

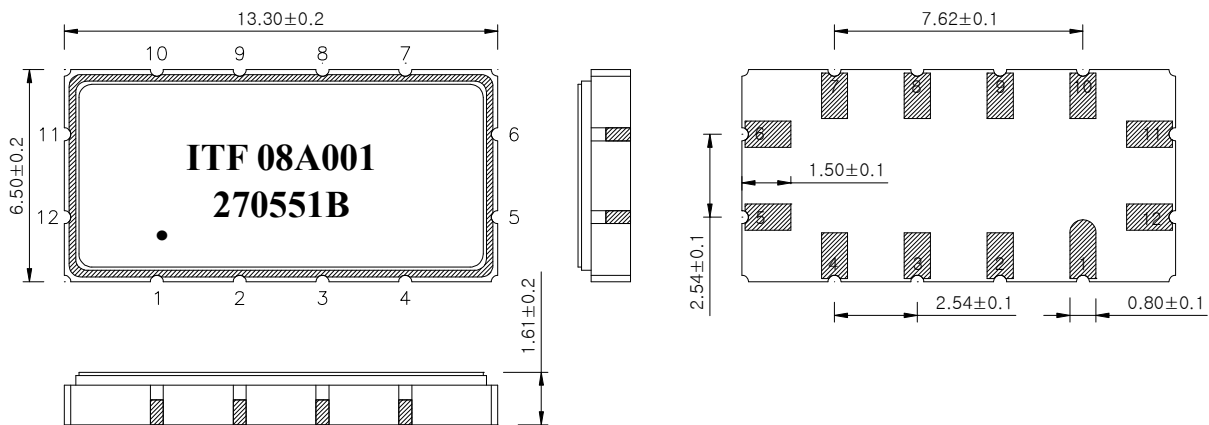
# Bandpass Filter 270551B



## 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.	270551B	
		Rev. Date	2008-05-16	
		Rev.	NJ8008-AS01	1/5

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## 3. Specifications

Fo = 70.0 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

Operating temperature range : -30℃ ~ +50℃		Minimum	Typical	Maximum
Center Frequency (Fc)	MHz	-	70.0	-
Insertion Loss	dB	-	7.7	9.5
1dB Bandwidth	MHz	4.7	4.93	-
3dB Bandwidth	MHz	5.3	5.6	-
40dB Bandwidth	MHz	-	8.1	8.2
Amplitude Ripple (Fo +/- 1.92 MHz)	dB	-	0.55	1.0
Group Delay Variation (Fo +/- 1.92 MHz)	nsec	-	80	120
Absolute Delay	usec	-	1.26	-
Ultimate Rejection	dB	45	50	-
Temperature Coefficient of Frequency (TCF)	ppm/°C	-	- 86	-

Room temperature : + 25℃		Minimum	Typical	Maximum
Insertion Loss	dB	-	7.0	9.0
Amplitude Ripple (Fo +/- 2.2 MHz)	dB	-	0.55	1.0
Group Delay Variation (Fo +/- 2.2 MHz)	nsec	-	80	120

### 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

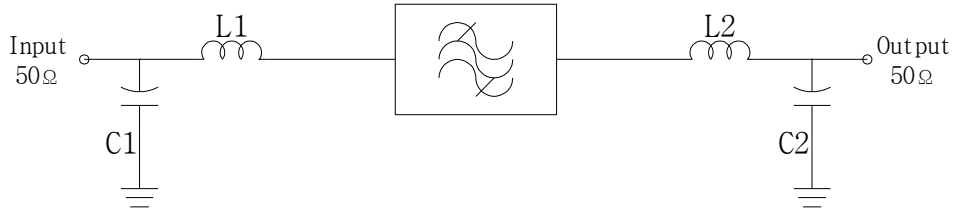
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## 4. Matching Schematic

