

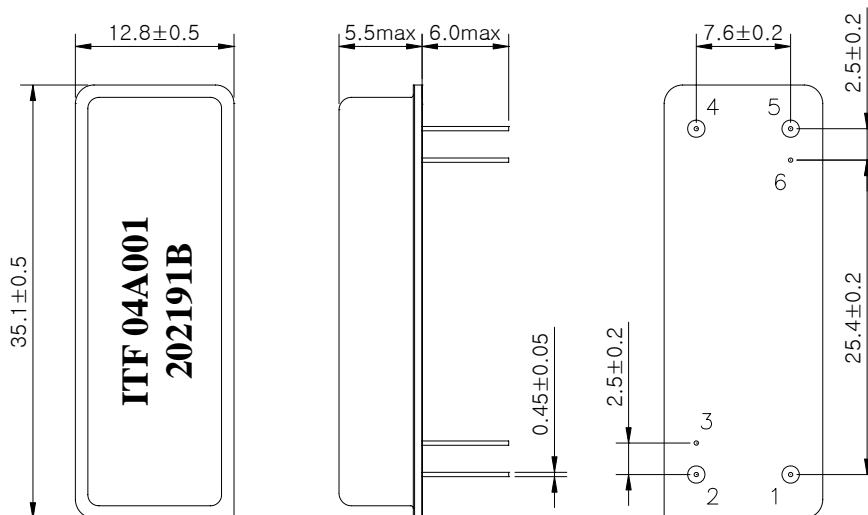
SAW Bandpass Filter 202191B



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

	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	202191B	
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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	4.2	4.35	-
3dB Bandwidth	MHz	4.5	4.57	4.7
40dB Bandwidth	MHz	-	5.52	6.0
Amplitude Ripple (Fo +/- 2.0 MHz)	dB	-	0.6	1.0
Group Delay Variation (Fo +/- 2.0 MHz)	nsec	-	80	200
Absolute Delay	usec	-	2.92	-
Relative Attenuation				
at 30.0 ~ 67.1 MHz	dB	45	50	-
at 67.1 ~ 67.3 MHz	dB	26	28	-
at 72.7 ~ 72.9 MHz	dB	26	28	-
at 72.9 ~ 100.0 MHz	dB	45	50	-
Temperature Coefficient of Frequency	ppm/°C	-	-94	-

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

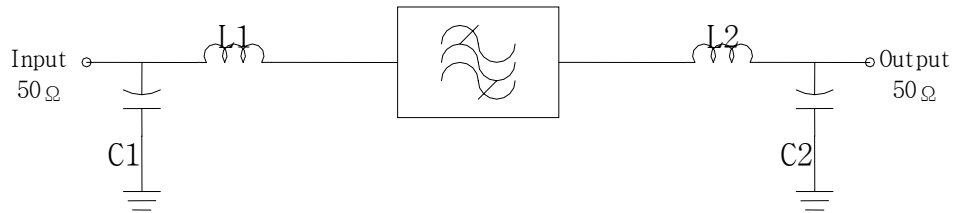
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4. Matching Schematic

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



$$L1 = L2 = 18 \text{ nH}$$

$$C1 = C2 = 90 \text{ pF}$$

5. Marking Configuration


ITF¹⁾ 04A001²⁾

202191B³⁾

1) Manufacturer name

2) Lot Number

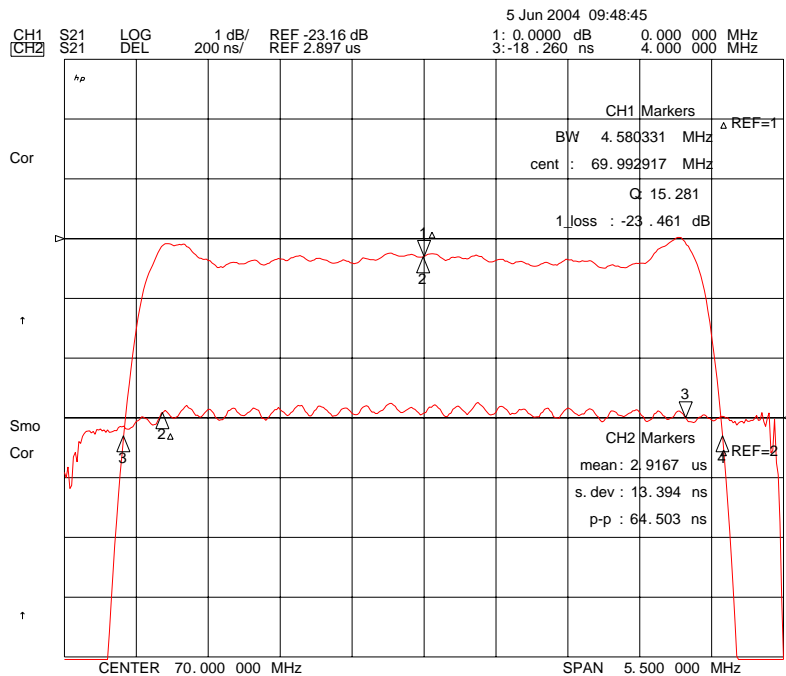
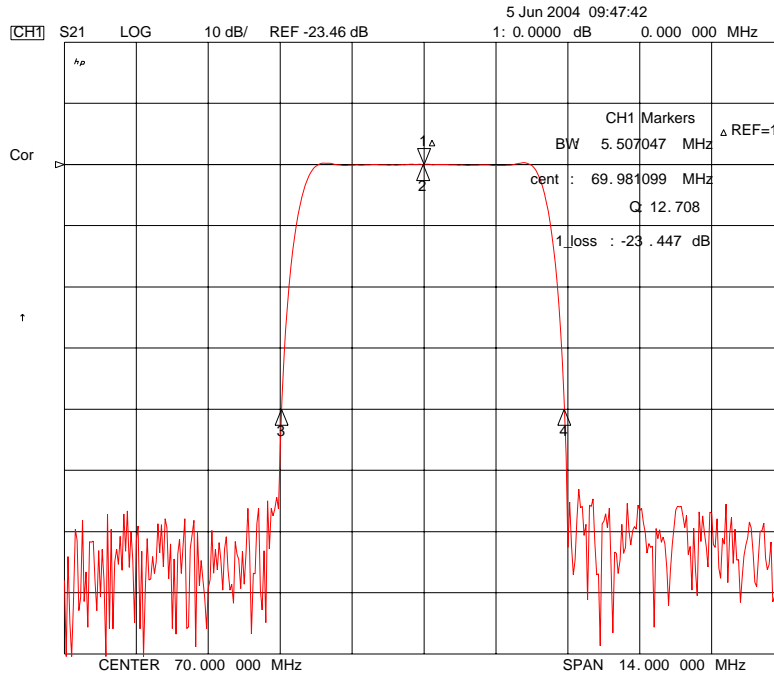
3) Part Number

