

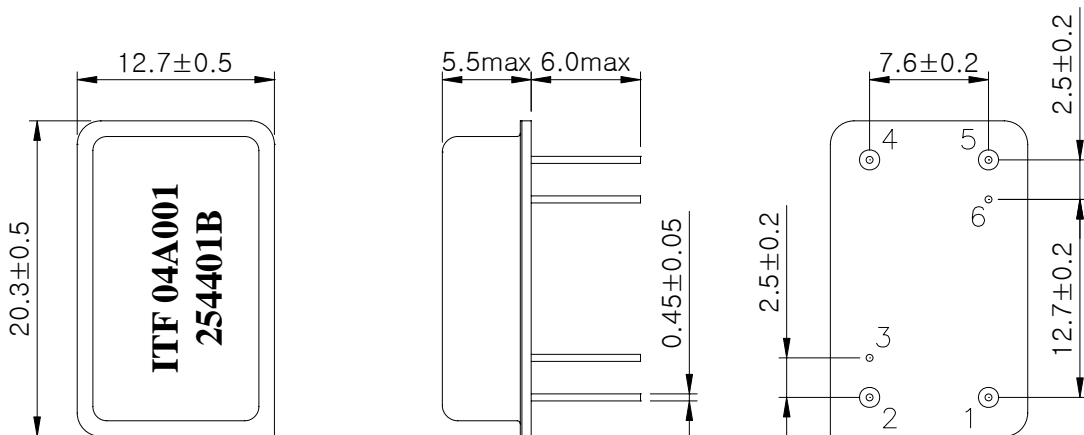
# SAW Bandpass Filter 254401B



## 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 : D2012

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.	254401B	
		Rev. Date	2004-03-22	
		Rev.	NM3026-CS03	1/5

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## 3. Specifications

Fo = 140 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

Operating temperature range : -20°C ~ +70°C		Minimum	Typical	Maximum
Center Frequency	MHz	139.75	140.0	140.25
Insertion Loss	dB	-	24.5	26.0
3dB Bandwidth	MHz	44	44.25	-
40dB Bandwidth	MHz	-	48.6	51
Amplitude Ripple (Fo +/- 20 MHz)	dB	-	0.8	1.0
Group Delay Variation (Fo +/- 20 MHz)	nsec	-	50	120
Absolute Delay	usec	-	1.07	-
Ultimate Rejection	dB	50	55	-
Temperature Coefficient of Frequency	ppm/°C	-	-72	-

Operating temperature range : +25°C		Minimum	Typical	Maximum
Amplitude Ripple (Fo +/- 20.5 MHz)	dB	-	0.8	1
Group Delay Variation (Fo +/- 20.5 MHz)	nsec	-	50	120

### 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

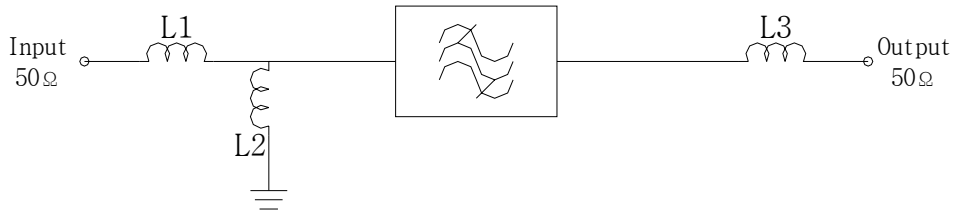
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## 4. Matching Schematic

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




L1 = 68 nH,      L3 = 56 nH  
L2 = 270 nH

## 5. Marking Configuration

ITF<sup>1)</sup> 04A001<sup>2)</sup>  
254401B<sup>3)</sup>

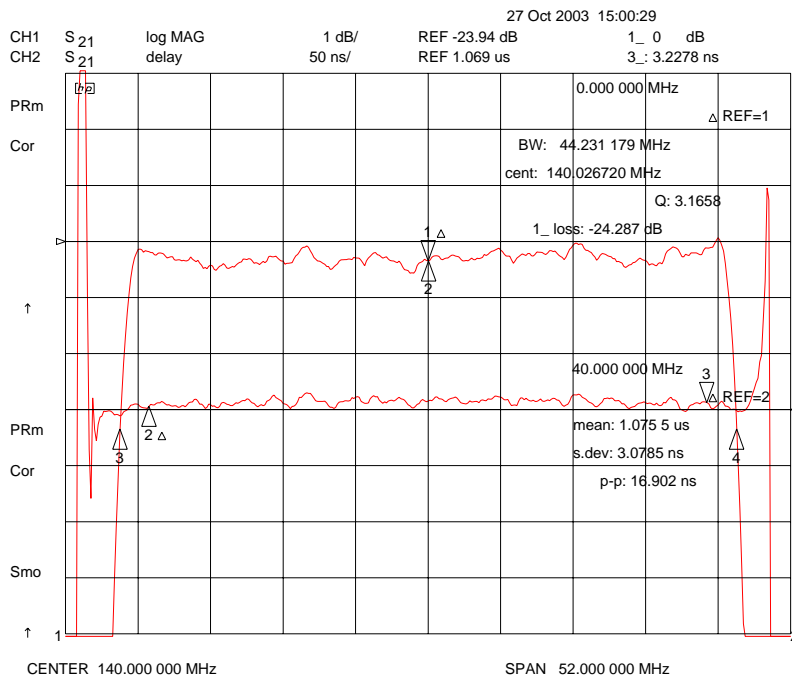
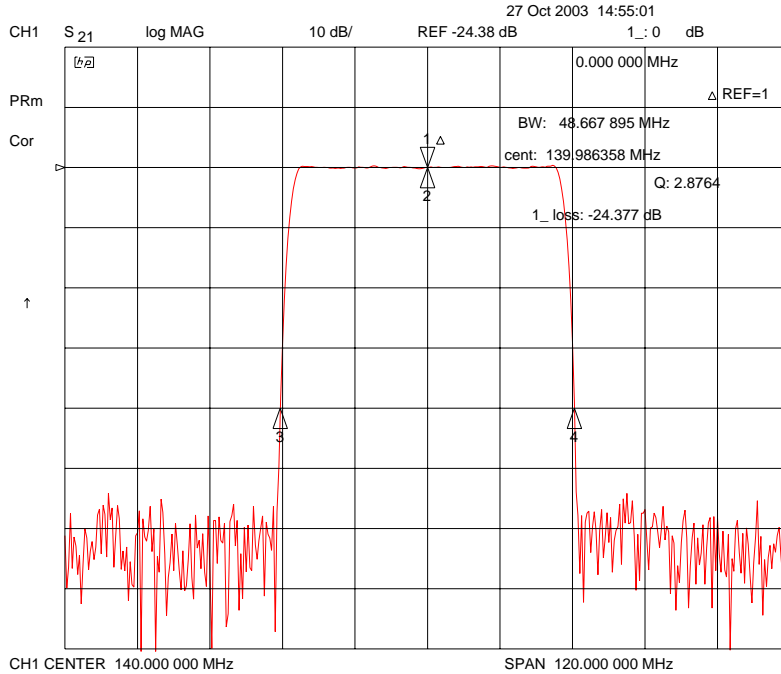
- 1) Manufacturer name
- 2) Lot Number
- 3) Part Number

