

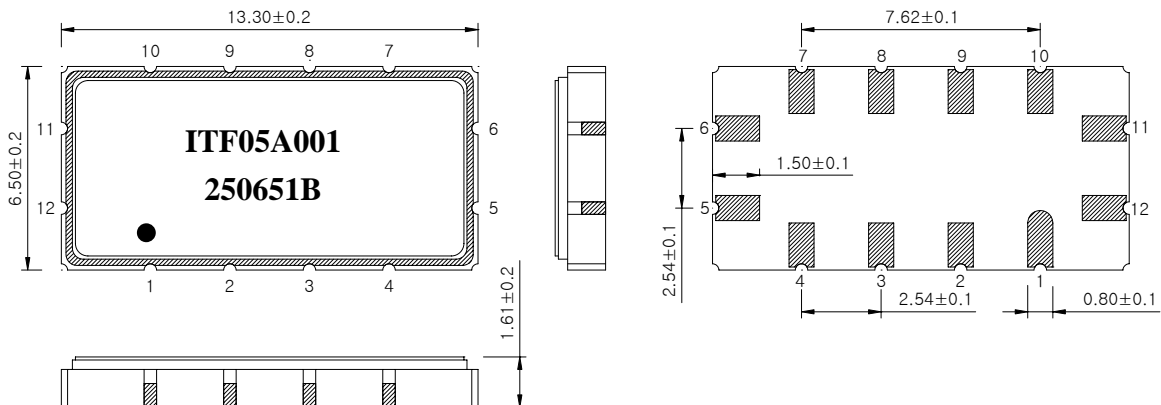
SAW Bandpass Filter 250651B



1. Features

- IF Bandpass Filter
- Low-Loss Filter
- Single-Ended Operation
- Ceramic Surface Mount Device (SMD) Package
- Maximum Storage Temperature Range : -40 °C ~ 85 °C
- Electrostatics Sensitive Device (ESD)

2. Package Dimensions



Package : S1365

Dimensions shown are nominal in millimeters

Body : Al₂O₃ Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 um, Over a 1.27 ~ 8.89 um Ni Plating

Pad Configuration	
11	Input
5	Output
6, 12	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.	250551B	
Rev. Date	2005-08-19	
Rev.	NJ5001-CS01	1/5

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3. Specifications

Fo = 175 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

Operating temperature range : -20℃ ~ +85℃		Minimum	Typical	Maximum
Center Frequency (Fc)	MHz	174.55	175.0	175.45
Insertion Loss	dB	-	15.0	17.0
1dB Bandwidth	MHz	5.1	5.3	-
3dB Bandwidth	MHz	-	6.1	-
40dB Bandwidth	MHz	-	9.4	10.4
Amplitude Ripple (Fo +/- 2.1 MHz)	dB	-	0.6	1.0
Return Loss (Fo +/- 2.1 MHz)	dB	9.0	10.0	
Group Delay Variation (Fo +/- 2.1 MHz)	nsec	-	60	160
Absolute Delay	usec	-	0.9	-
Relative Attenuation				-
DC ~ Fc - 7MHz	dB	55	60	
Fc - 7MHz ~ Fc - 5MHz	dB	35	50	
Fc + 5MHz ~ Fc + 7MHz	dB	35	37	
Fc + 7MHz ~ Fc + 145 MHz	dB	50	55	
Temperature Coefficient of Frequency	ppm/℃	-	-23	-

Room temperature : +25℃		Minimum	Typical	Maximum
Center Frequency	MHz	174.8	175.0	175.2
Insertion Loss	dB		15.0	16.5
Amplitude Ripple (Fo +/- 2.35 MHz)	dB		0.6	1.0
Group Delay Variation (Fo +/- 2.35MHz)	nsec	-	60	160
Relative Attenuation				
DC ~ Fc - 6.75 MHz	dB	55	60	
Fc - 6.75 MHz ~ Fc - 4.75 MHz	dB	35	50	
Fc + 4.75 MHz ~ Fc + 6.75 MHz	dB	35	37	
Fc + 6.75 MHz ~ Fc + 145 MHz	dB	50	55	

