

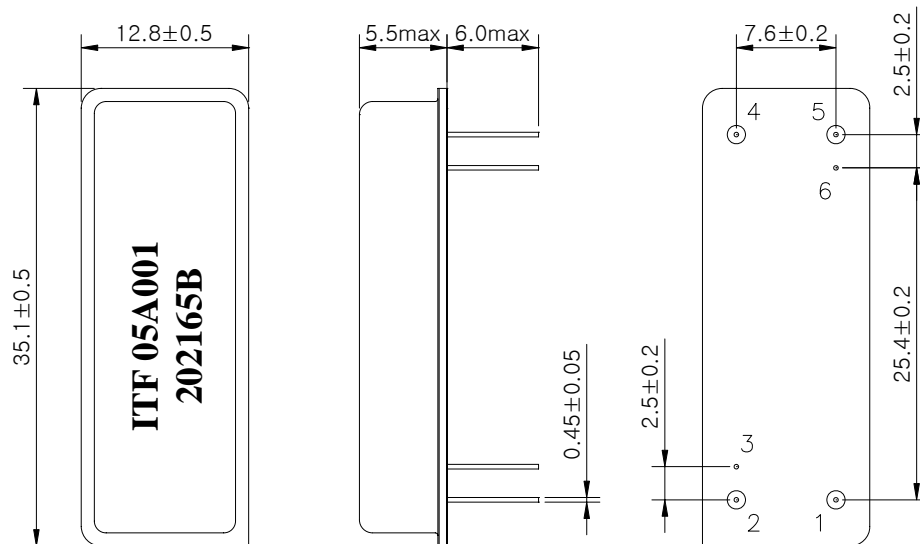
SAW Bandpass Filter 202165B



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
Other	Case ground

	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	202165B	
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3. Specifications

Fo = 70 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

Operating temperature range : -10°C ~ +60°C		Minimum	Typical	Maximum
Center Frequency	MHz	69.95	70.0	70.05
Insertion Loss	dB	-	23.5	25
1dB Bandwidth	MHz	-	2.43	-
3dB Bandwidth	MHz	2.5	2.77	-
40dB Bandwidth	MHz	-	3.83	3.95
Amplitude Ripple (Fo +/- 1.1 MHz)	dB	-	0.76	1.1
Group Delay Variation (Fo +/- 1.1 MHz)	nsec	-	70	150
Absolute Delay	usec	-	4.09	-
Ultimate Rejection	dB	45	48	-
Temperature Coefficient of Frequency	ppm/°C ²	-	-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
- 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

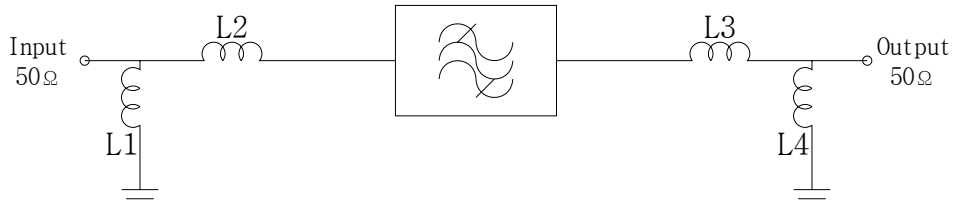
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4. Matching Schematic

