

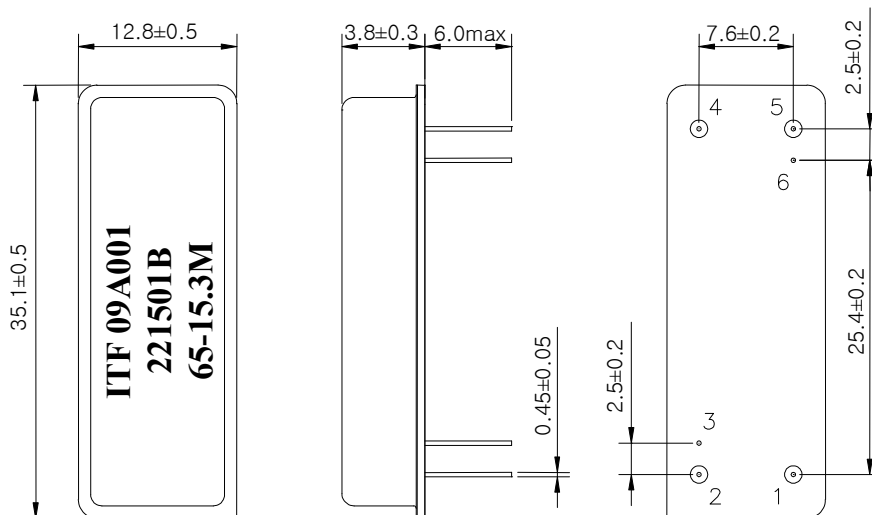
# SAW Bandpass Filter 221501B



## 1. Features

- IF Bandpass Filter
- High Attenuation
- Single-Ended Operation
- DIP Package
- Maximum Storage Temperature Range : -40°C ~ 85°C
- Electrostatics Sensitive Device (ESD)


## 2. Package Dimension



### Package : D3512

Dimensions shown are nominal in millimeters  
 Base : Fe(SPCC), Au plating over Ni plated  
 Cap : Cu & Cr Alloy, Ni Plated  
 Termination : Kovar, Au Plated

Pin Configuration	
1	Input
5	Output
2, 4	Ground
3, 6	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.	221501B	
		Rev. Date	2009-04-13	
		Rev.	NM9029-CS01	1/5

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## 3. Specifications

Fo = 65.0 MHz


Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

		Minimum	Typical	Maximum
Center Frequency	MHz	-	65.0	-
Insertion Loss	dB	-	23.2	25.0
1dB Bandwidth	MHz	15.2	15.38	-
3dB Bandwidth	MHz	-	15.56	-
50dB Bandwidth	MHz	-	16.4	16,5
Amplitude Ripple (fo ± 7.56 MHz)	dB	-	0.55	1.0
Group Delay Variation (fo ± 7.56 MHz)	nsec	-	50	100
Absolute Delay	usec	-	3.54	-
Ultimate Rejection	dB	55	60	-
Temperature Coefficient of Frequency	ppm/°C	-	-72	-

### 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 at room temperature
- 3) All attenuation measurements are measured relative to insertion loss

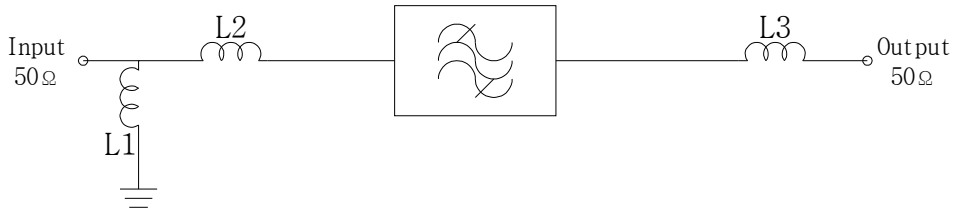
 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	221501B	
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## 4. Matching Schematic

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




**L1 = 180nH, L2 = 56nH, L3 = 100nH**

## 5. Marking Configuration

ITF<sup>1)</sup>09A001<sup>2)</sup>  
221501B<sup>3)</sup>  
65<sup>4)</sup>-15.3M<sup>5)</sup>

