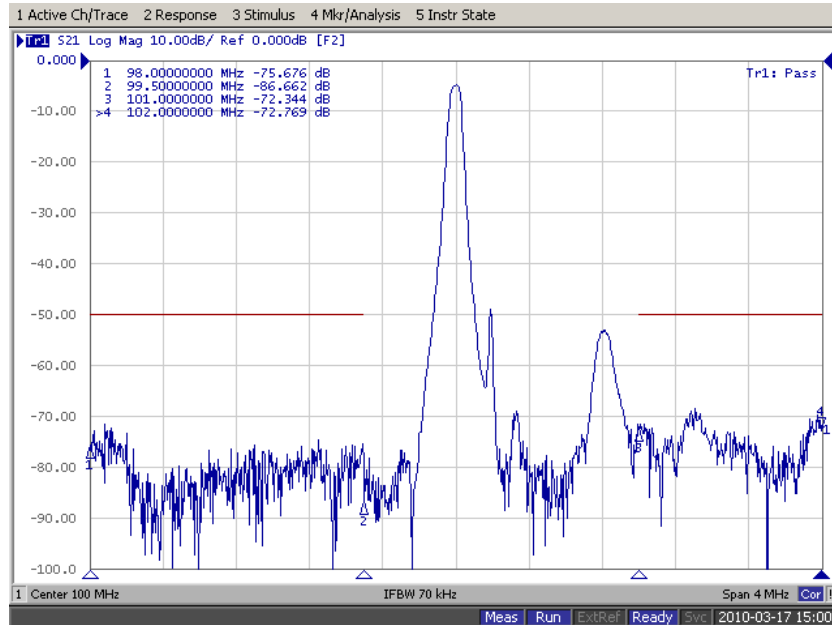
Center Frequency Range ( MHz) at room temp.	Marking
99.925 ~ 99.935	ITF 02D073 <b>A</b> 205604B
99.936 ~ 99.945	ITF 02D073 <b>B</b> 205604B
99.946 ~ 99.955	ITF 02D073 <b>C</b> 205604B
99.956 ~ 99.965	ITF 02D073 <b>D</b> 205604B
99.966 ~ 99.975	ITF 02D073 <b>E</b> 205604B
99.976 ~ 99.985	ITF 02D073 <b>F</b> 205604B
99.986 ~ 99.995	ITF 02D073 <b>G</b> 205604B
99.996 ~ 100.005	ITF 02D073 <b>H</b> 205604B
100.006 ~ 100.015	ITF 02D073 <b>I</b> 205604B
100.016 ~ 100.025	ITF 02D073 <b>J</b> 205604B
100.026 ~ 100.035	ITF 02D073 <b>K</b> 205604B
100.036 ~ 100.045	ITF 02D073 <b>L</b> 205604B
100.046 ~ 100.055	ITF 02D073 <b>M</b> 205604B
100.056 ~ 100.065	ITF 02D073 <b>N</b> 205604B
100.066 ~ 100.075	ITF 02D073 <b>O</b> 205604B

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## Typical Performance (at +25°C)

