

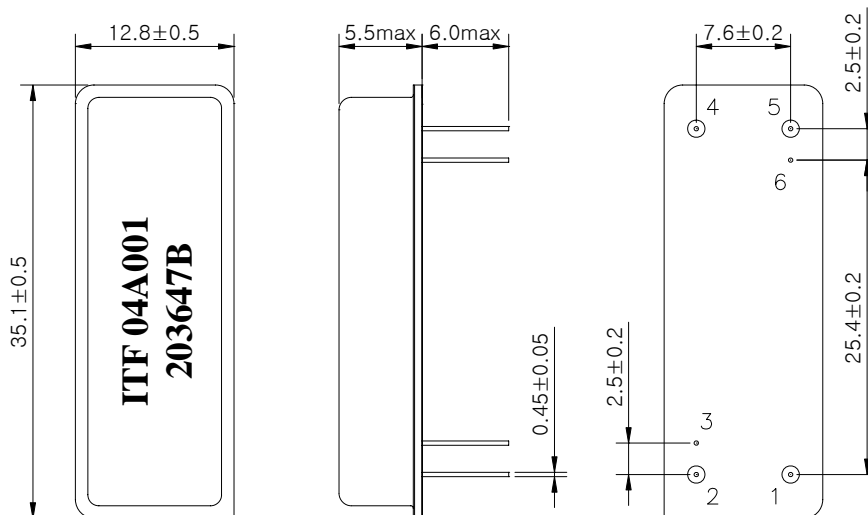
# SAW Bandpass Filter 203647B



## 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
4	Output
2, 5	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.	203647B	
		Rev. Date	2004-04-06	
		Rev.	NW3003-CS02	1/5

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## 3. Specifications

Fo = 195.9 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

		Minimum	Typical	Maximum
Center Frequency	MHz	195.82	195.9	195.98
Insertion Loss	dB	-	22.5	25.0
1dB Bandwidth	MHz	5.1	5.2	-
3dB Bandwidth	MHz	5.3	5.5	-
40dB Bandwidth	MHz	-	6.7	7.0
Amplitude Ripple (Fo +/- 2.3 MHz)	dB	-	0.8	1.0
Group Delay Variation (Fo +/- 2.3 MHz)	nsec	-	120	250
Absolute Delay	usec	-	2.68	-
Ultimate Rejection	dB	47	50	-
Temperature Coefficient of Frequency	ppm/°C <sup>2</sup>	-	-0.03	-

### 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

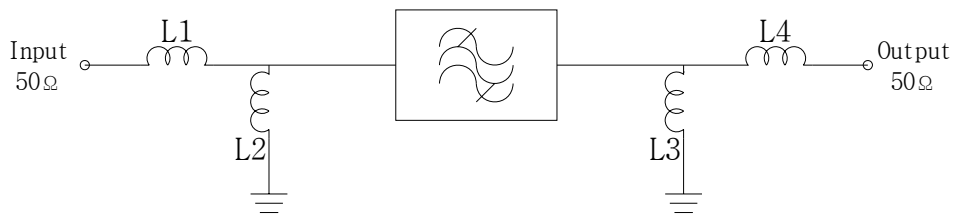
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## 4. Matching Schematic

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



$$L1 = L2 = L4 = 56 \text{ nH}$$

$$L3 = 82 \text{ nH}$$

## 5. Marking Configuration


ITF<sup>1)</sup>04A001<sup>2)</sup>

203647B<sup>3)</sup>

1) Manufacturer name

2) Lot Number

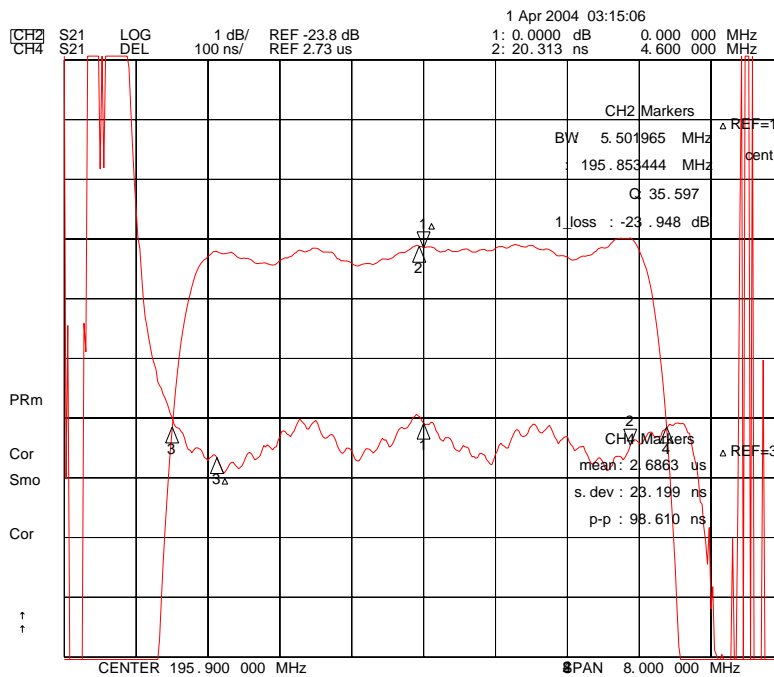
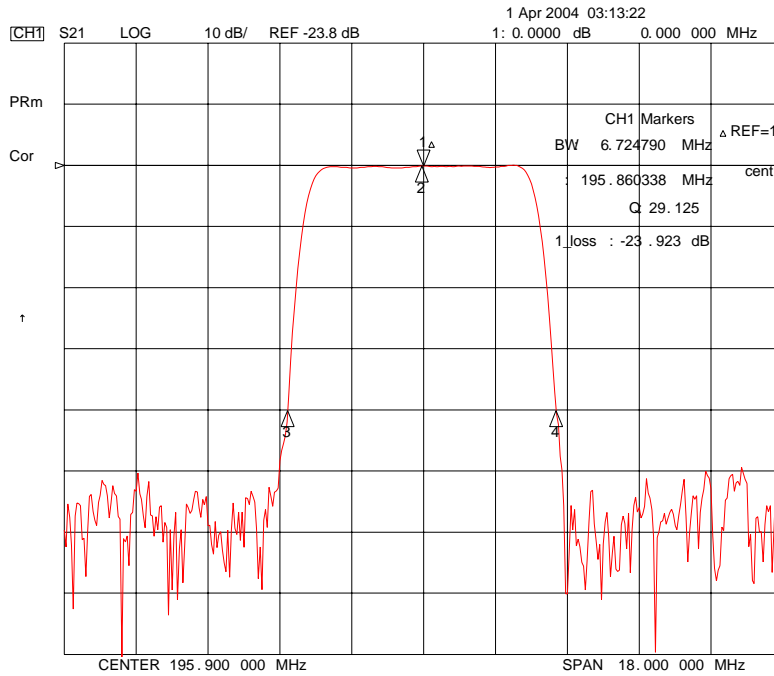
3) Part Number

