

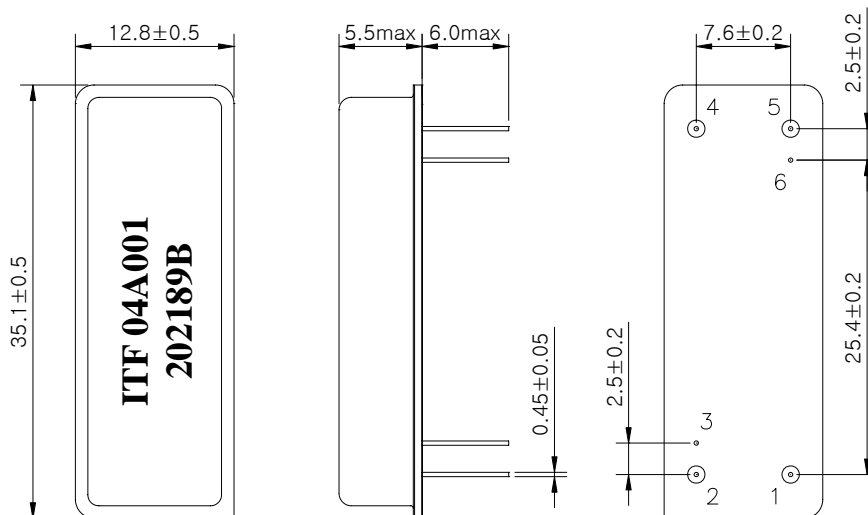
# SAW Bandpass Filter 202189B



## 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.	202189B	
		Rev. Date	2004-06-07	
		Rev.	NM3015-CS02	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

		Minimum	Typical	Maximum
Center Frequency	MHz	-	70.0	-
Insertion Loss	dB	-	23.5	25.0
1dB Bandwidth	MHz	8.0	8.3	-
3dB Bandwidth	MHz	8.4	8.5	-
40dB Bandwidth	MHz	-	9.45	9.6
Amplitude Ripple (Fo +/- 4.0 MHz)	dB	-	0.7	1.0
Group Delay Variation (Fo +/- 4.0 MHz)	nsec	-	70	150
Absolute Delay	usec	-	3.42	-
Ultimate Rejection	dB	50	55	-
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

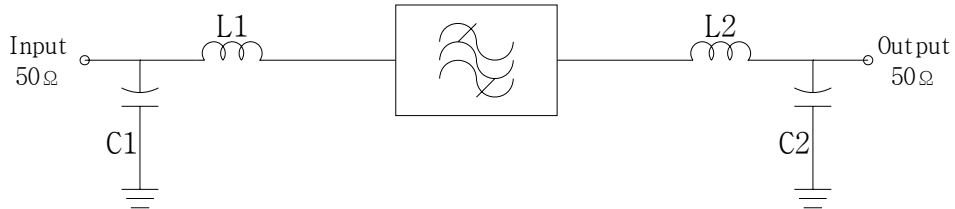
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## 4. Matching Schematic

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



$$L1 = L2 = 47 \text{ nH}$$

$$C1 = C2 = 56 \text{ pF}$$

## 5. Marking Configuration

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

202189B<sup>3)</sup>

1) Manufacturer name

2) Lot Number

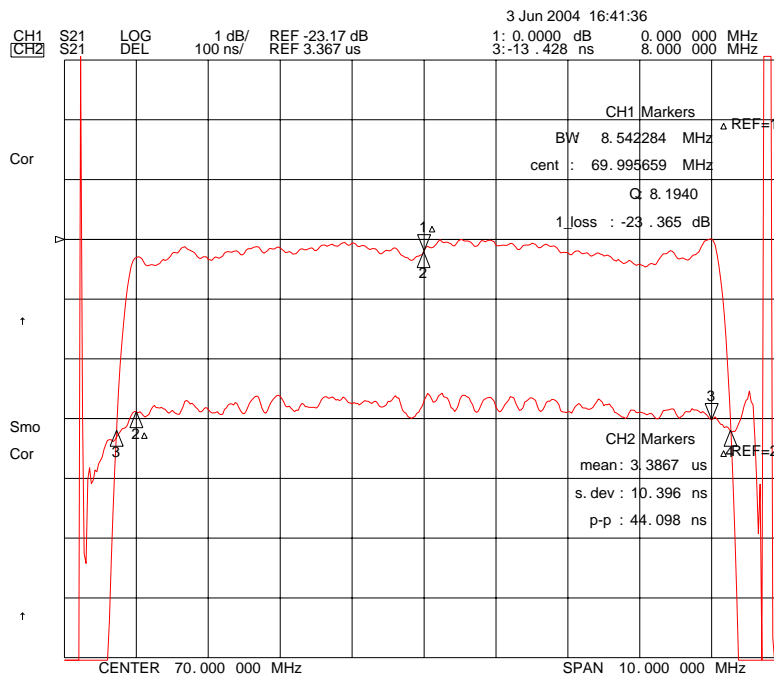
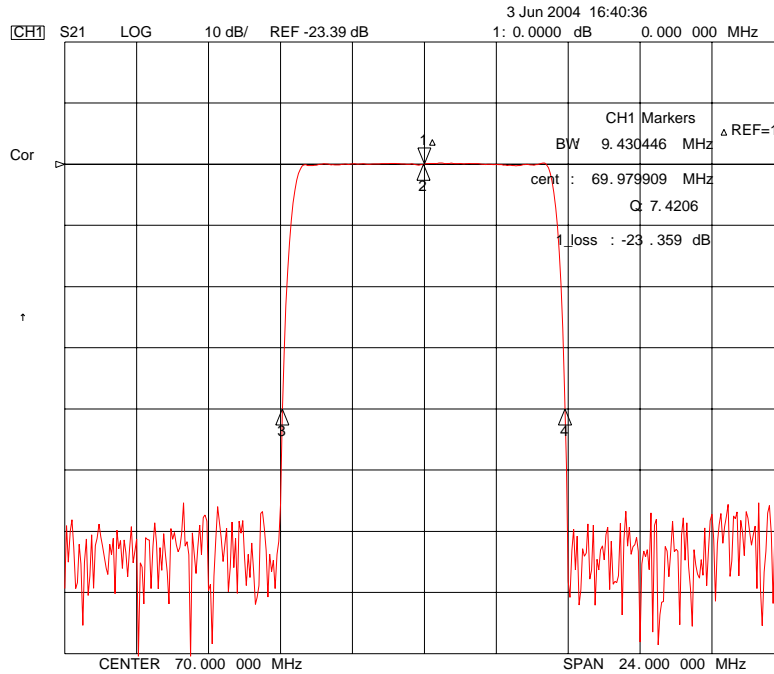
3) Part Number