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



$$L1 = L2 = 120 \text{ nH}$$
$$C1 = 56 \text{ pF}, \quad C2 = 68 \text{ pF}$$


## 5. Marking Configuration

ITF<sup>1)</sup> 08A001<sup>2)</sup>

270551B<sup>3)</sup>

●<sup>4)</sup>

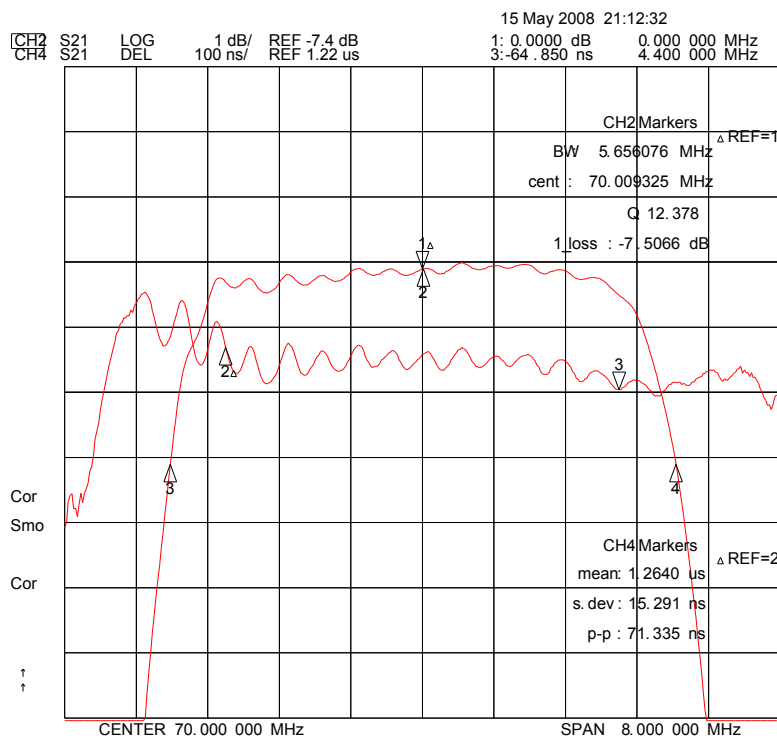
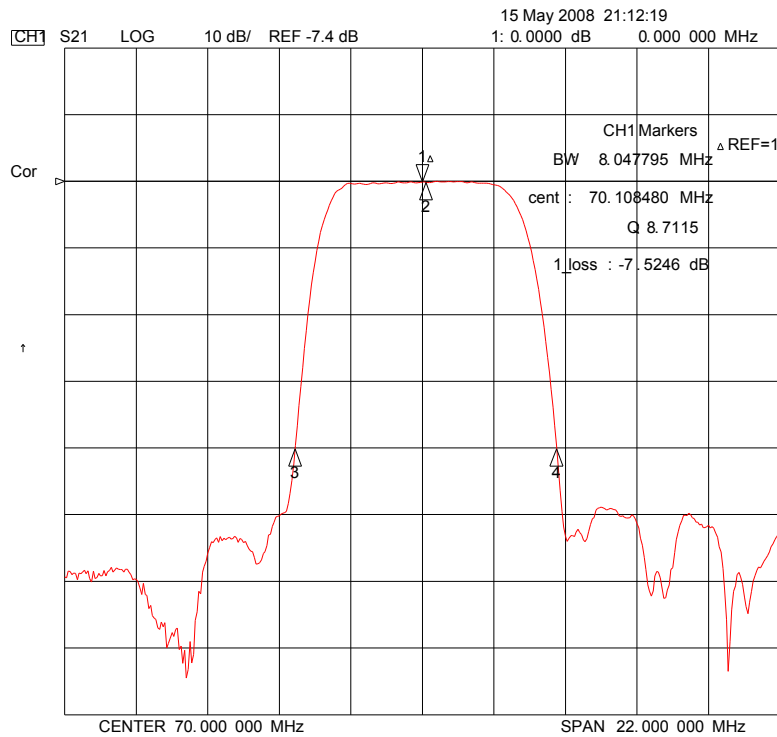
- 1) Manufacturer name
- 2) Lot Number
- 3) Part Number
- 4) Pad Number 1 Index