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



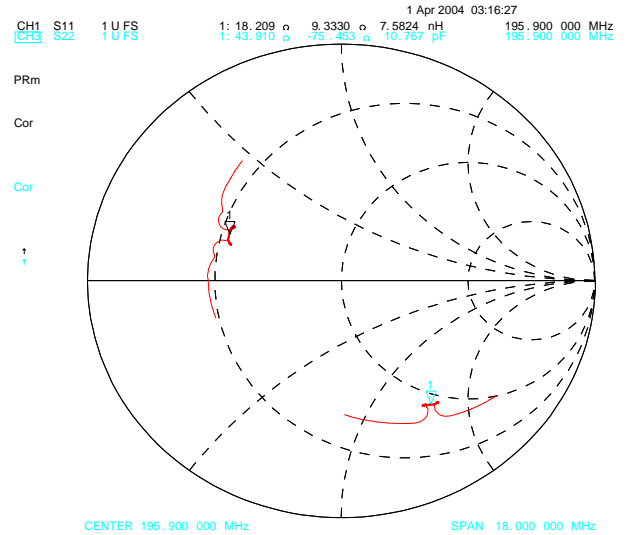
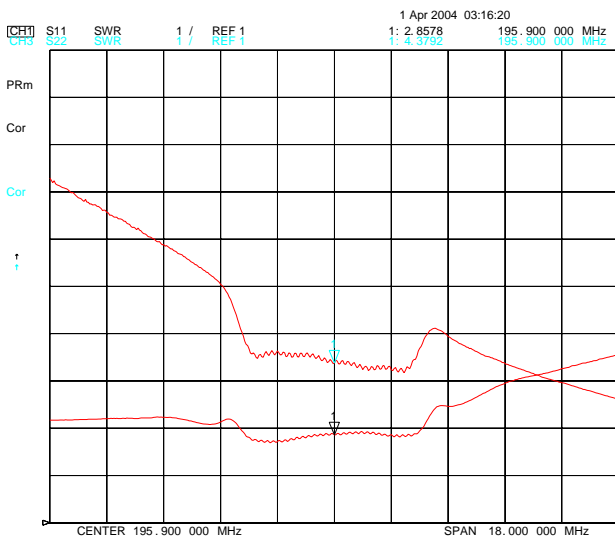
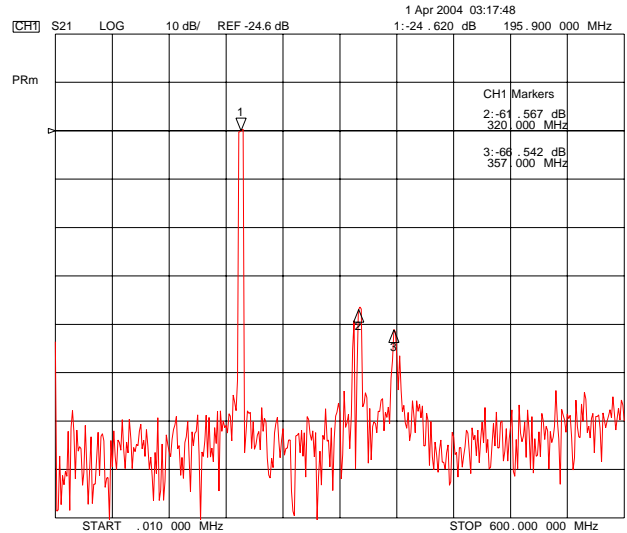
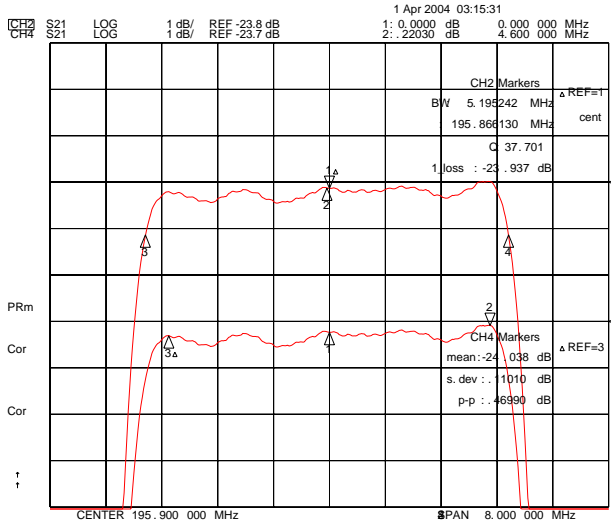
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