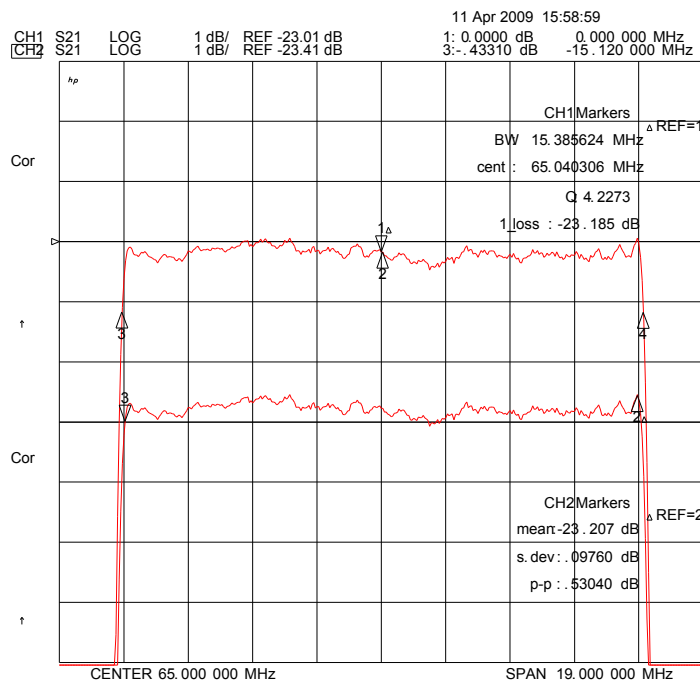
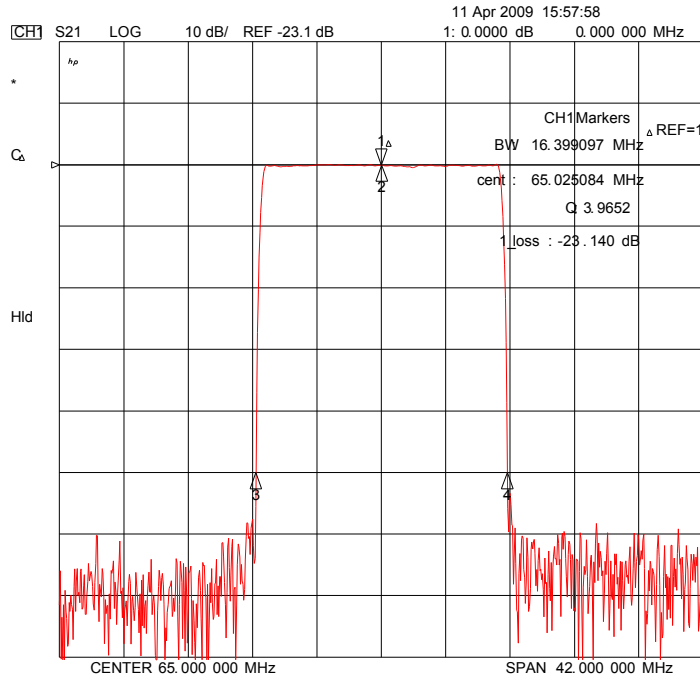
- 1) Manufacturer name
- 2) Lot Number
- 3) Part Number
- 4) Center frequency
- 5) 1dB-Bandwidth