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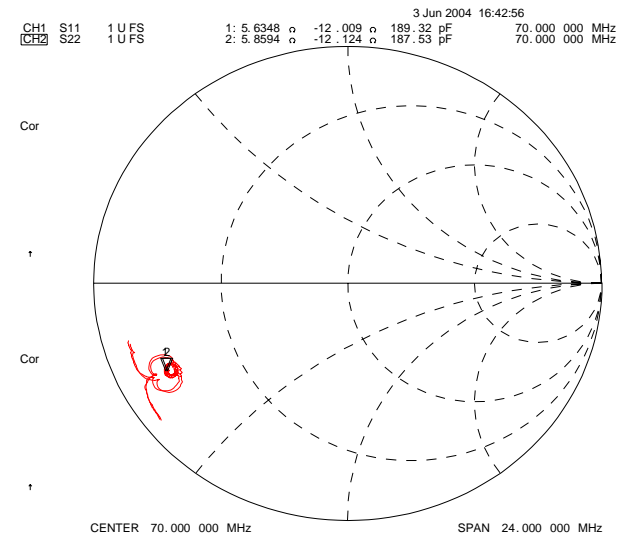
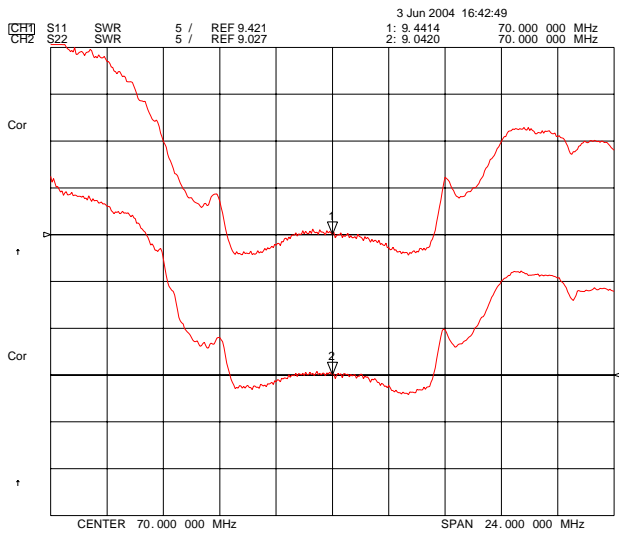
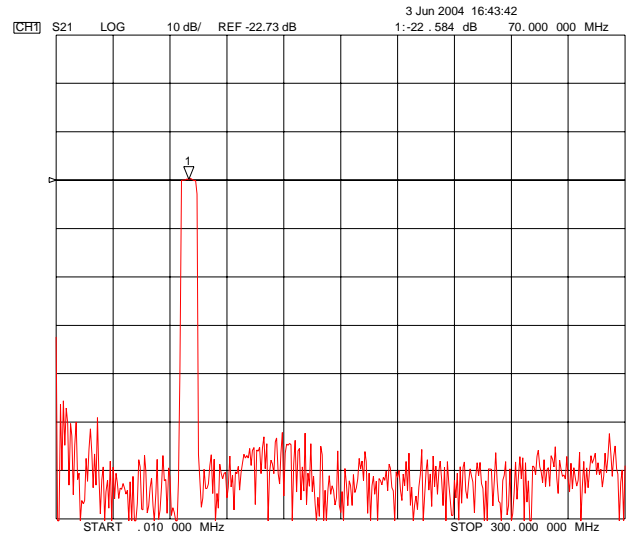
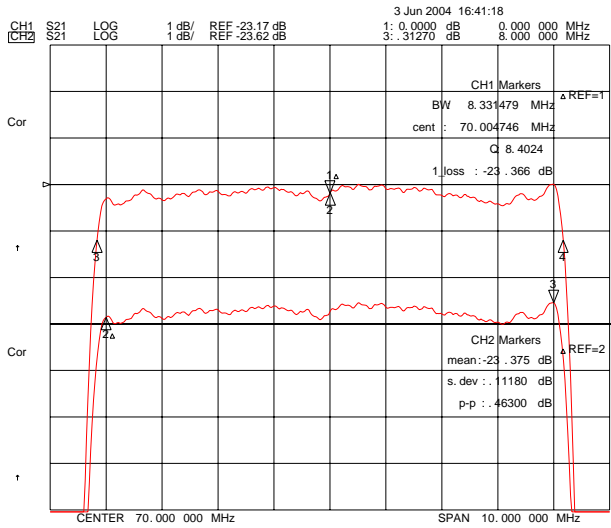


## 6. Typical Performance ( at +25°C )



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