

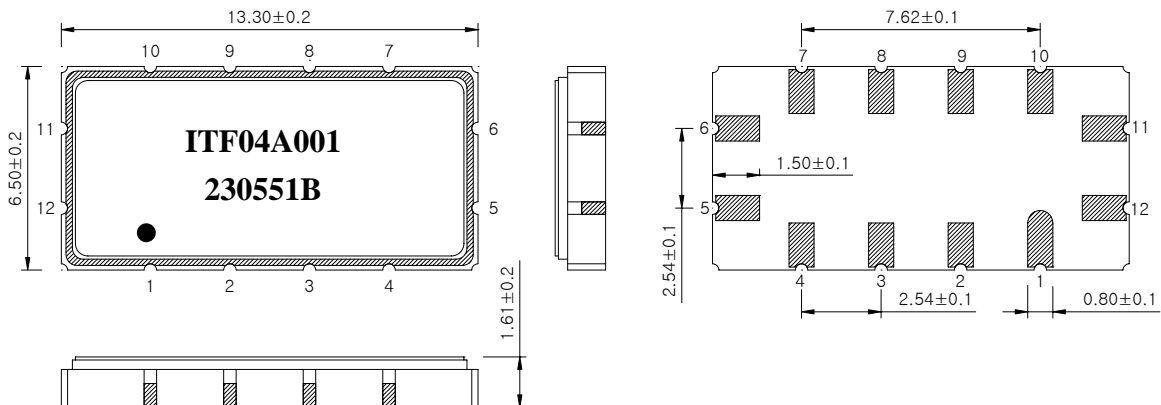
SAW Bandpass Filter 230551B



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. | 230551B | |
| Rev. Date | 2004-06-24 | |
| Rev. | NJ4009-CS01 | 1/5 |

SAW Bandpass Filter 230551B



3. Specifications

Fo = 75.0 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

| Operating Temperature Range : -30°C ~ +85°C | | Minimum | Typical | Maximum |
|---|--------|---------|---------|---------|
| Center Frequency | MHz | 74.4 | 75.0 | 75.6 |
| Insertion Loss | dB | - | 7.0 | 9.0 |
| 1dB Bandwidth | MHz | 4.7 | 4.8 | - |
| 3dB Bandwidth | MHz | 5.4 | 5.6 | - |
| 40dB Bandwidth | MHz | - | 7.9 | 8.5 |
| Amplitude Ripple (Fo +/- 1.8 MHz) | dB | - | 0.6 | 1.0 |
| Group Delay Variation (Fo +/- 1.8 MHz) | nsec | - | 90 | 140 |
| Absolute Delay | usec | - | 1.23 | 1.5 |
| Ultimate Rejection | dB | 40 | 45 | - |
| Temperature Coefficient of Frequency | ppm/°C | - | -86 | - |

| Room temperature : + 25 °C | | Minimum | Typical | Maximum |
|--|------|---------|---------|---------|
| Center Frequency | MHz | 74.8 | 75.0 | 75.2 |
| Amplitude Ripple (Fo +/- 3.2 MHz) | dB | - | 0.6 | 1.0 |
| Group Delay Variation (Fo +/- 3.2 MHz) | nsec | - | 90 | 140 |

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

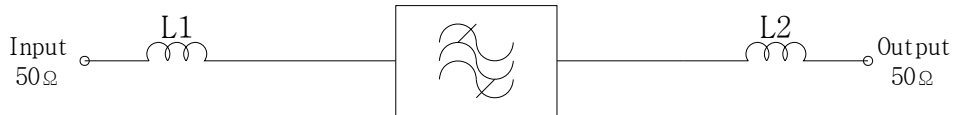
| | | | | |
|--|---|-----------|-------------|-----|
| | ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809 | Part No. | 230551B | |
| | | Rev. Date | 2004-06-24 | |
| | | Rev. | NJ4009-CS01 | 2/5 |

