

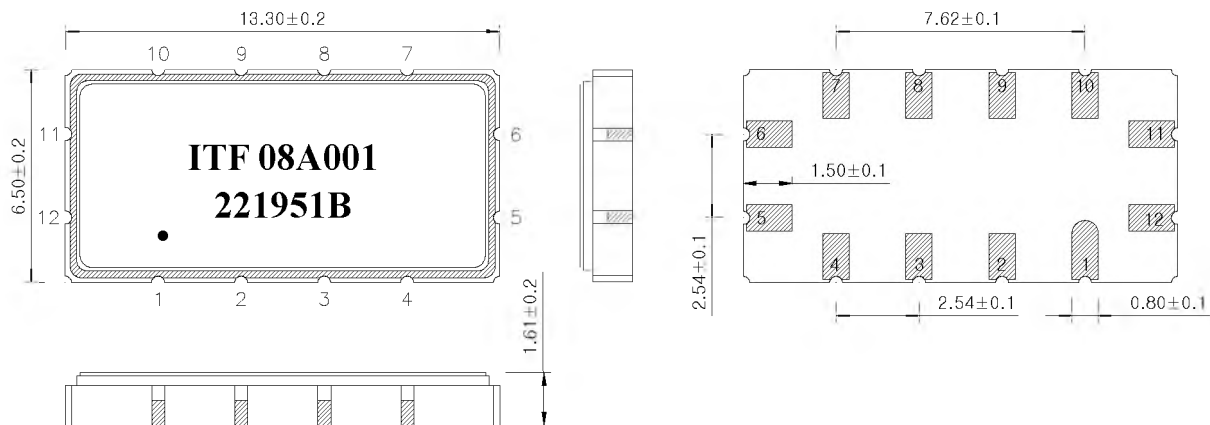
Bandpass Filter 221951B



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

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3. Specifications

$F_0 = 62.5 \text{ MHz}$

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

Operating temperature range : $-10^\circ\text{C} \sim +60^\circ\text{C}$		Minimum	Typical	Maximum
Center Frequency (F_c)	MHz	-	62.5	-
Insertion Loss	dB	-	14.5	17.5
1dB Bandwidth	MHz	18.8	19.3	-
3dB Bandwidth	MHz	-	19.87	-
15dB Bandwidth	MHz	-	21.26	21.4
40dB Bandwidth	MHz	-	22.6	23.5
Amplitude Ripple ($F_0 \pm 9.12 \text{ MHz}$)	dB	-	0.4	0.9
Group Delay Variation ($F_0 \pm 9.12 \text{ MHz}$)	nsec	-	50	100
Absolute Delay	usec	-	1.25	-
Ultimate Rejection	dB	40	45	-
Temperature Coefficient of Frequency (TCF)	ppm/ $^\circ\text{C}$	-	- 86	-

Room temperature : $+25^\circ\text{C}$		Minimum	Typical	Maximum
Insertion Loss	dB	-	14.5	17.0
Amplitude Ripple ($F_0 \pm 9.32 \text{ MHz}$)	dB	-	0.4	0.9
Group Delay Variation ($F_0 \pm 9.32 \text{ MHz}$)	nsec	-	50	100
Relative Attenuation $F_0 \pm 10.2 \text{ MHz}$	dB	2	5	-

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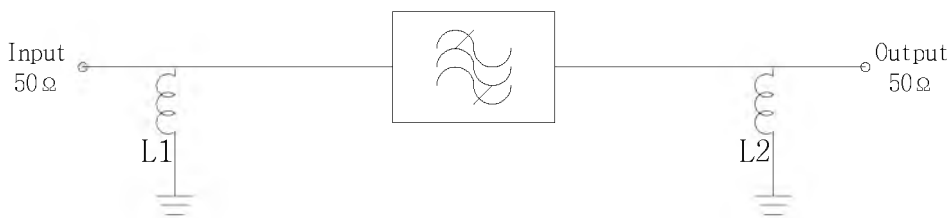


Notes :