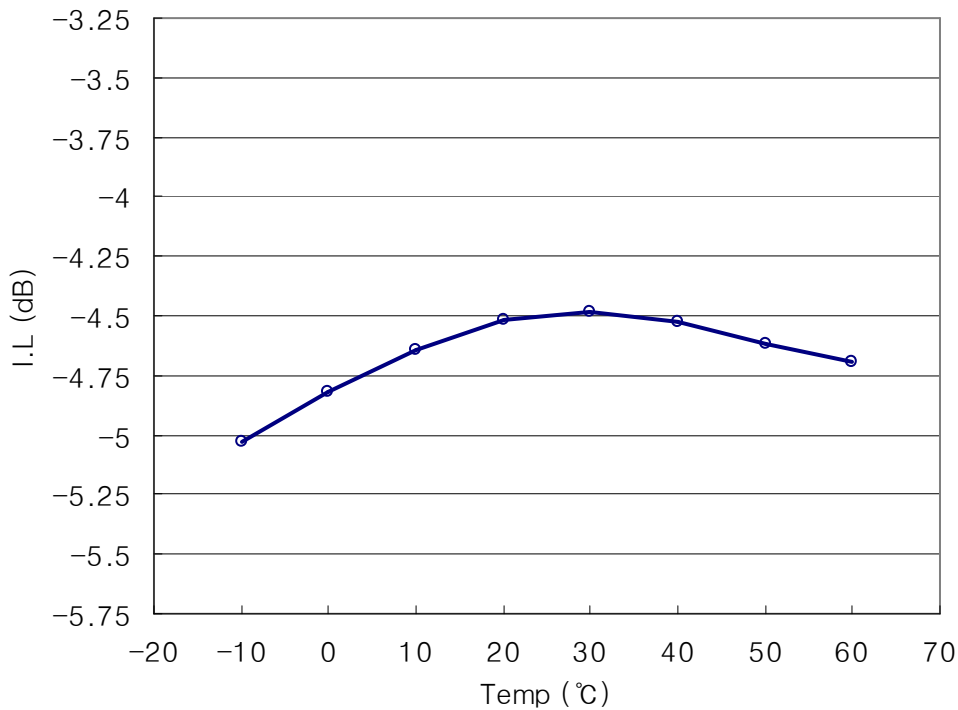
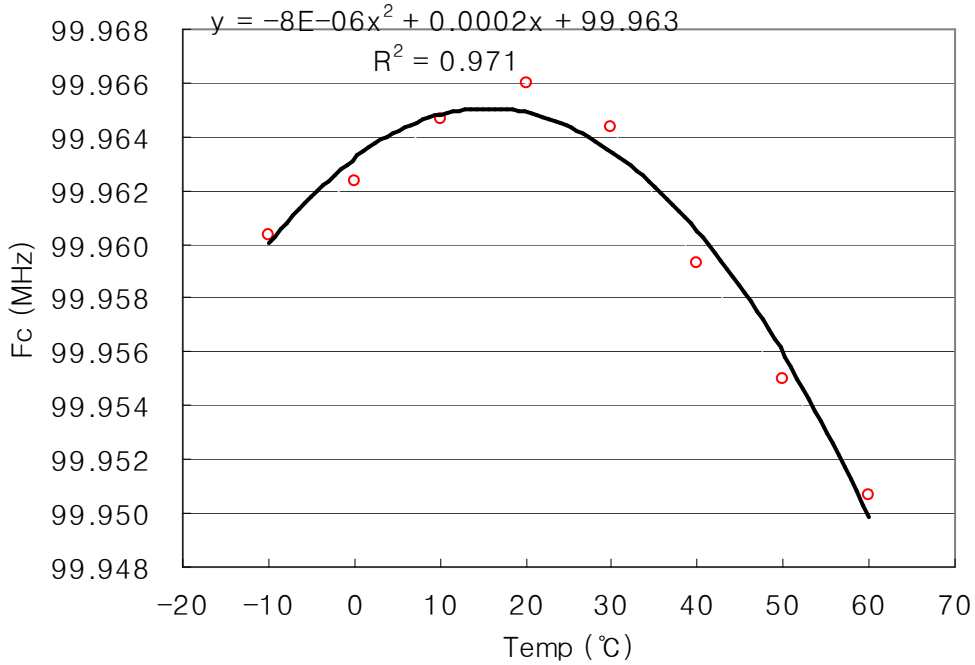


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## Temperature Characteristic



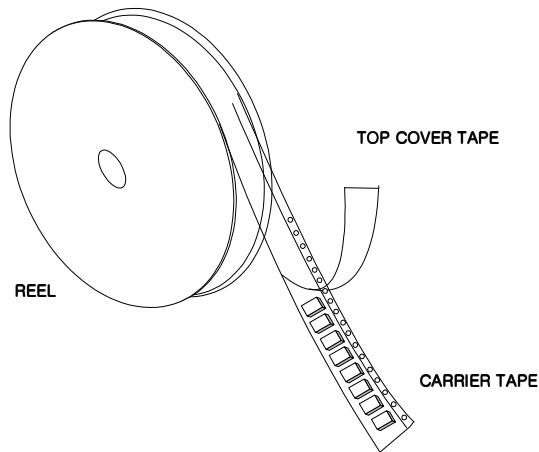
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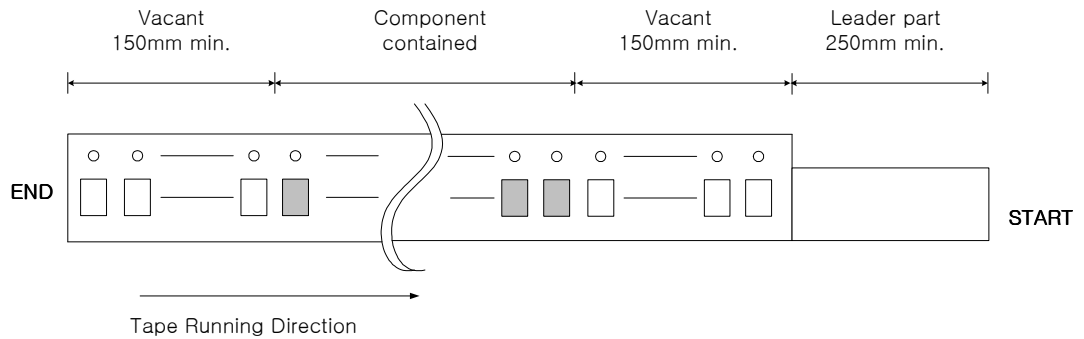
## Packing Specification