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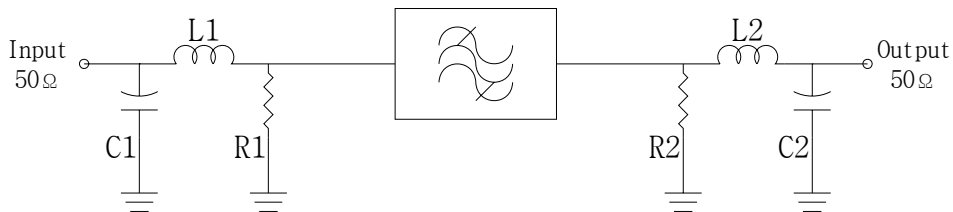


Notes :

- 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

4. Matching Schematic

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



L1 = 39 nH, L2 = 39 nH
 C1 = 39 pF, C2 = 39 pF
 R1 = 300 Ω, R2 = 300 Ω

5. Marking Configuration

ITF¹⁾05A001²⁾

250651B³⁾

● 4)

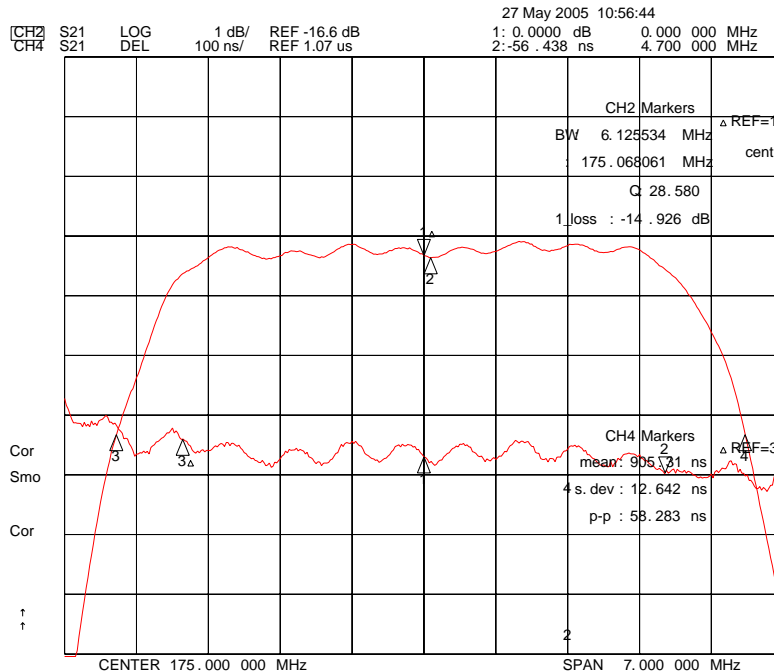
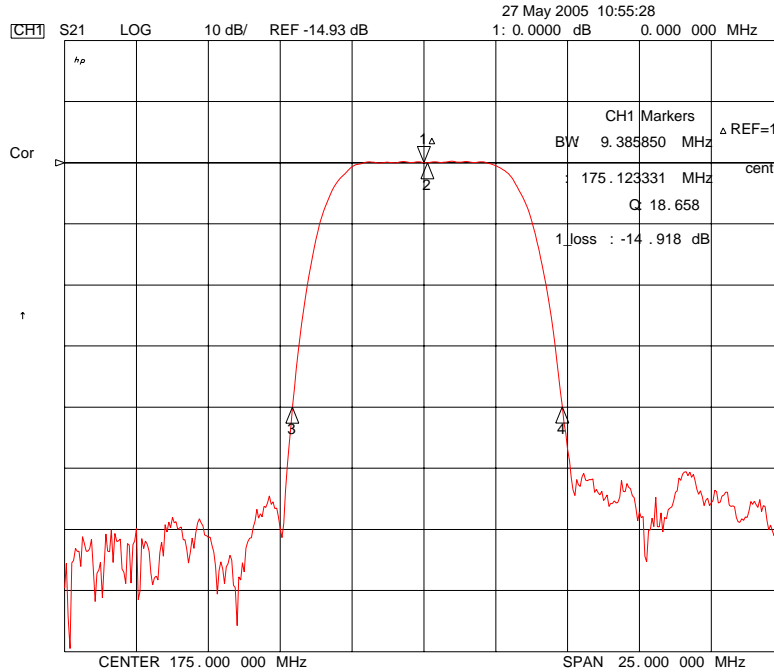
- 1) Manufacturer name
- 2) Lot Number
- 3) Part Number
- 4) Pad Number 1 Index

