

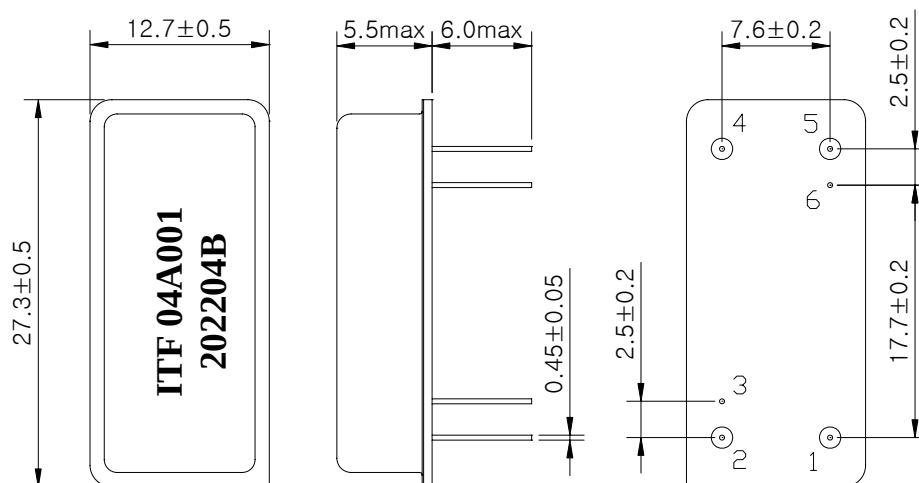
# SAW Bandpass Filter 202204B



## 1. Features

- IF Bandpass Filter
- High Attenuation
- Single-Ended Operation
- DIP Package
- Maximum Storage Temperature Range : -40℃ ~ 85℃
- Electrostatics Sensitive Device (ESD)

## 2. Package Dimension



### Package : D2712

Dimensions shown are nominal in millimeters

Base : Fe(SPCC), Au plating over Ni plated

Cap : Cu & Cr Alloy, Ni Plated

Termination : Kovar, Au Plated

### Pin Configuration

|      |             |
|------|-------------|
| 1    | Input       |
| 5    | Output      |
| 2, 4 | Ground      |
| 3, 6 | Case ground |

|                                                                                                                     |                                                                                                                                   |           |             |     |
|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------|-------------|-----|
| <br>Integrated Technology Future | <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.  | 202204B     |     |
|                                                                                                                     |                                                                                                                                   | Rev. Date | 2004-06-02  |     |
|                                                                                                                     |                                                                                                                                   | Rev.      | NM4010-CS01 | 1/5 |

# SAW Bandpass Filter 202204B



## 3. Specifications

Fo = 70.0 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

|                                          |        | Minimum | Typical | Maximum |
|------------------------------------------|--------|---------|---------|---------|
| Center Frequency                         | MHz    | -       | 70.0    | -       |
| Insertion Loss                           | dB     | -       | 23.5    | 25.0    |
| 1dB Bandwidth                            | MHz    | -       | 19.35   | -       |
| 3dB Bandwidth                            | MHz    | 19.5    | 19.6    | -       |
| 40dB Bandwidth                           | MHz    | -       | 20.8    | 21.0    |
| Amplitude Ripple (Fo +/- 9.375 MHz)      | dB     | -       | 0.8     | 1.0     |
| Group Delay Variation (Fo +/- 9.375 MHz) | nsec   | -       | 50      | 150     |
| Absolute Delay                           | usec   | -       | 2.6     | -       |
| Ultimate Rejection                       | dB     | 50      | 55      | -       |
| Temperature Coefficient of Frequency     | ppm/°C | -       | -72     | -       |

### 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 at room temperature
- 3) All attenuation measurements are measured relative to insertion loss

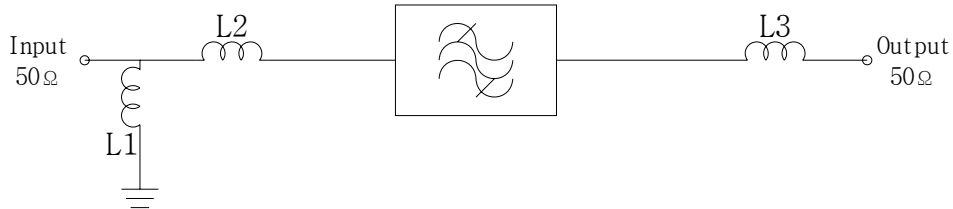
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|                                                                                     |                                                                                                                                   | Rev.      | NM4010-CS01 | 2/5 |

