

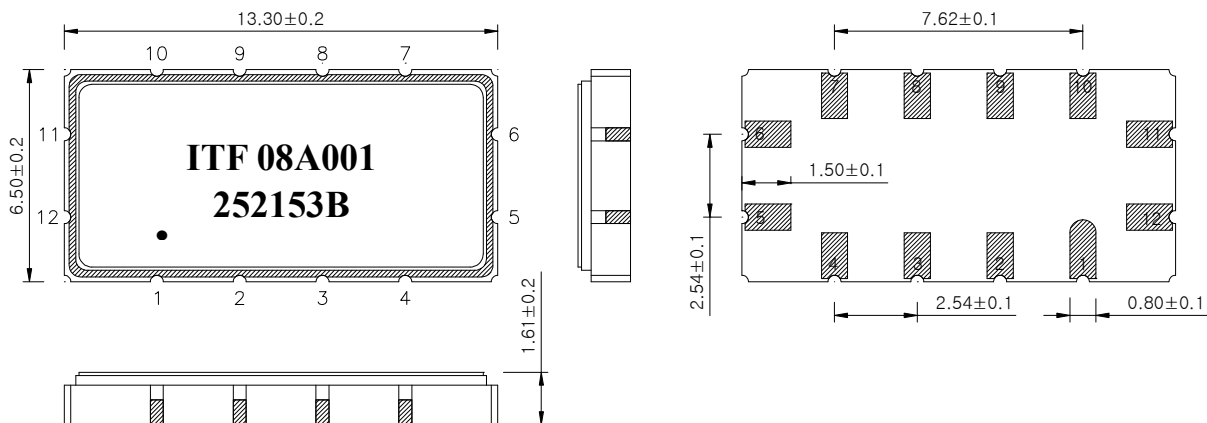
Bandpass Filter 252153B



1. Features

- IF bandpass filter
- Low-Loss Filter
- Single-ended operation
- Ceramic Surface Mount Device(SMD) Package
- Maximum Storage Temperature Range : -40℃ ~ 85℃
- 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.	252153B	
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3. Specifications

Fo = 106.0 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

Room temperature : +25℃		Minimum	Typical	Maximum
Center Frequency (Fc)	MHz	-	106.0	-
Insertion Loss	dB	-	10.0	13.0
1dB Bandwidth	MHz	20.0	20.54	-
3dB Bandwidth	MHz	-	21.4	-
40dB Bandwidth	MHz	-	25.5	26.0
Amplitude Ripple (Fo +/- 9.32 MHz)	dB	-	0.55	1.0
Group Delay Variation (Fo +/- 9.32 MHz)	nsec	-	40	80
Absolute Delay	usec	-	0.8	-
Ultimate Rejection	dB	40	45	-
Temperature Coefficient of Frequency (TCF)	ppm/°C	-	- 86	-

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

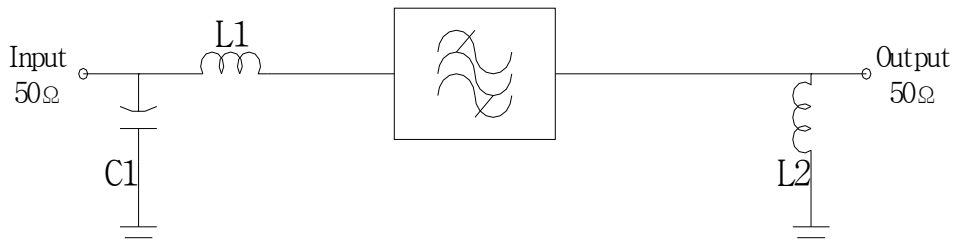
 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	252153B	
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4. Matching Schematic

