

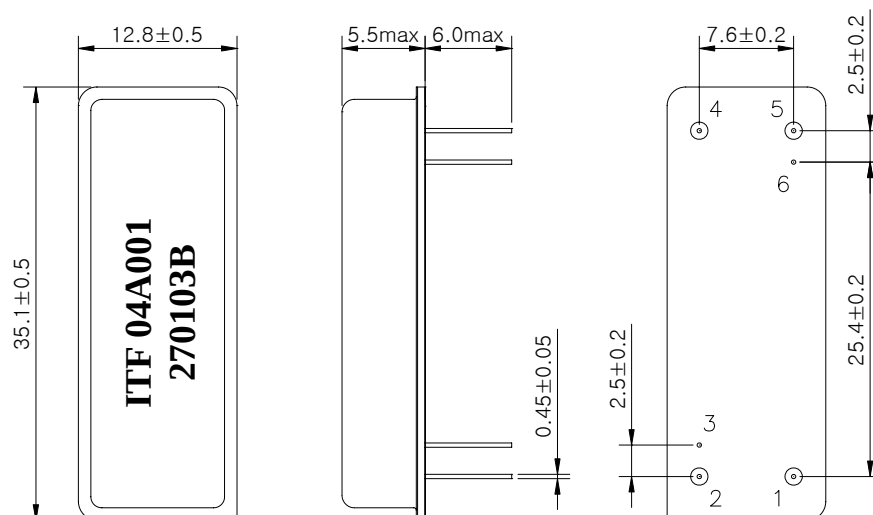
SAW Bandpass Filter 270103B



1. Features

- IF bandpass filter
- High attenuation
- Single-ended operation
- DIP Package
- Maximum Storage Temperature Range : -40℃ ~ 85℃
- 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
3, 6	Case ground

 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	270103B	
		Rev. Date	2004-03-16	
		Rev.	NW3025-CS03	1/5

SAW Bandpass Filter 270103B



3. Specifications

Fo = 70 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

Operating temperature range : -10℃ ~ +60℃		Minimum	Typical	Maximum
Center Frequency	MHz	69.96	70.0	70.04
Insertion Loss	dB	-	21.5	25.0
1dB Bandwidth	MHz	-	1.4	-
3dB Bandwidth	MHz	1.5	1.6	1.7
40dB Bandwidth	MHz	-	2.37	2.45
Amplitude Ripple (Fo +/- 0.7 MHz)	dB	-	0.5	1.0
Group Delay Variation (Fo +/- 0.7 MHz)	nsec	-	150	250
Absolute Delay	usec	-	3.37	3.5
Ultimate Rejection	dB	50	55	-
Temperature Coefficient of Frequency	ppm/℃ 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

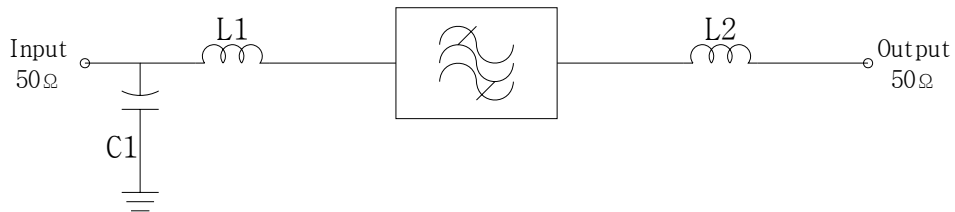
 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	270103B	
		Rev. Date	2004-03-16	
		Rev.	NW3025-CS03	2/5

