

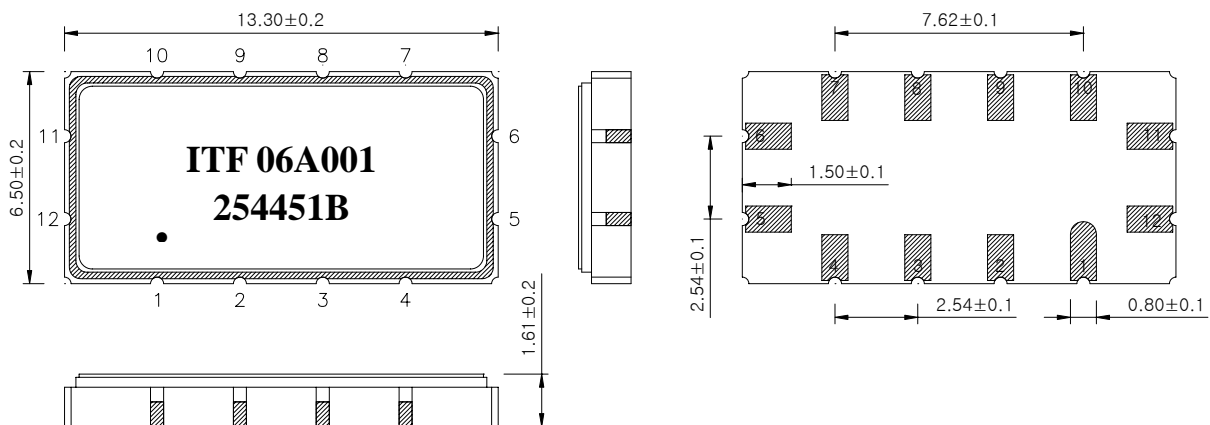
Bandpass Filter 254451B



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 Dimension



Package : S1365

Dimensions shown are nominal in millimeters

Body : Al₂O₃

Lid : Kovar, Ni Plated

Termination : Au plating 0.3 ~ 1.0um, over a 1.27 ~ 8.89um Ni Plating

Pin 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.	254451B	
Rev. Date	2006-04-13	
Rev.	NJ6005-CS01	1/5

Bandpass Filter 254451B



3. Specifications

F_o = 128 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

Operating temperature range : -30 °C ~ +80 °C		Minimum	Typical	Maximum
Center Frequency	MHz	127.25	128.0	128.75
Insertion Loss	dB	-	19.0	20.5
1dB Bandwidth	MHz	40.0	43.3	-
3dB Bandwidth	MHz	43.0	44.7	-
40dB Bandwidth	MHz	-	50.0	54.0
Amplitude Ripple (F _o +/- 19.75 MHz)	dB	-	0.7	1.0
Group Delay Variation (F _o +/- 19.75 MHz)	nsec	-	30	80
Absolute Delay	usec	-	0.73	1.0
Relative Attenuation				
DC ~ 100.0MHz	dB	45	50	
156.0MHz ~ 200.00MHZ	dB	40	45	-
200.00MHZ ~ 310.00MHZ	dB	25	30	
310.00MHZ ~ 470.00MHZ	dB	20	25	
Temperature Coefficient of Frequency	ppm/°C	-	-86	-

Room temperature : + 25 °C		Minimum	Typical	Maximum
Center Frequency	MHz	127.85	128.0	128.15
Insertion Loss	dB		18.5	20.0
Amplitude Ripple (F _o +/- 20.35 MHz)	dB	-	0.7	1.0
Group Delay Variation (F _o +/- 20.35 MHz)	nsec	-	30	80

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

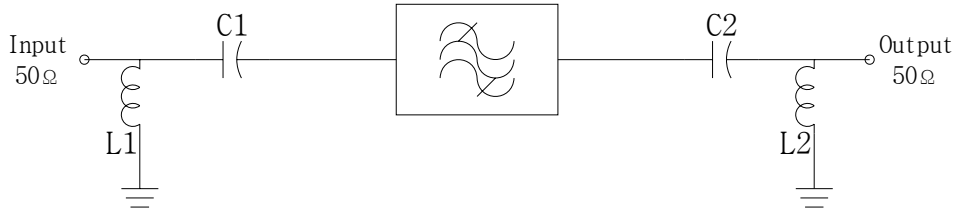
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		Rev. Date	2006-04-13	
		Rev.	NJ6005-CS01	2/5

