

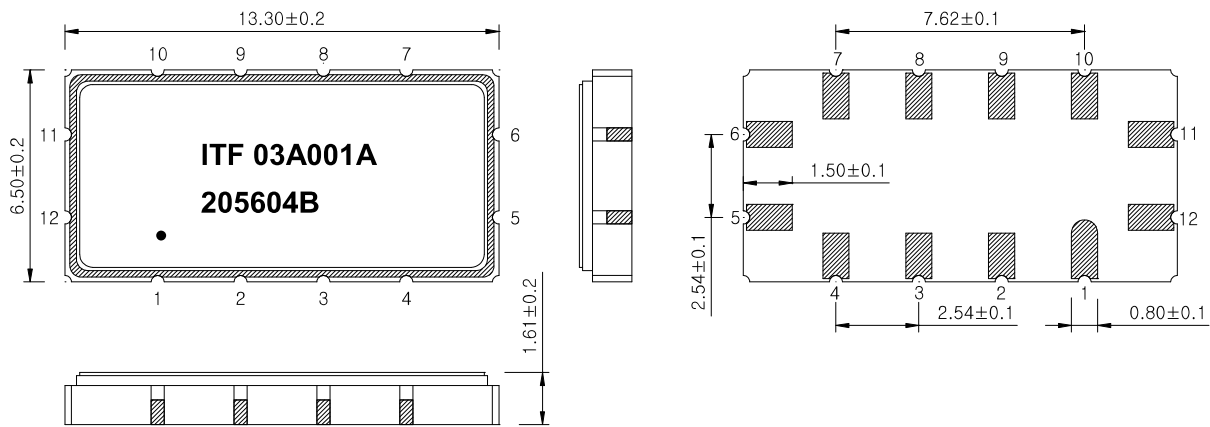
SAW Bandpass Filter 205604B



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 : Al₂O₃ 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)

	ITF Co., Ltd. 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 101.0 ~ 102.0 MHz	dB	50	55	-
		50	55	-
Temperature Coefficient of Frequency	ppm/°C ²	-	-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

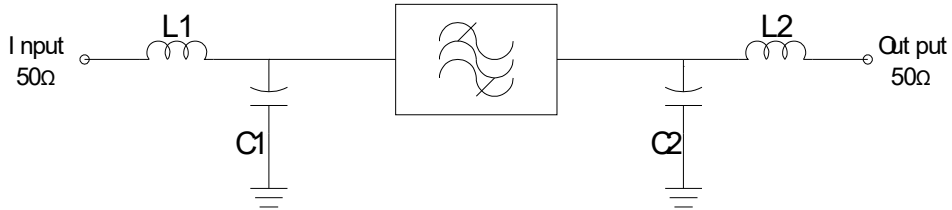
 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	205604B	
		Rev. Date	2010-03-17	
		Rev.	NI2010-AS03	2/8

