

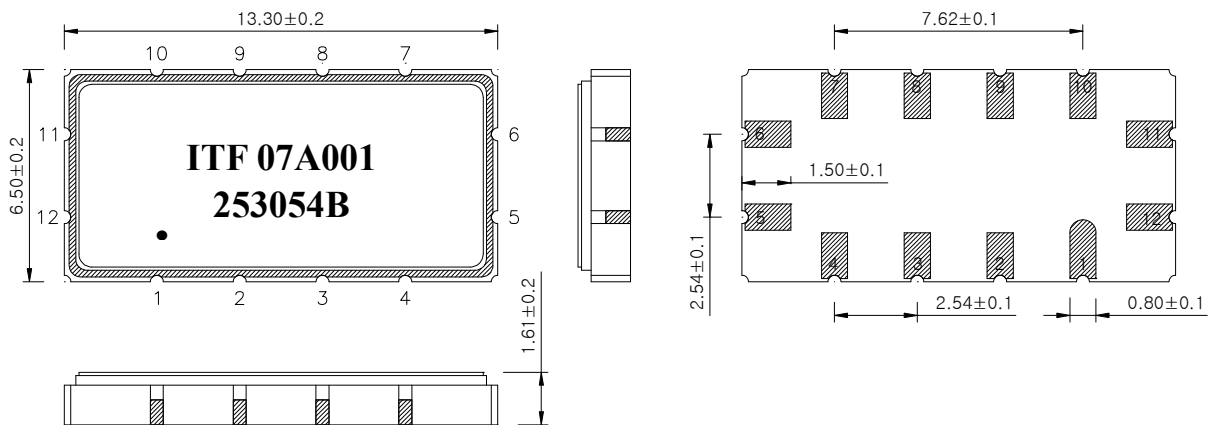
# Bandpass Filter 253054B



## 1. Features

- IF bandpass filter
- Low-Loss Filter
- Single-ended operation
- Ceramic Surface Mount Device(SMD) Package
- Maximum Storage Temperature Range : -40℃ ~ 85℃
- Electrostatics Sensitive Device (ESD)

## 2. Package Dimension



**Package : S1365**

Dimensions shown are nominal in millimeters

Body : Al<sub>2</sub>O<sub>3</sub>

Lid : Kovar, Ni Plated

Termination : Au plating 0.3 ~ 1.0um, over a 1.27 ~ 8.89um Ni Plating

Pin Configuration	
11	Input
5	Output
6, 12	Ground
Other	Case ground

	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	253054B	
		Rev. Date	2008-04-15	
		Rev.	NJ7017-AS01	1/5

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## 3. Specifications

F<sub>o</sub> = 125.0 MHz


Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

Room temperature range : +25°C		Minimum	Typical	Maximum
Center Frequency (F <sub>c</sub> )	MHz	-	125.0	-
Insertion Loss	dB	-	18.5	21.0
1dB Bandwidth	MHz	28.5	29.6	-
3dB Bandwidth	MHz	-	30.5	-
40dB Bandwidth	MHz	-	35.5	36.0
Amplitude Ripple (F <sub>o</sub> +/- 14.05 MHz)	dB	-	0.7	1.0
Group Delay Variation (F <sub>o</sub> +/- 14.05 MHz)	nsec	-	40	50
Absolute Delay	usec	-	0.69	-
Relative Attenuation				
10.0 ~ 88.5 MHz	dB	45	50	
88.5 ~ 105.0 MHz	dB	40	45	
147.0 ~ 320.0 MHz	dB	45	50	
320.0 ~ 500.0 MHz	dB	45	50	
Temperature Coefficient of Frequency	ppm/°C	-	- 86	-

### Notes :

- 1) All specifications are based on the matching schematic shown below
- 2) All specifications are measured by Agilent Network analyzer and full 2 port calibration
- 3) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- 4) All attenuation measurements are measured relative to insertion loss

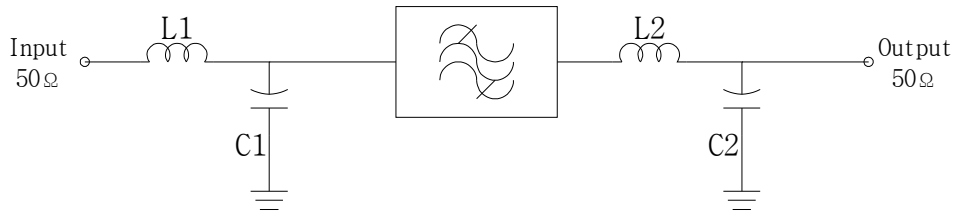
 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	253054B	
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## 4. Matching Schematic