Bandpass Filter 254451B



4. Matching Schematic

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



$$C1 = C2 = 62\text{pF}$$

$$L1 = 120\text{nH} , L2 = 56\text{nH}$$

5. Marking Configuration

ITF¹⁾06A001²⁾

254451B³⁾

●⁴⁾

1) Manufacturer name

2) Lot Number

3) Part Number

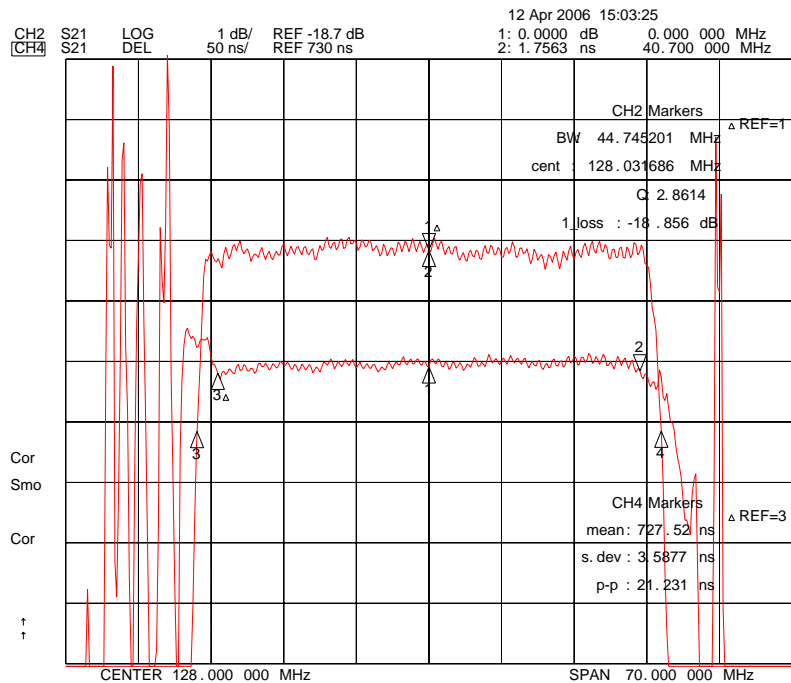
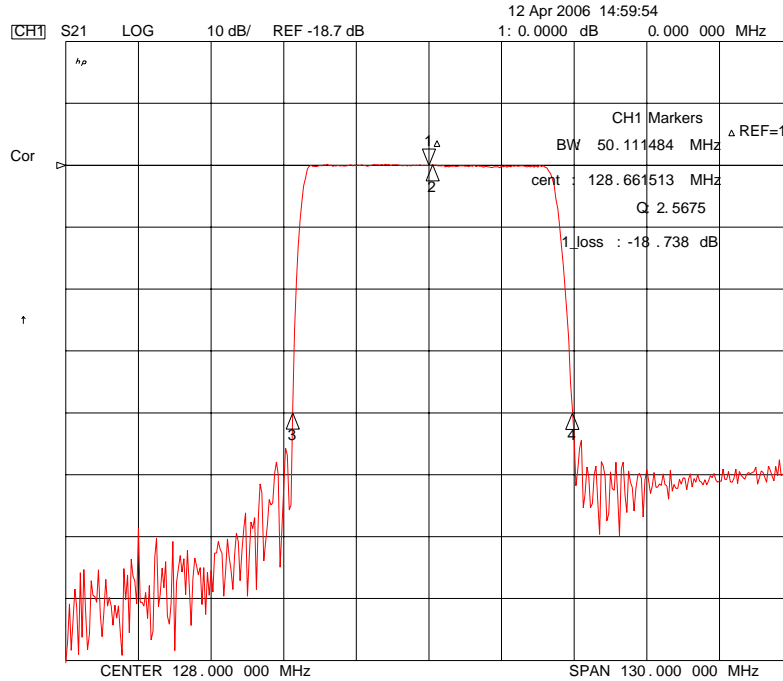
4) Pad Number 1 Index

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		Rev. Date	2006-04-13	
		Rev.	NJ6005-CS01	3/5