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



$$C1 = 30 \text{ pF}, \quad L1 = 100 \text{ nH}$$

$$L2 = 39 \text{ nH}$$

5. Marking Configuration

ITF¹⁾ 08A001²⁾

252153B³⁾

●⁴⁾

1) Manufacturer name

2) Lot Number

3) Part Number

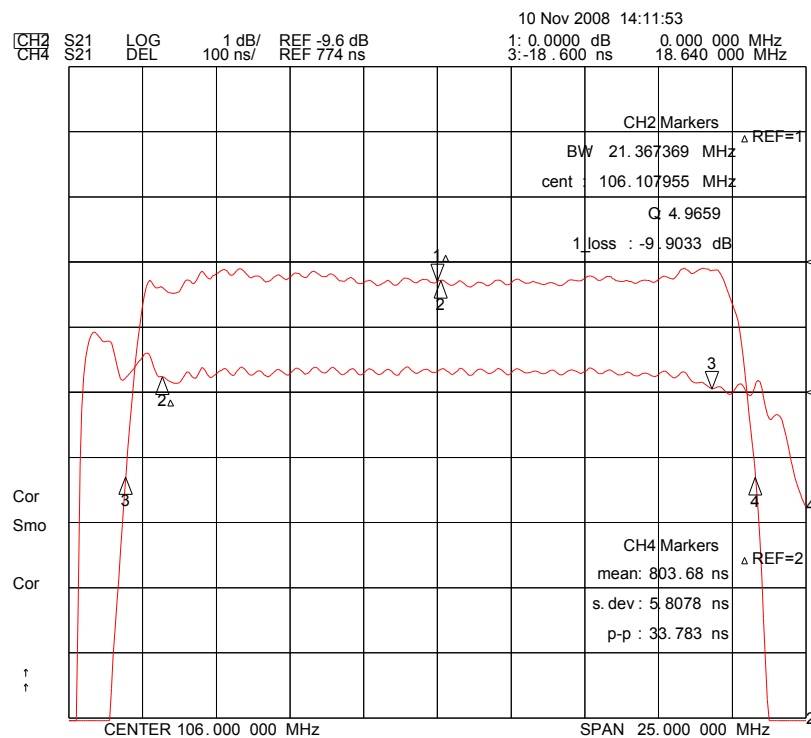
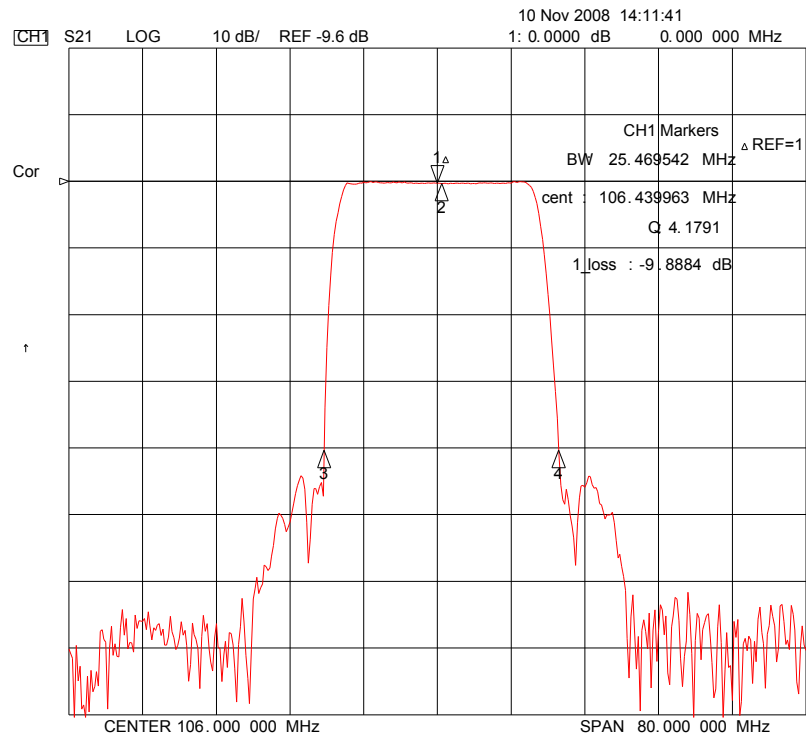
4) Pad Number 1 Index

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6. Typical Performance (at +25°C)