SAW Bandpass Filter 270103B



4. Matching Schematic

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



$$L1 = 270 \text{ nH}, \quad L2 = 270 \text{ nH}$$

$$C1 = 51 \text{ pF}$$

5. Marking Configuration

ITF¹⁾ 04A001²⁾

270103B³⁾

1) Manufacturer name

2) Lot Number

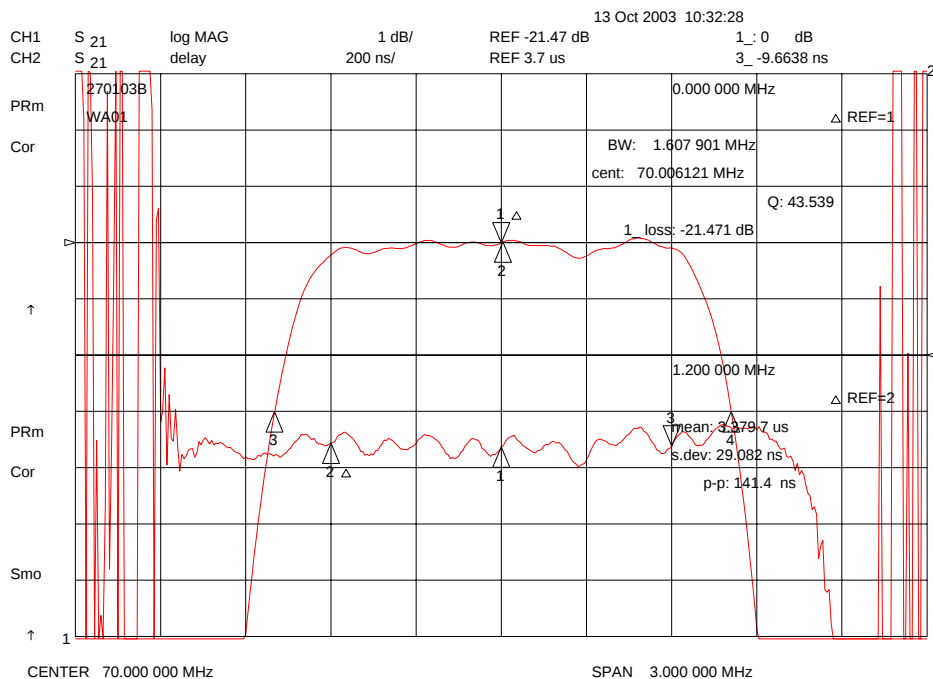
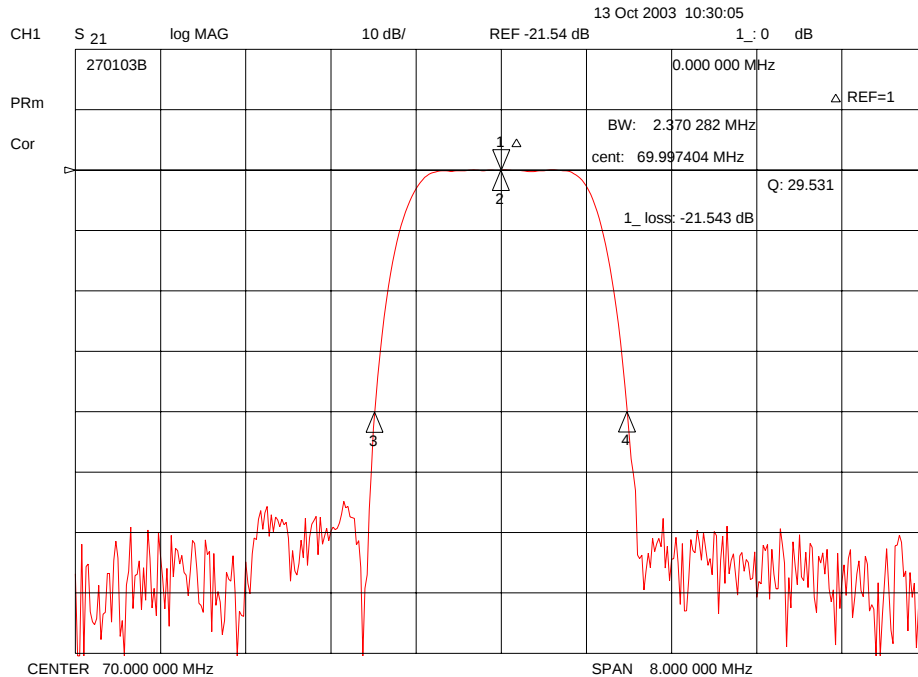
3) Part Number

	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	270103B	
		Rev. Date	2004-03-16	
		Rev.	NW3025-CS03	3/5

SAW Bandpass Filter 270103B



6. Typical Performance (at +25°C)



ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

Part No.