- 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)



$$L1 = 150 \text{ nH}, \quad L2 = 82 \text{ nH}$$

5. Marking Configuration

ITF¹⁾08A001²⁾

221951B³⁾

●⁴⁾

1) Manufacturer name

2) Lot Number

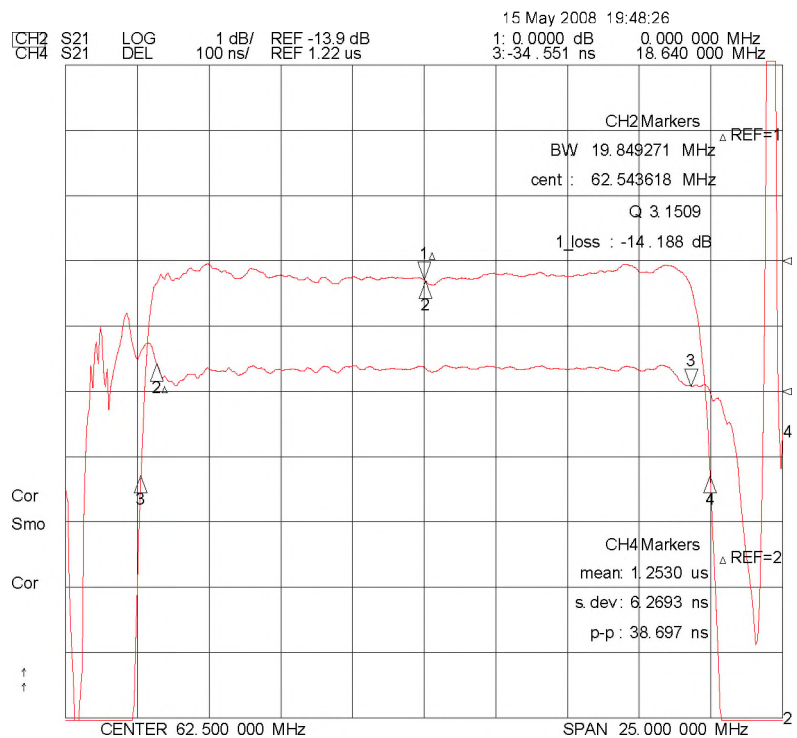
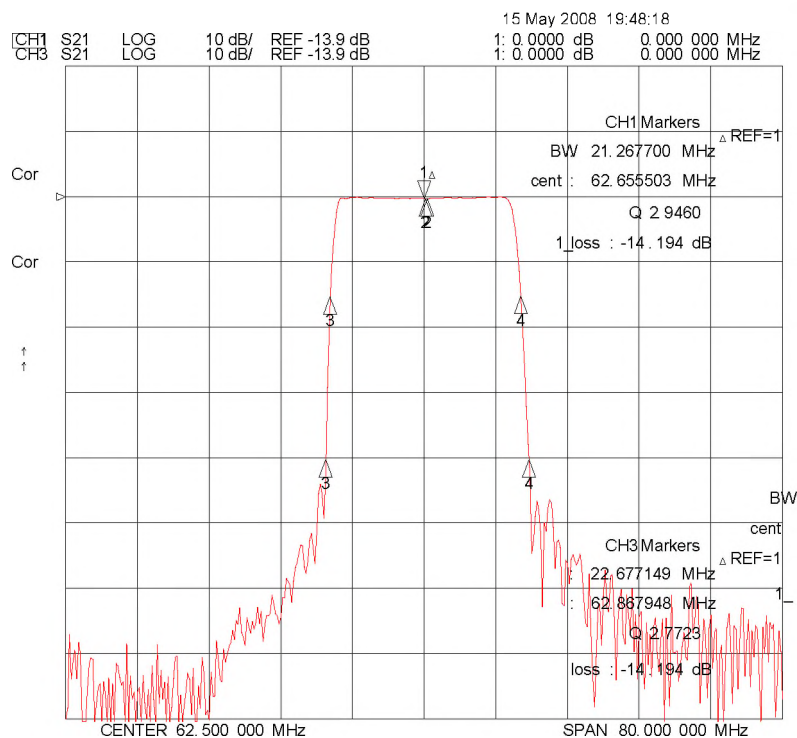
3) Part Number

4) Pad Number 1 Index

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6. Typical Performance (at +25°C)



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