SAW Bandpass Filter 205604B



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

ITF¹⁾ 03A001²⁾ A³⁾
205604B⁴⁾

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

	ITF Co., Ltd. 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	3/8

SAW Bandpass Filter 205604B



Marking Example

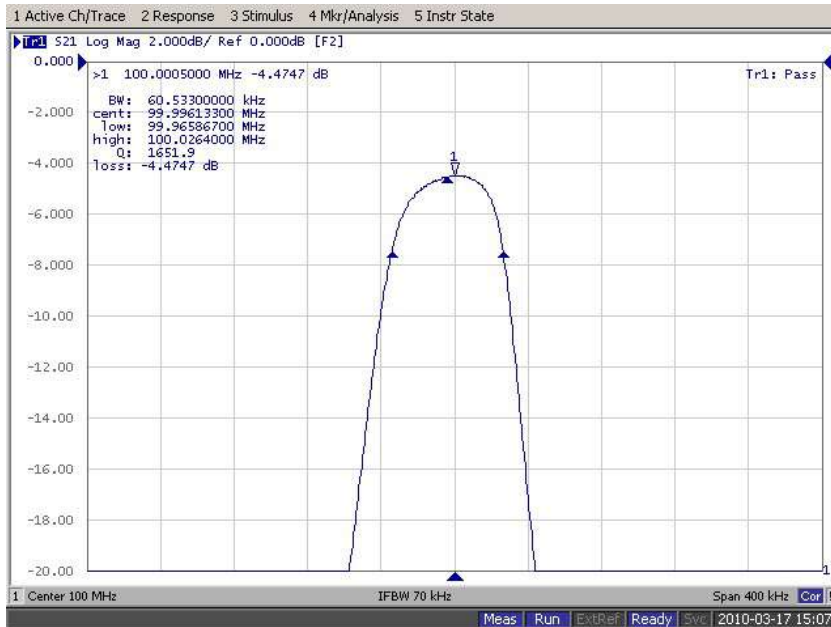
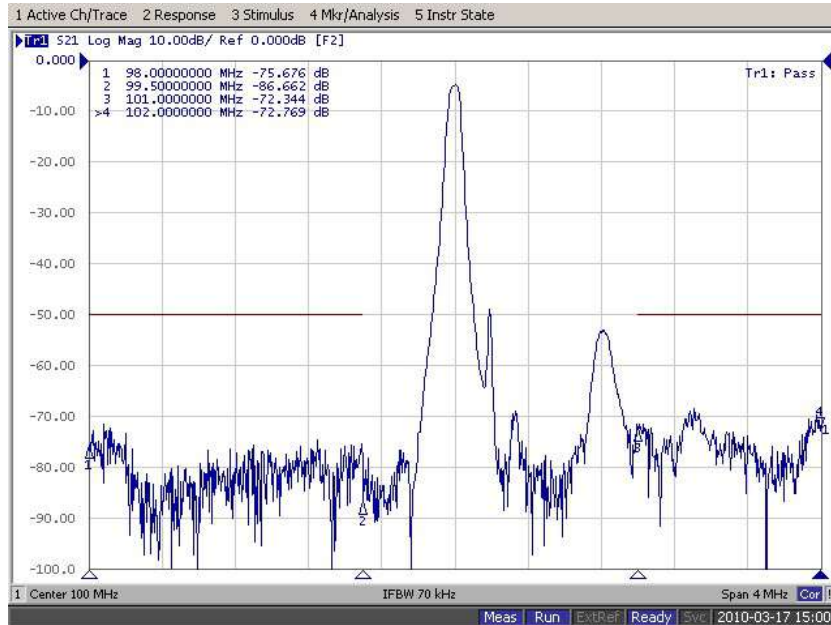
Center Frequency Range (MHz) at room temp.	Marking
99.925 ~ 99.935	ITF 02D073A 205604B
99.936 ~ 99.945	ITF 02D073B 205604B
99.946 ~ 99.955	ITF 02D073C 205604B
99.956 ~ 99.965	ITF 02D073D 205604B
99.966 ~ 99.975	ITF 02D073E 205604B
99.976 ~ 99.985	ITF 02D073F 205604B
99.986 ~ 99.995	ITF 02D073G 205604B
99.996 ~ 100.005	ITF 02D073H 205604B
100.006 ~ 100.015	ITF 02D073I 205604B
100.016 ~ 100.025	ITF 02D073J 205604B
100.026 ~ 100.035	ITF 02D073K 205604B
100.036 ~ 100.045	ITF 02D073L 205604B
100.046 ~ 100.055	ITF 02D073M 205604B
100.056 ~ 100.065	ITF 02D073N 205604B
100.066 ~ 100.075	ITF 02D073O 205604B

	ITF Co., Ltd. 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	4/8

SAW Bandpass Filter 205604B



Typical Performance (at +25°C)



