

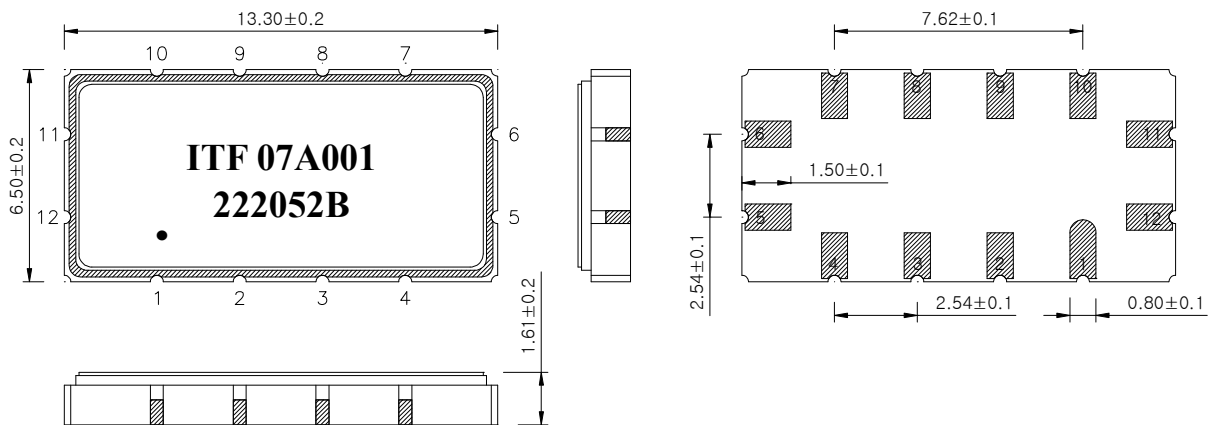
# Bandpass Filter 222052B



## 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 : Al<sub>2</sub>O<sub>3</sub>

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 |

|  |   |           |             |     |
|--|---|-----------|-------------|-----|
|  | <b>ITF Co., Ltd.</b><br>102-901, Bucheon Technopark 364,<br>Samjeong-Dong, Ojeong-Gu, Bucheon-City,<br>Gyeonggi-Do, Korea 421-809 | Part No.  | 222052B     |     |
|  |   | Rev. Date | 2007-05-04  |     |
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## 3. Specifications

F<sub>o</sub> = 62.5 MHz


Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

| Room temperature : +25°C                            |        | Minimum | Typical | Maximum |
|---|--------|---------|---------|---------|
| Center Frequency (F <sub>c</sub> )                  | MHz    | -       | 62.5    | -       |
| Insertion Loss                                      | dB     | -       | 16.5    | 18.0    |
| 1dB Bandwidth                                       | MHz    | -       | 19.6    | -       |
| 3dB Bandwidth                                       | MHz    | 20.3    | 20.35   | -       |
| 40dB Bandwidth                                      | MHz    | -       | 23.4    | 24.0    |
| Amplitude Ripple (F <sub>o</sub> +/- 9.32 MHz)      | dB     | -       | 0.3     | 0.6     |
| Group Delay Variation (F <sub>o</sub> +/- 9.32 MHz) | nsec   | -       | 20      | 60      |
| Absolute Delay                                      | usec   | -       | 1.17    | -       |
| 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

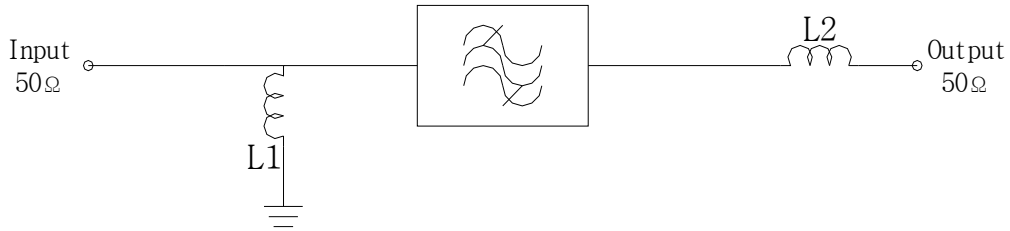
|   |   |           |             |     |
|---|---|-----------|-------------|-----|
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## 4. Matching Schematic