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



L1 = 82 nH,      L2 = 47 nH  
 C1 = 13 pF,      C2 = 36 pF

## 5. Marking Configuration

ITF<sup>1)</sup> 07A001<sup>2)</sup>

253054B<sup>3)</sup>

●<sup>4)</sup>

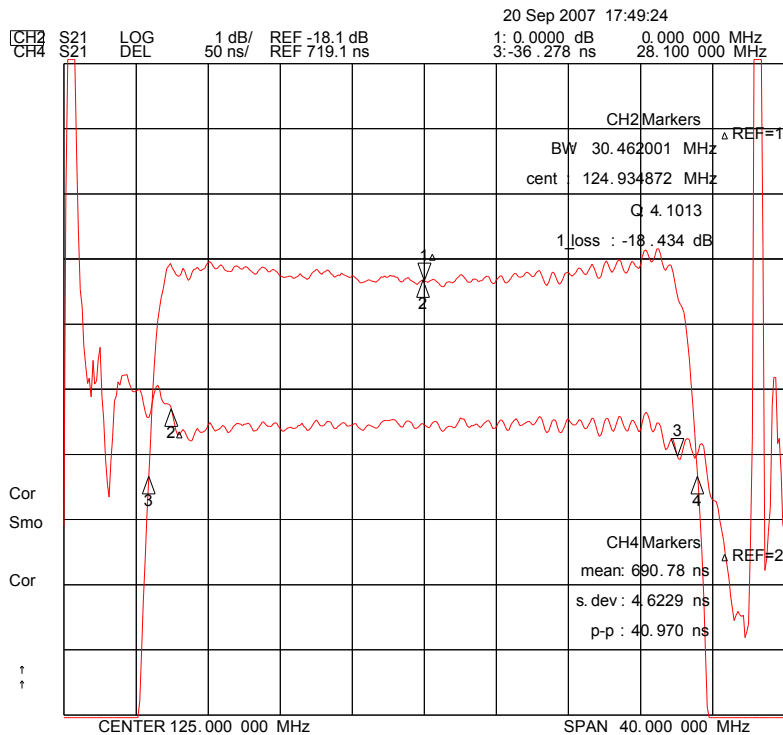
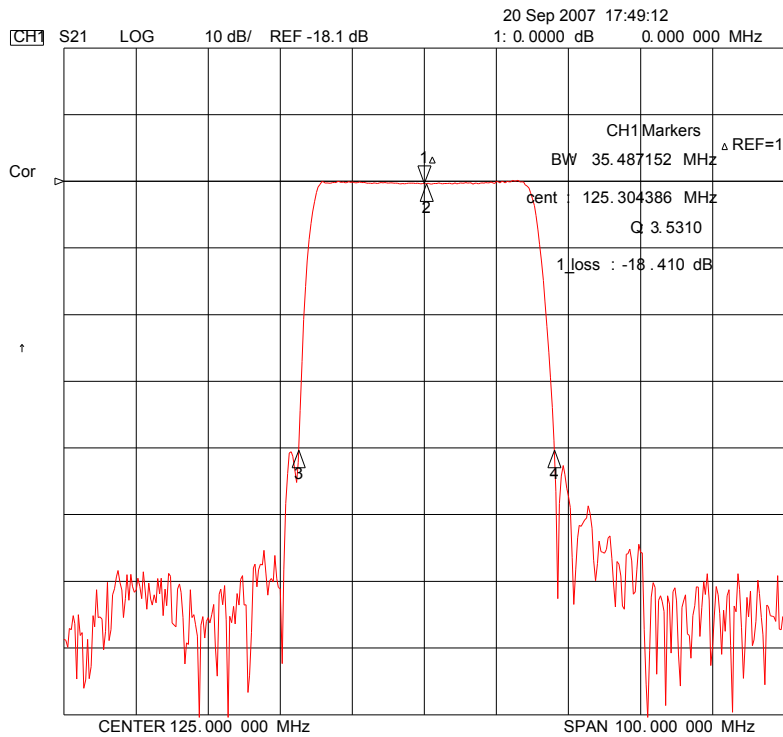
- 1) Manufacturer name
- 2) Lot Number
- 3) Part Number
- 4) Pad Number 1 Index