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



L1 = 180 nH, L2 = 220 nH

L3 = 330 nH L4 = 82 nH

5. Marking Configuration

ITF¹⁾05A001²⁾

202165B³⁾

1) Manufacturer name

2) Lot Number

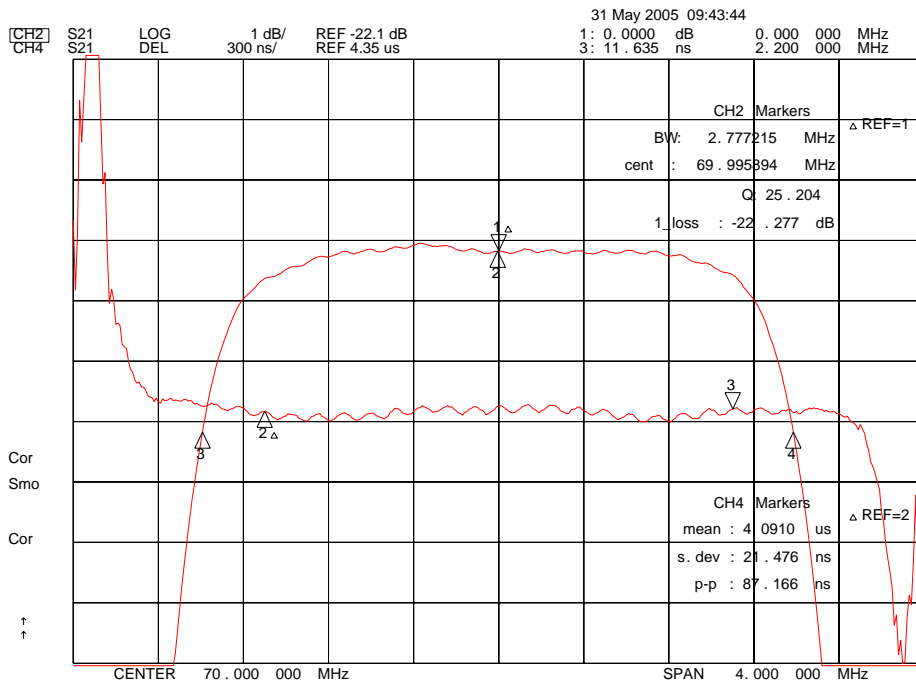
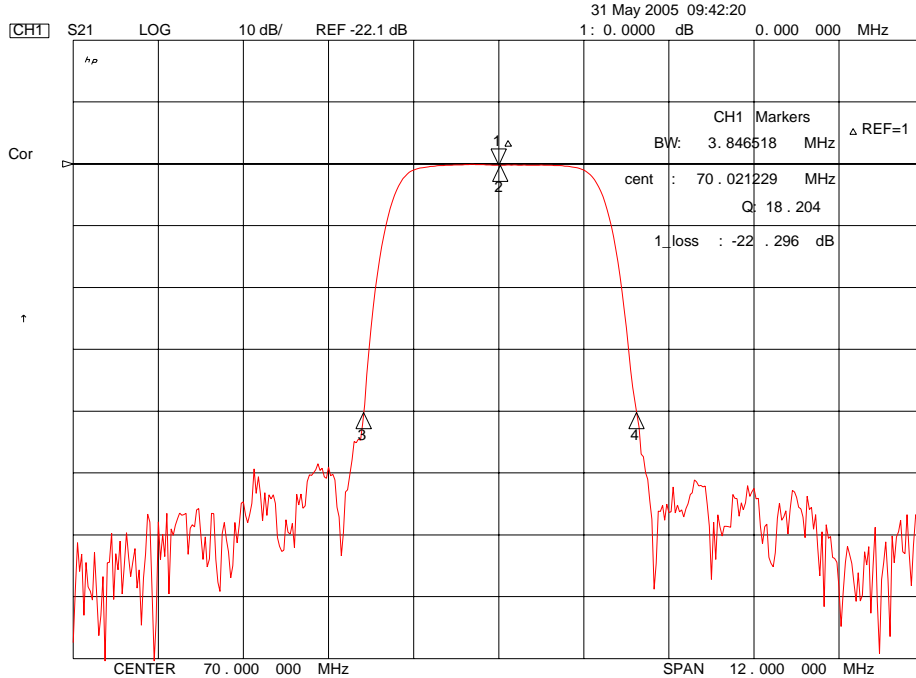
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6. Typical Performance (at +25°C)