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



$$L1 = L2 = 100 \text{ nH}$$

## 5. Marking Configuration

ITF<sup>1)</sup> 07A001<sup>2)</sup>

222052B<sup>3)</sup>


●<sup>4)</sup>

1) Manufacturer name

2) Lot Number

3) Part Number

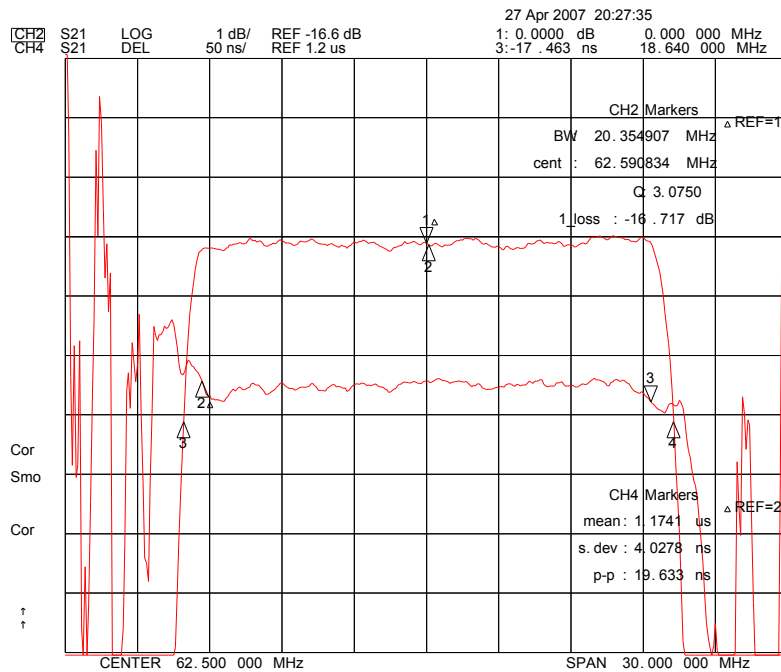
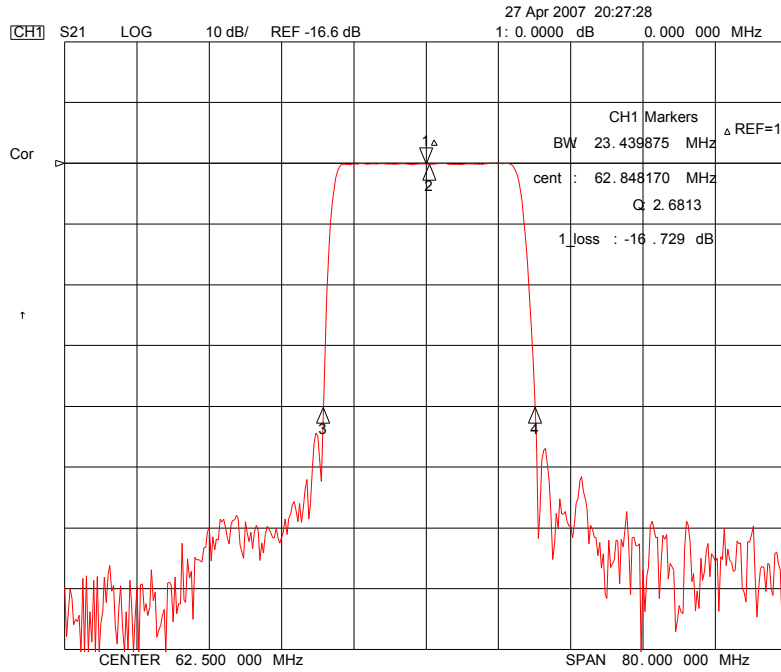
4) Pad Number 1 Index