Bandpass Filter 254451B



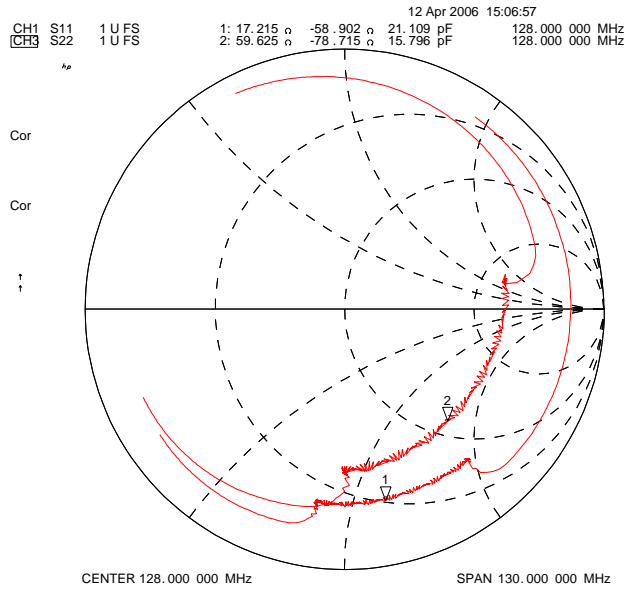
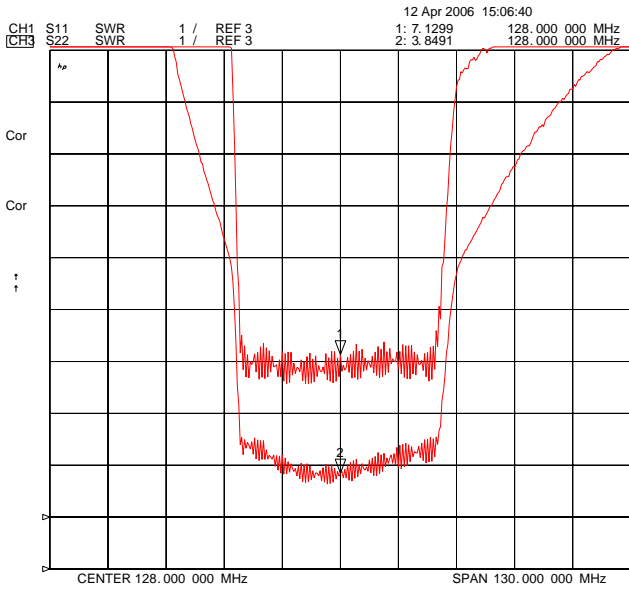
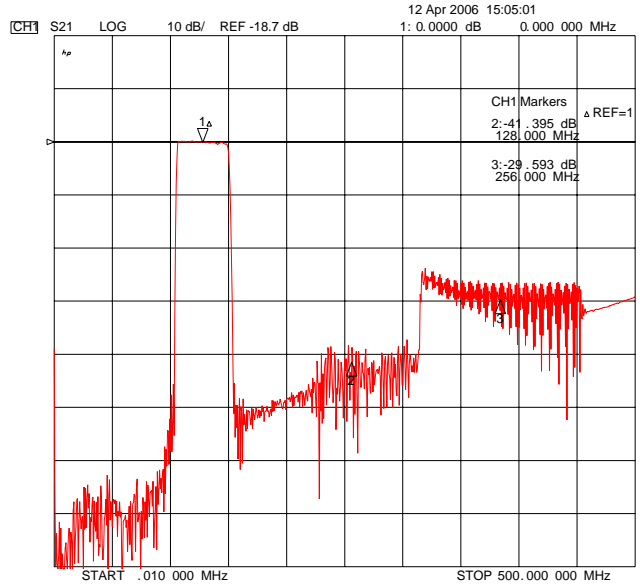
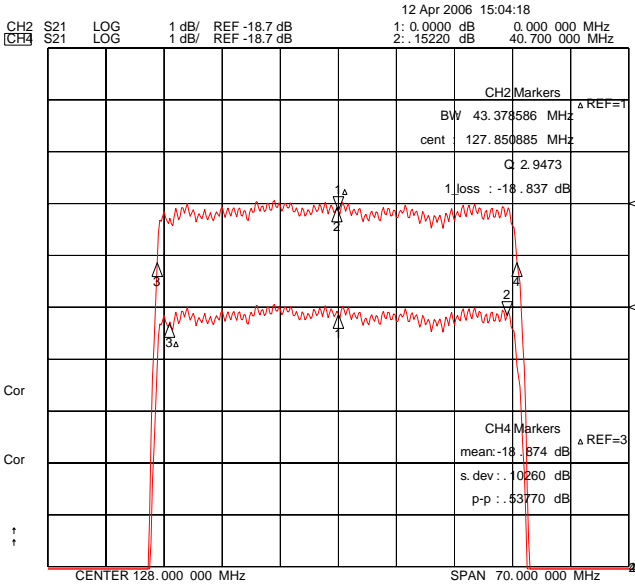
6. Typical Performance (at +25°C)



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Rev. Date	2006-04-13	
Rev.	NJ6005-CS01	4/5

Bandpass Filter 254451B



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Rev. Date	2006-04-13	
Rev.	NJ6005-CS01	5/5