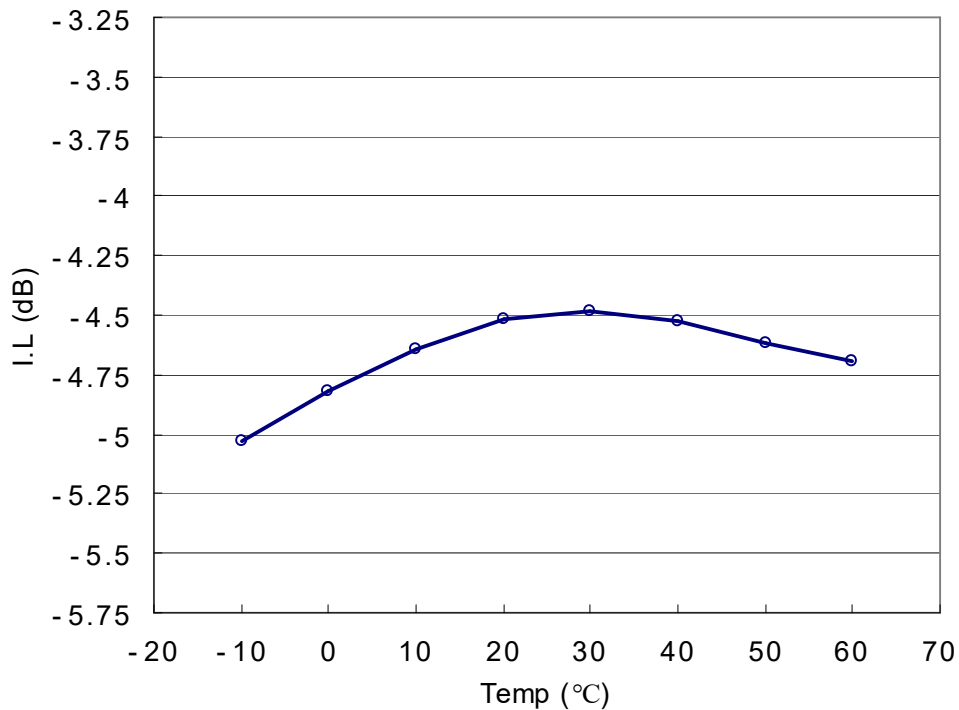
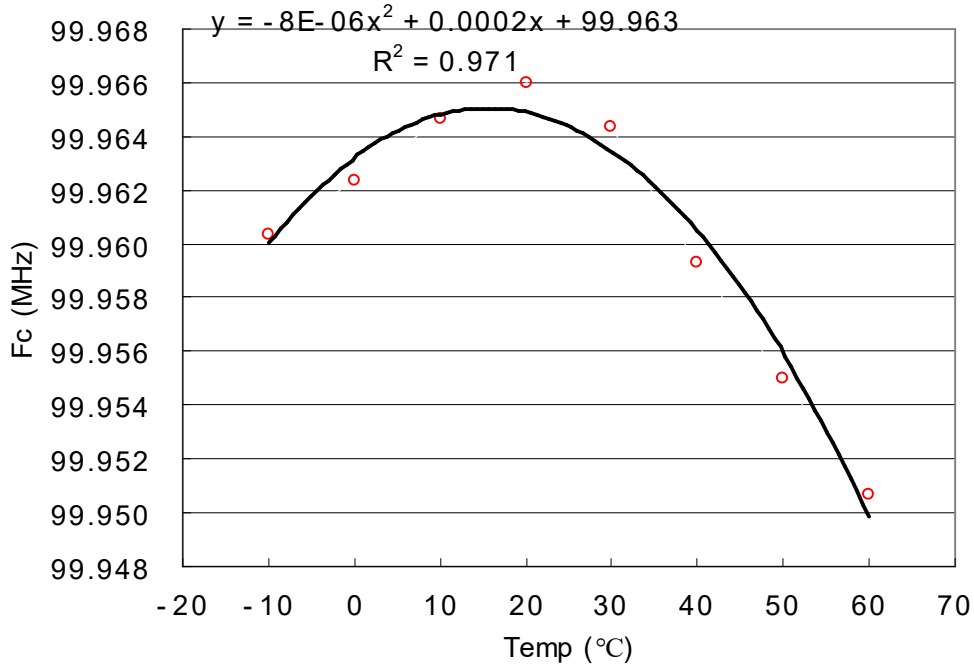
ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

Part No.	205604B		
Rev. Date	2010-03-17		
Rev.	NI2010-AS03	5/8	

SAW Bandpass Filter 205604B



Temperature Characteristic



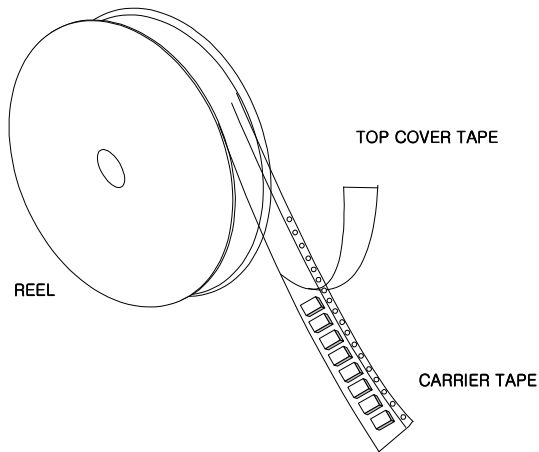
	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	205604B	
		Rev. Date	2010-03-17	
		Rev.	NI2010-AS03	6/8