|   |   |           |             |     |
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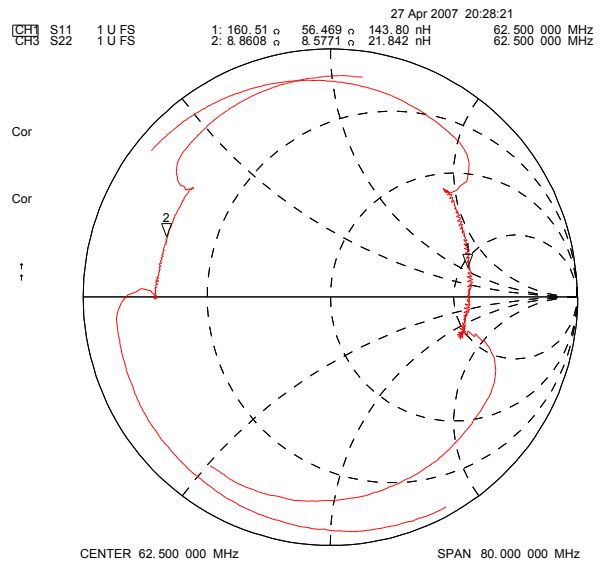
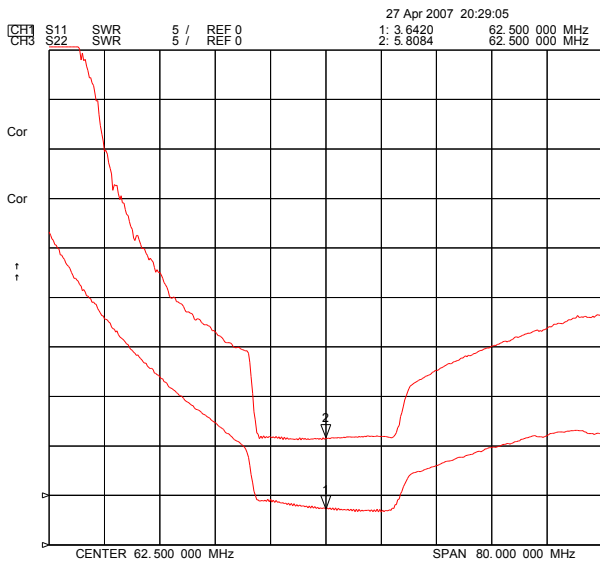
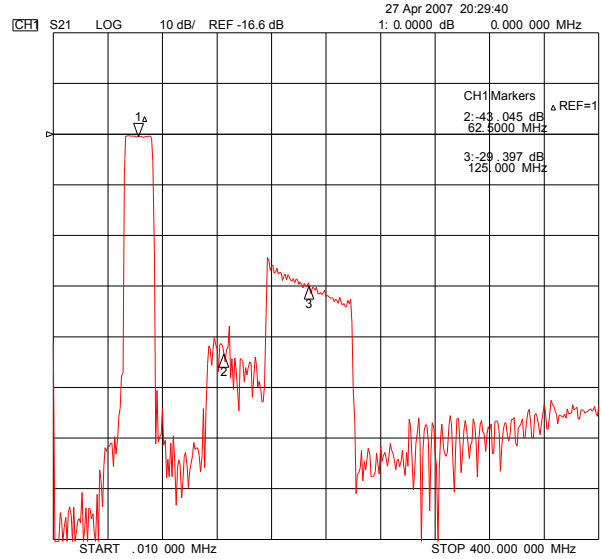
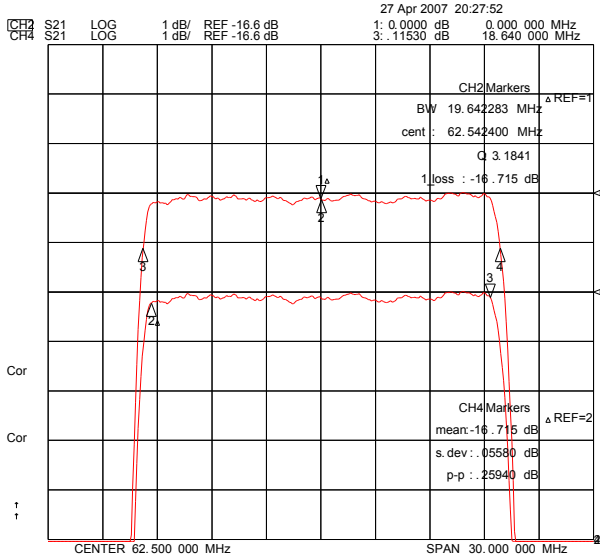


## 6. Typical Performance ( at +25°C )



|  |   |           |             |     |
|--|---|-----------|-------------|-----|
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