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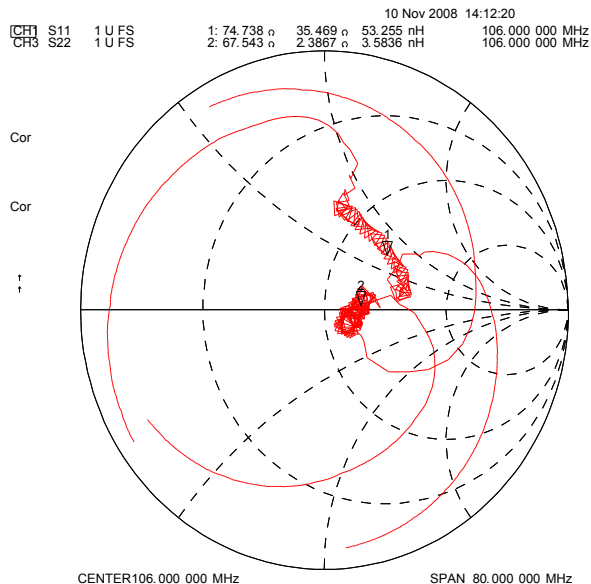
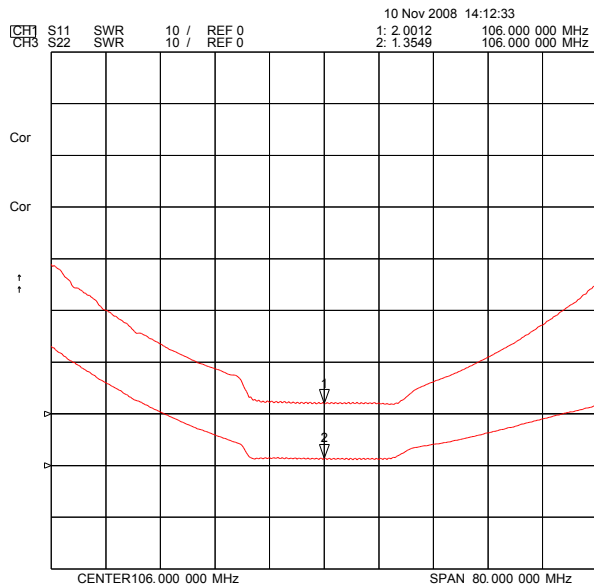
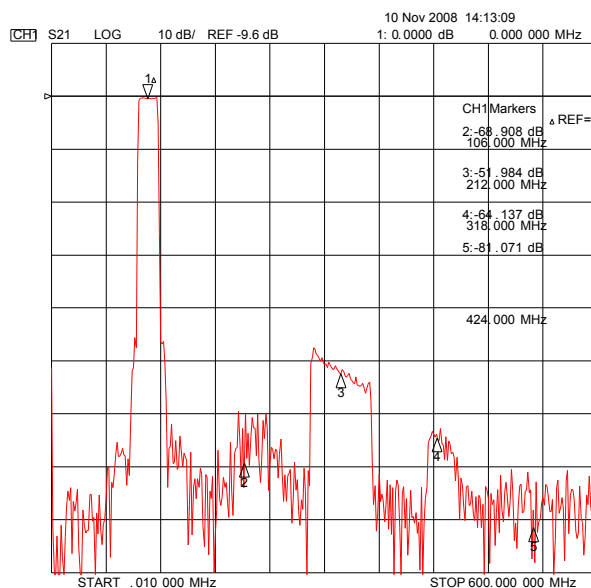
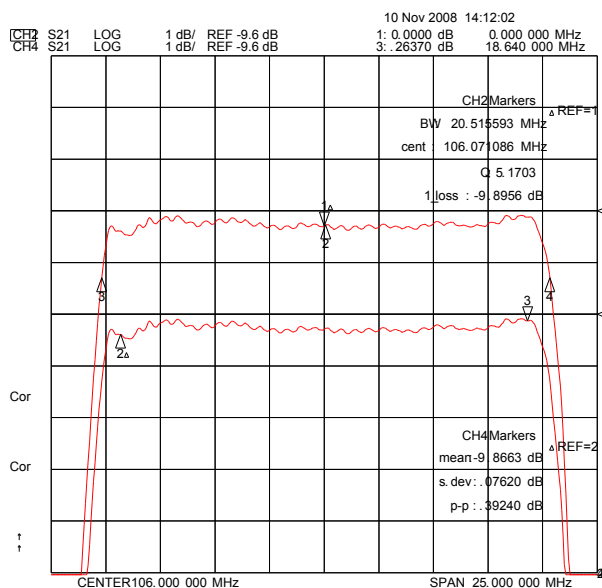
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