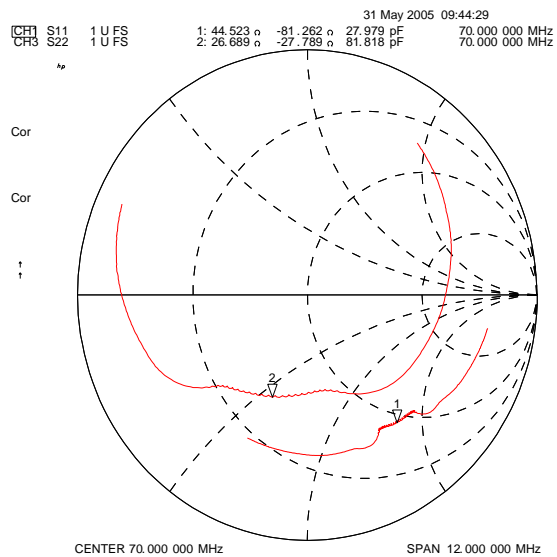
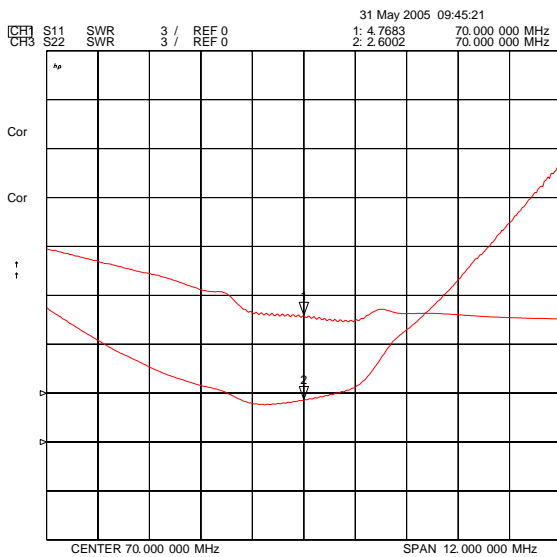
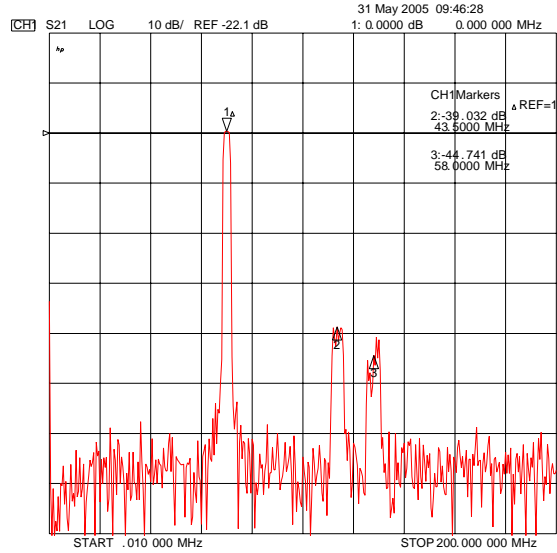
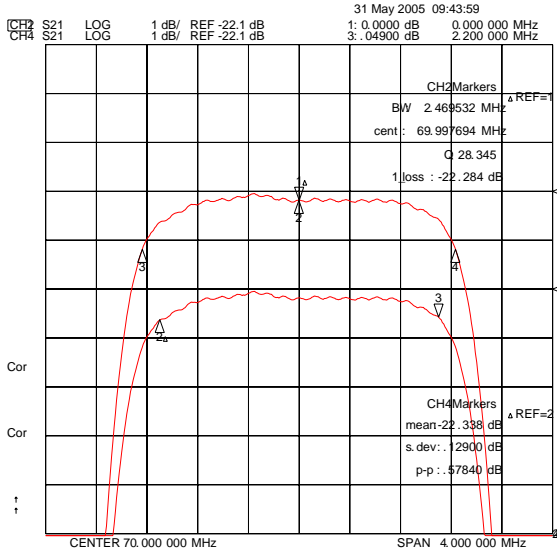
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