 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	202191B	
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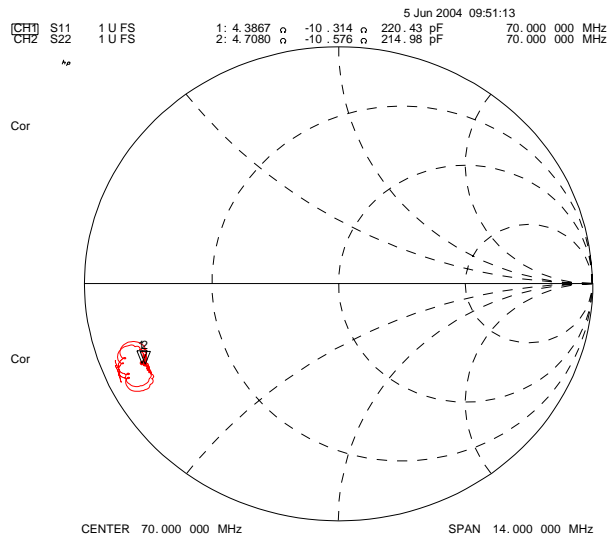
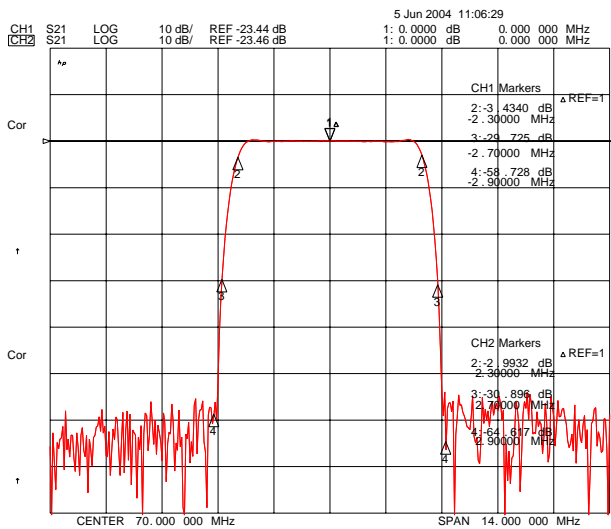
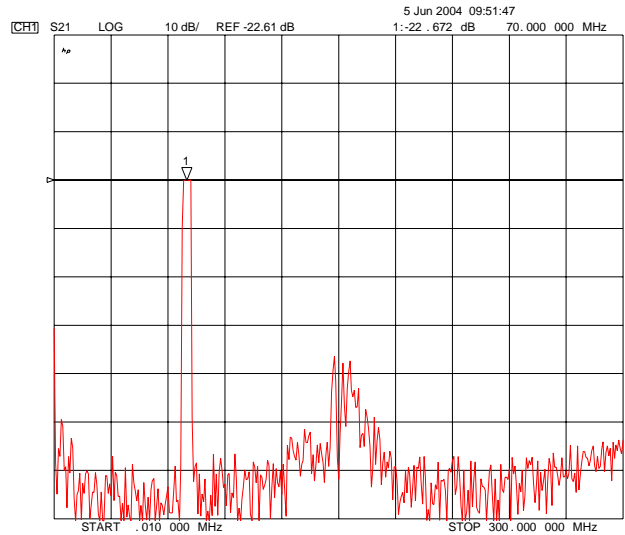
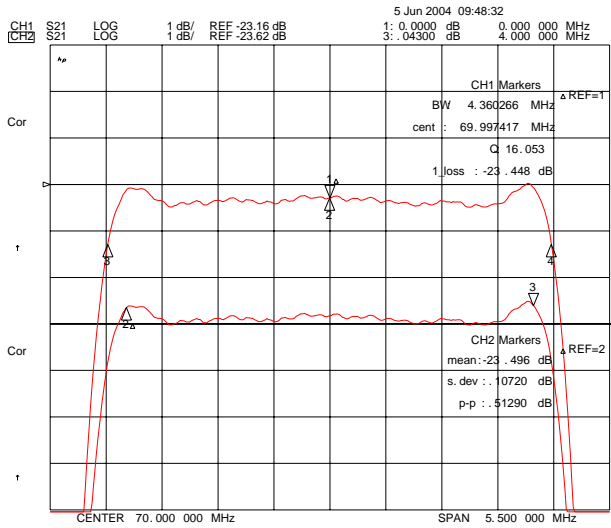


6. Typical Performance (at +25°C)



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