1. Reeling Quantity : 2000 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

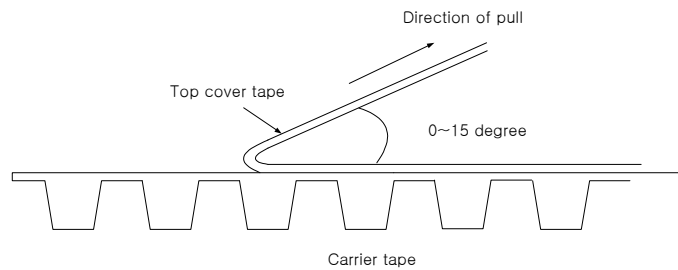



2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

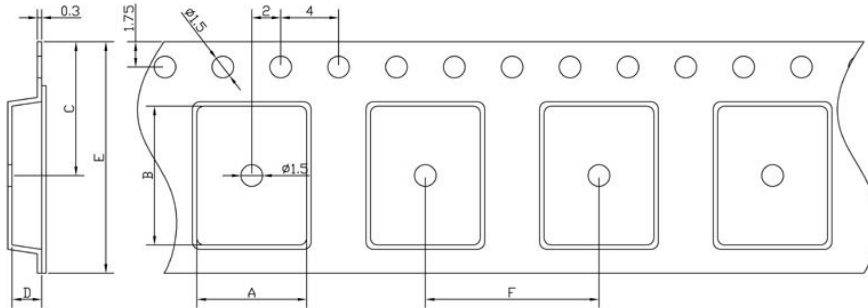


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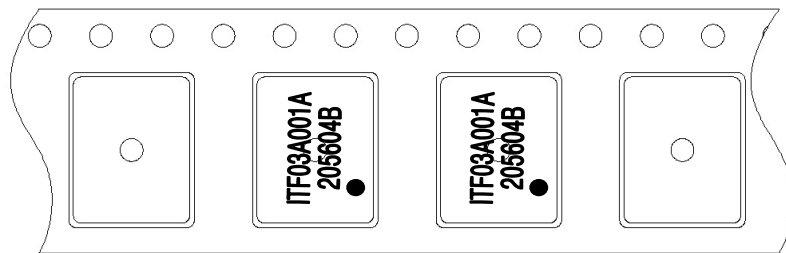


## Carrier Tape Dimensions [unit : mm]



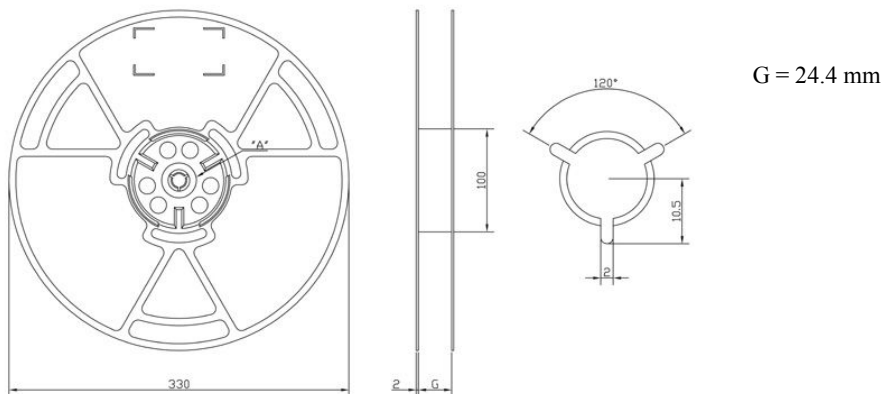
A	7.00 ± 0.1
B	13.80 ± 0.1
C	13.25 ± 0.1
D	1.95 ± 0.1
E	24.00 ± 0.1
F	12.00 ± 0.1


## Part Direction



→  
Tape Running Direction

## Reel Dimensions [unit : mm]



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