SAW Bandpass Filter 230551B



4. Matching Schematic

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



L1 = 82 nH

L2 = 150 nH

5. Marking Configuration

ITF¹⁾ 04A001²⁾

230551B³⁾

● ⁴⁾

1) Manufacturer name

2) Lot Number

3) Part Number

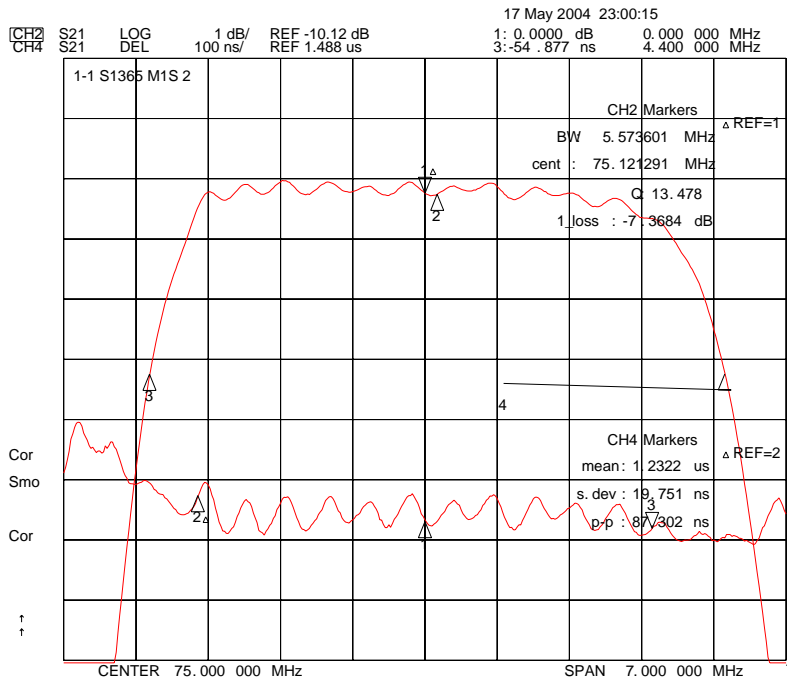
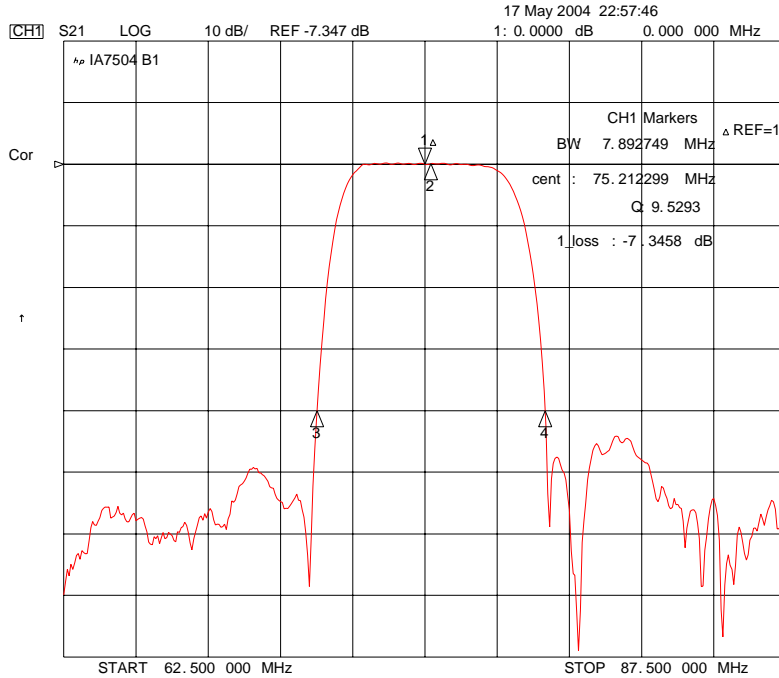
4) Pad Number 1 Index

| | | | | |
|--|---|-----------|-------------|-----|
| | ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809 | Part No. | 230551B | |
| | | Rev. Date | 2004-06-24 | |
| | | Rev. | NJ4009-CS01 | 3/5 |