 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.	270551B	
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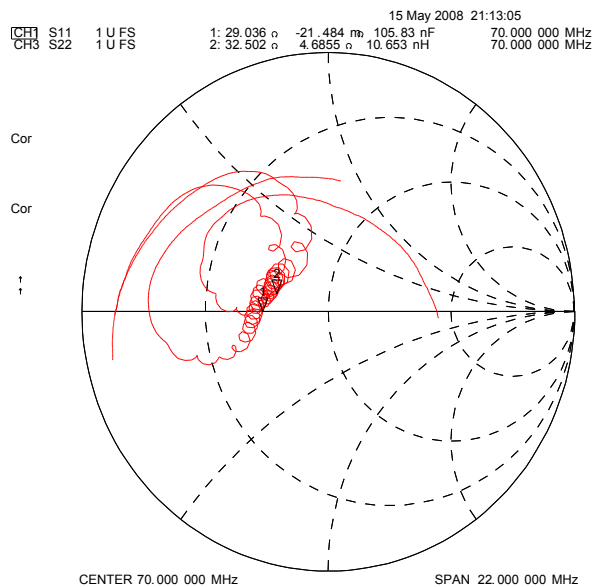
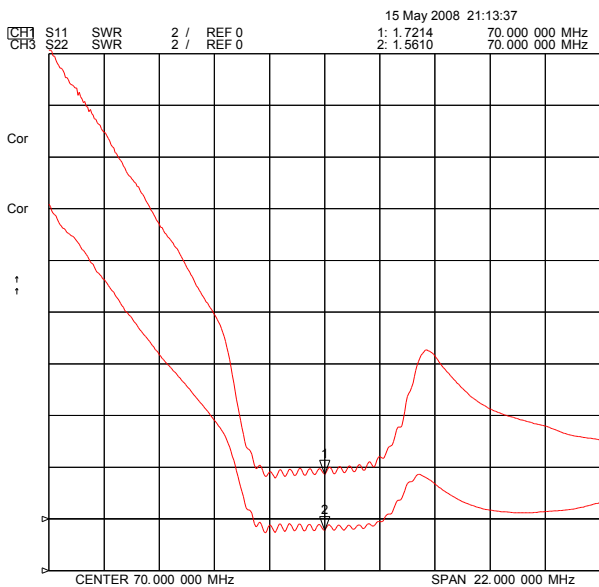
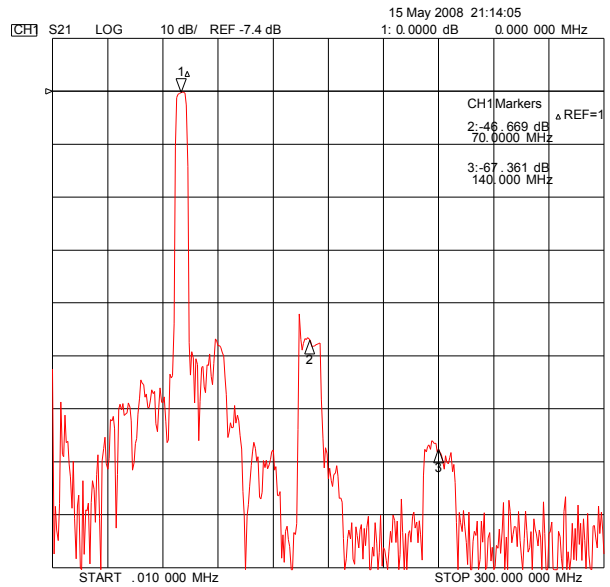
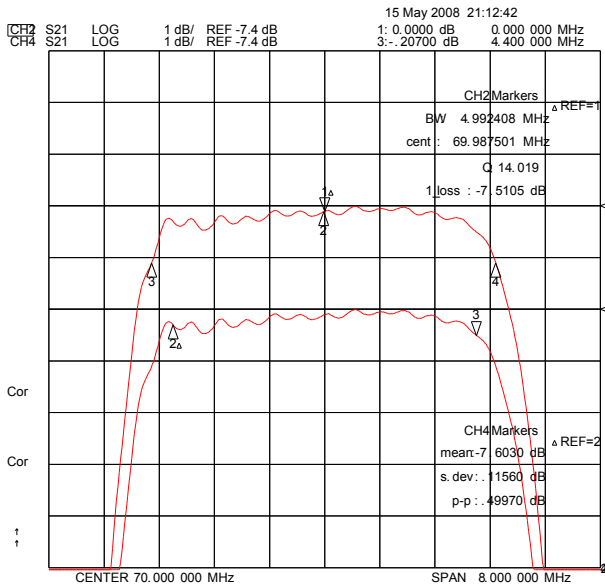


## 6. Typical Performance ( at +25°C )



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