270103B

Rev. Date

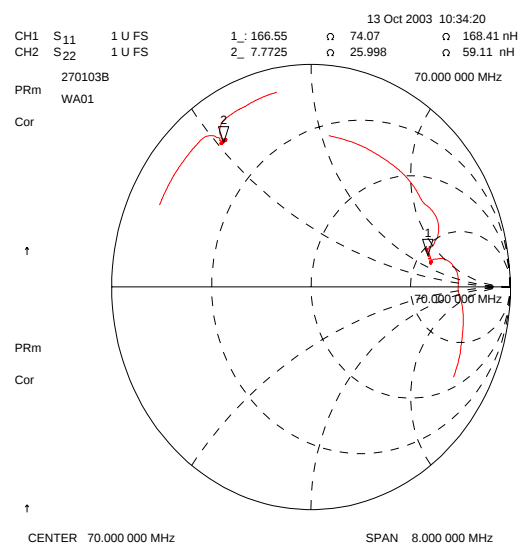
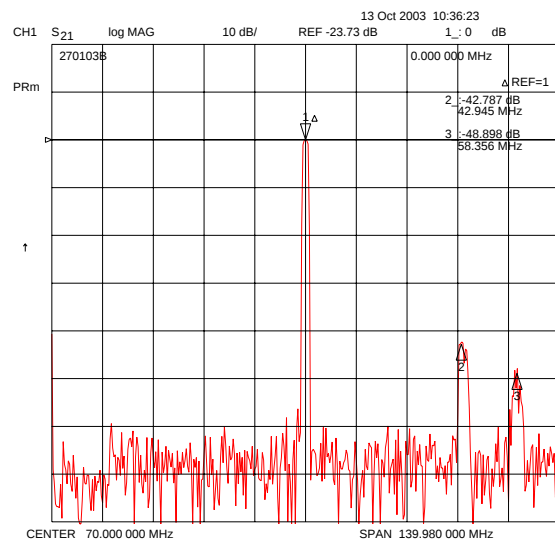
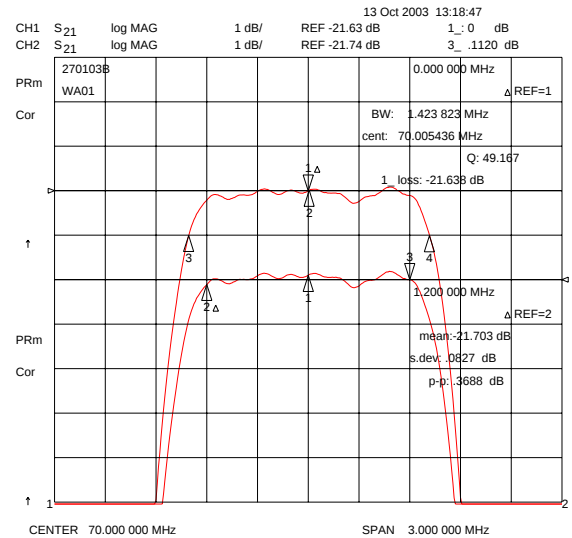
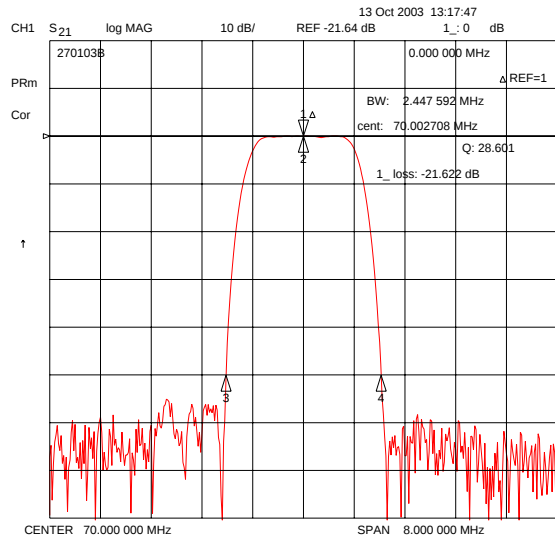
2004-03-16

Rev.

NW3025-CS03

4/5

SAW Bandpass Filter 270103B



ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

Part No.

270103B

Rev. Date

2004-03-16

Rev.

NW3025-CS03

5/5