SAW Bandpass Filter 205604B



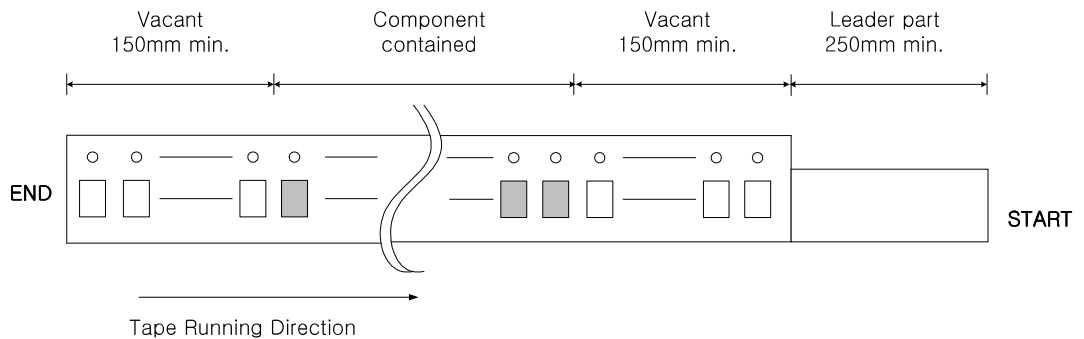
Packing Specification

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

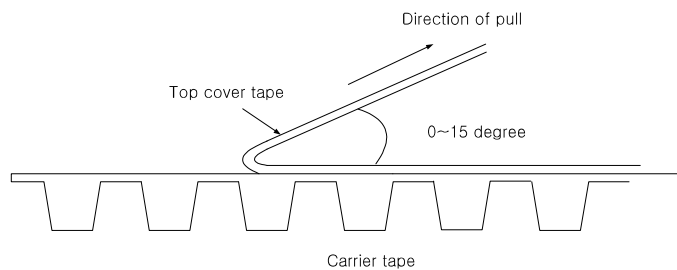


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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



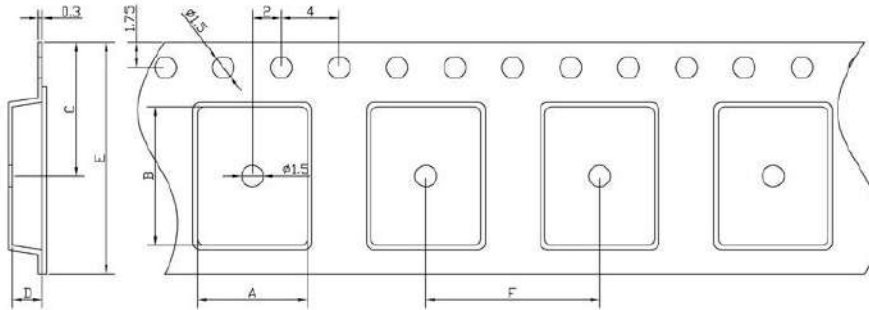
ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

Part No.	205604B	
Rev. Date	2010-03-17	
Rev.	NI2010-AS03	7/8

SAW Bandpass Filter 205604B

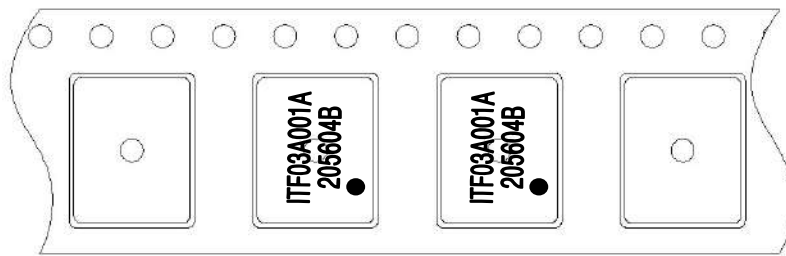


Carrier Tape Dimensions [unit : mm]



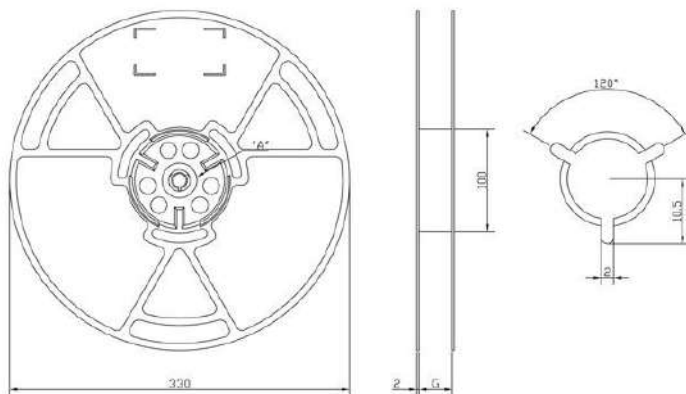
A	7.00 ± 0.1
B	13.80 ± 0.1
C	13.25 ± 0.1
D	1.95 ± 0.1
E	24.00 ± 0.1
F	12.00 ± 0.1

Part Direction



→
Tape Running Direction

Reel Dimensions [unit : mm]



G = 24.4 mm

	ITF Co., Ltd. 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	8/8