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



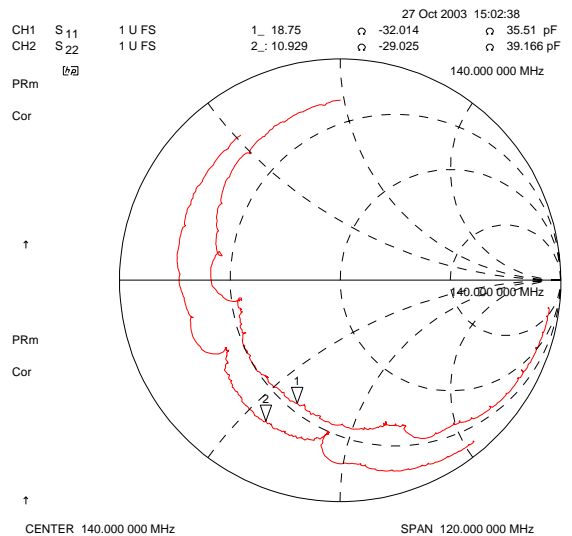
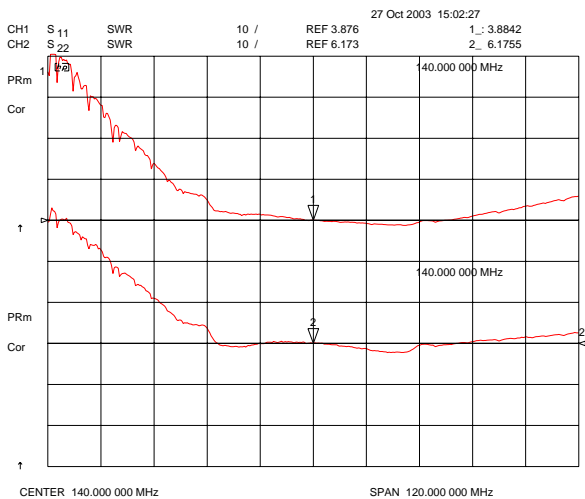
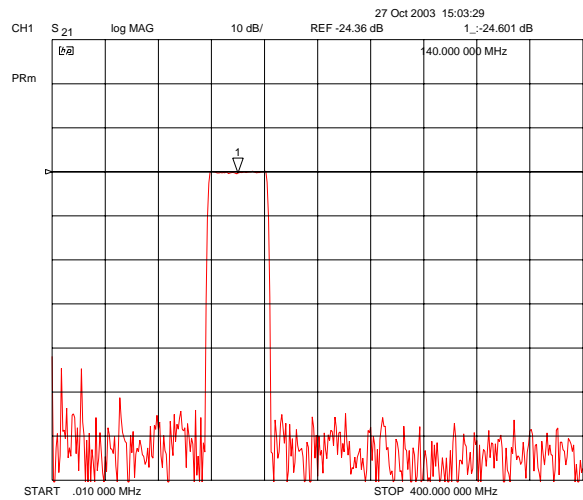
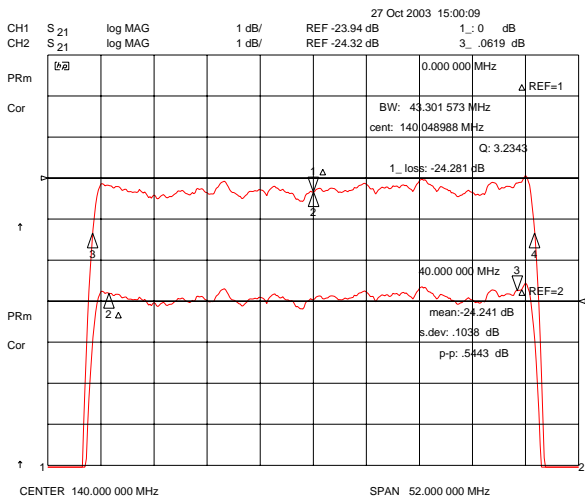
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