SAW Bandpass Filter 230551B



6. Typical Performance (at +25°C)



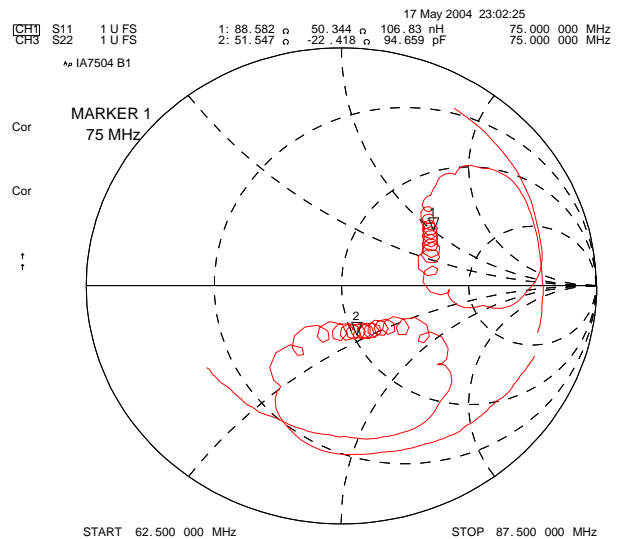
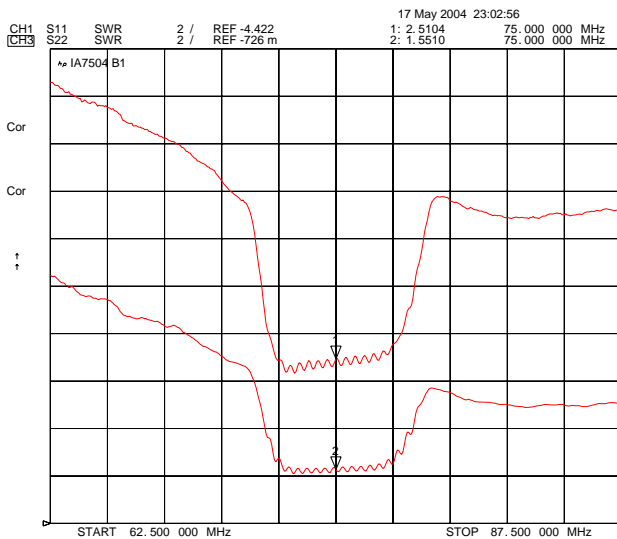
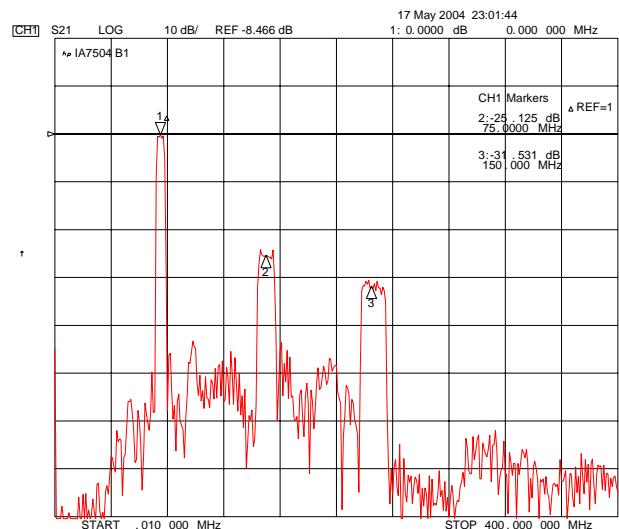
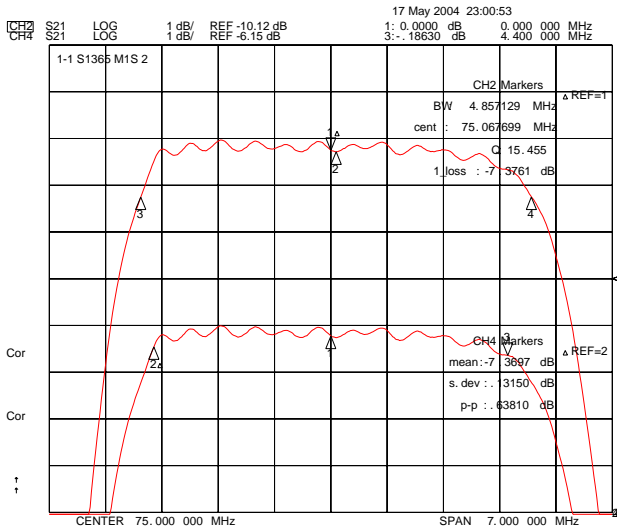
ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

Part No. 230551B

Rev. Date 2004-06-24

Rev. NJ4009-CS01 4/5

SAW Bandpass Filter 230551B



ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

| | | |
|-----------|-------------|-----|
| Part No. | 230551B | |
| Rev. Date | 2004-06-24 | |
| Rev. | NJ4009-CS01 | 5/5 |