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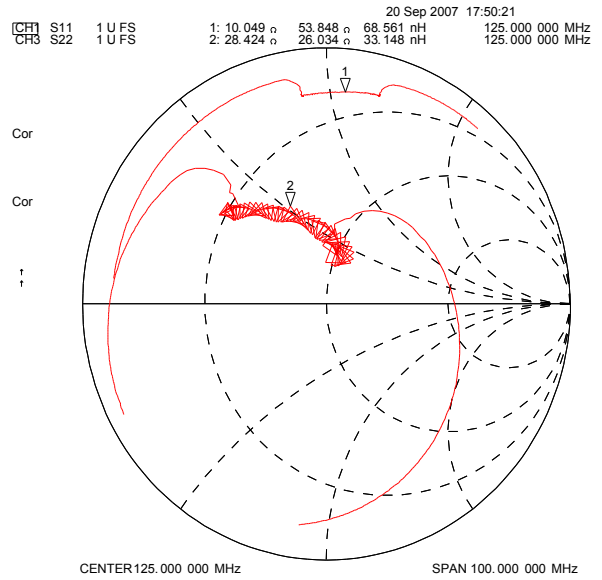
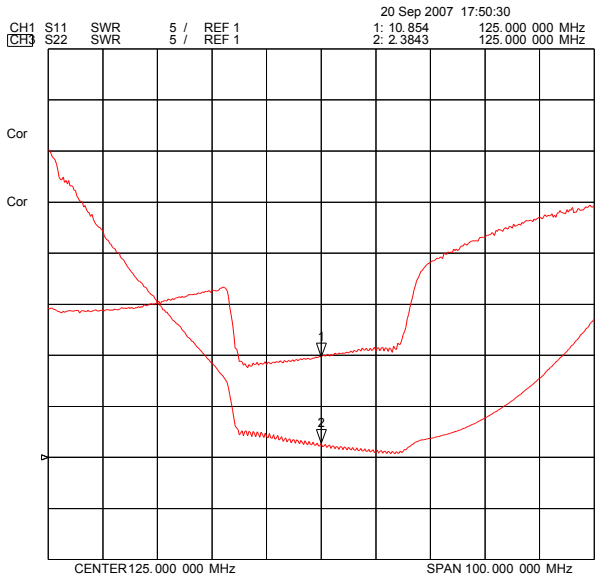
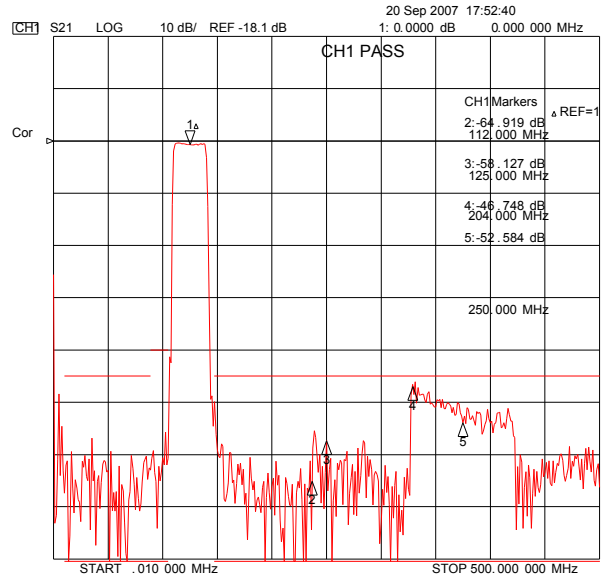
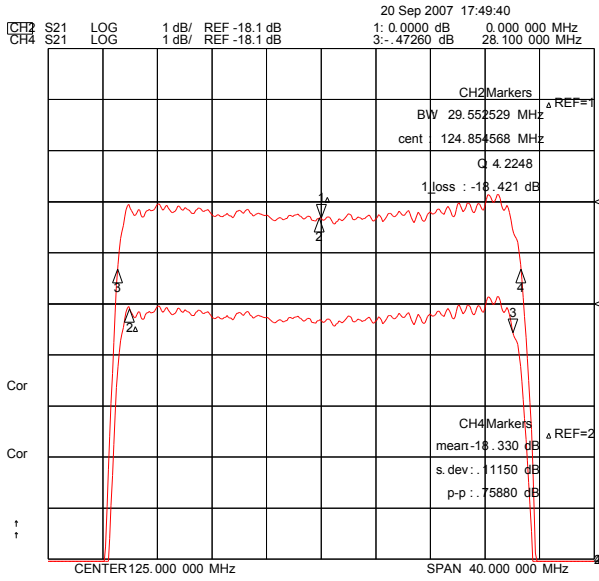


## 6. Typical Performance ( at +25°C )



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