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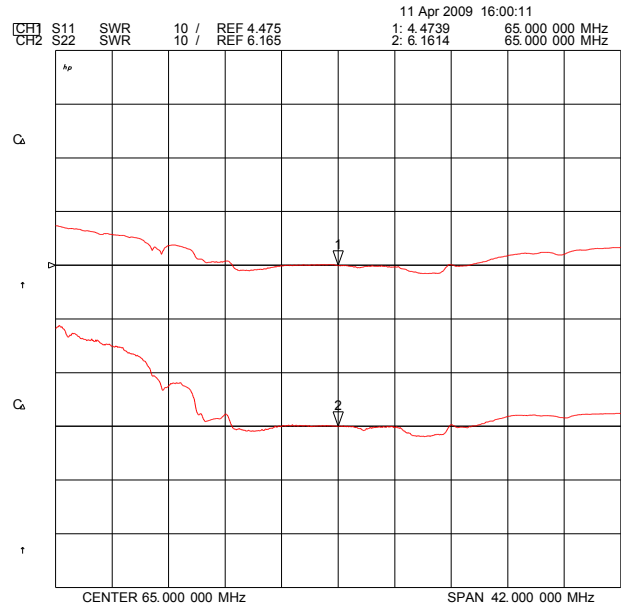
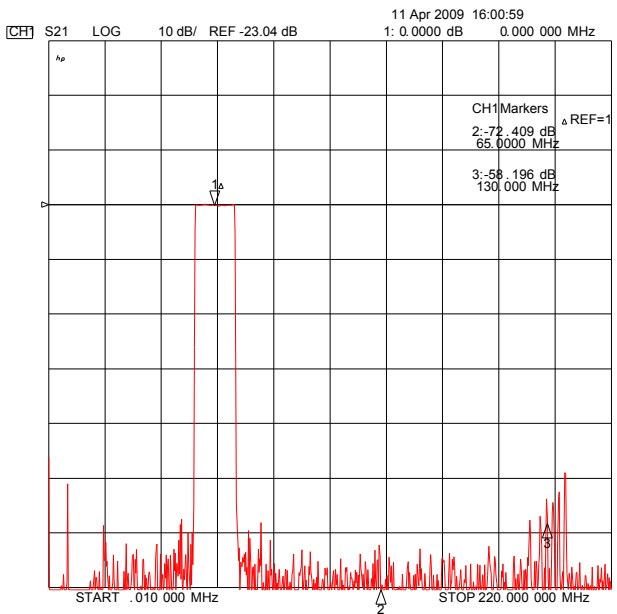
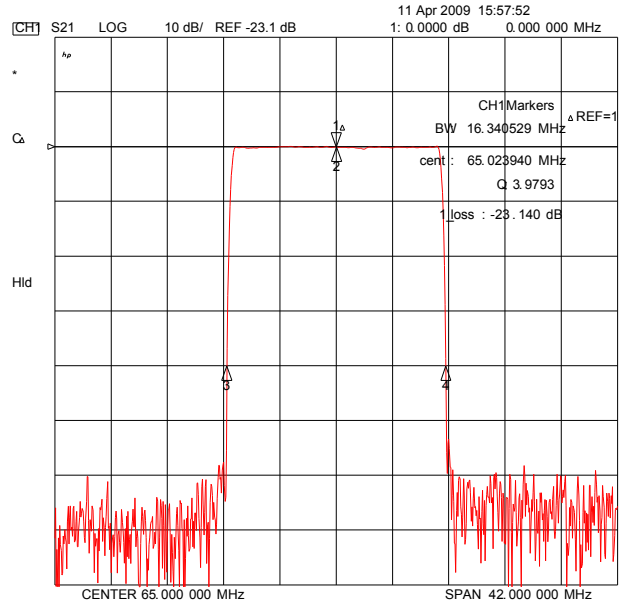
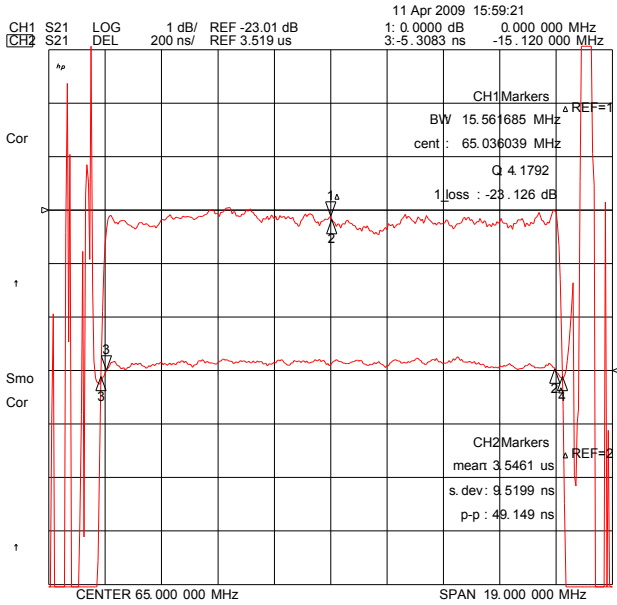


## 6. Typical Performance ( at +25°C )



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