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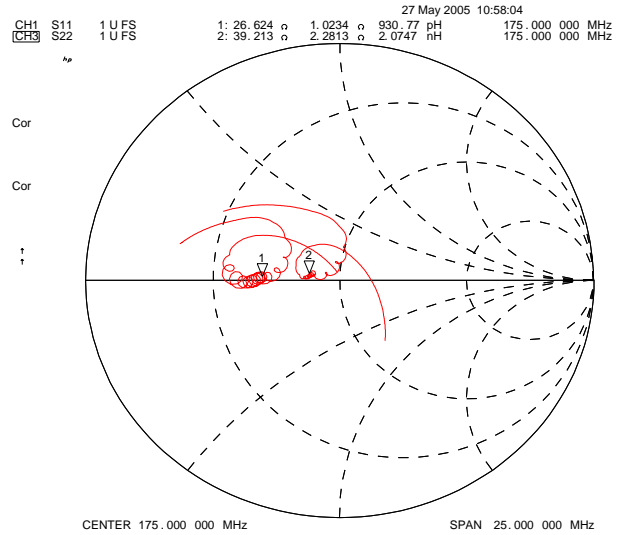
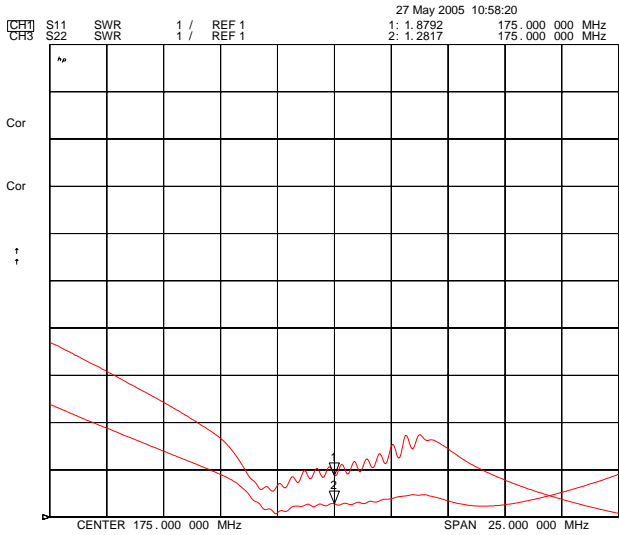
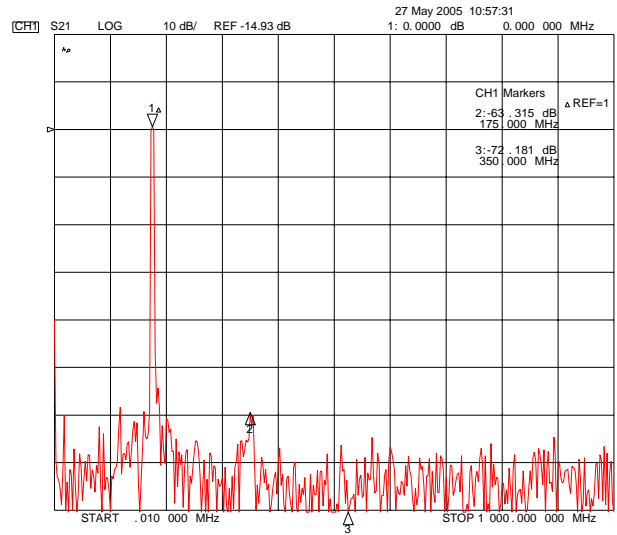
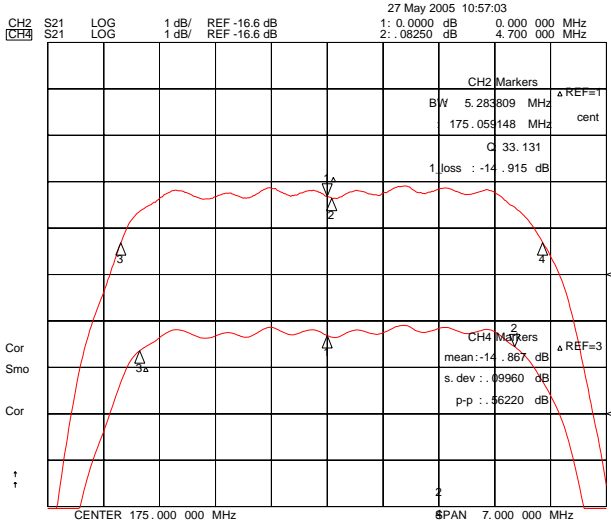


6. Typical Performance (at +25°C)



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