# SAW Bandpass Filter 202204B



## 4. Matching Schematic

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



$$L2 = L3 = 150 \text{ nH,}$$

$$L1 = 270 \text{ nH}$$

## 5. Marking Configuration

ITF<sup>1)</sup> 04A001<sup>2)</sup>

202204B<sup>3)</sup>

1) Manufacturer name

2) Lot Number

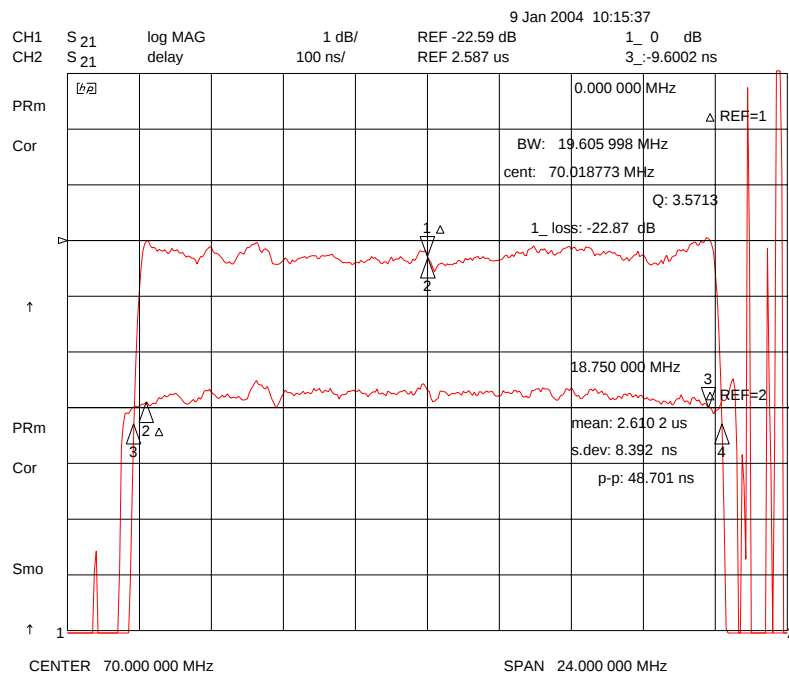
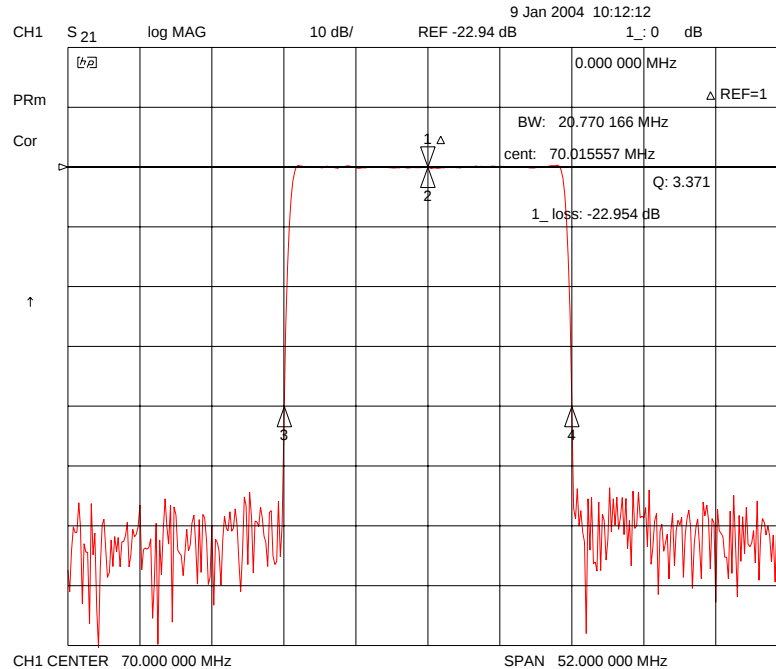
3) Part Number

|                                                                                     |                                                                                                                                   |           |             |     |
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|                                                                                     |                                                                                                                                   | Rev.      | NM4010-CS01 | 3/5 |

# SAW Bandpass Filter 202204B



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



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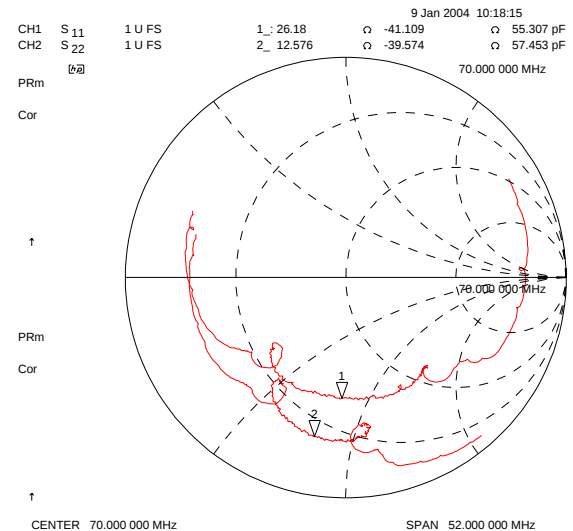
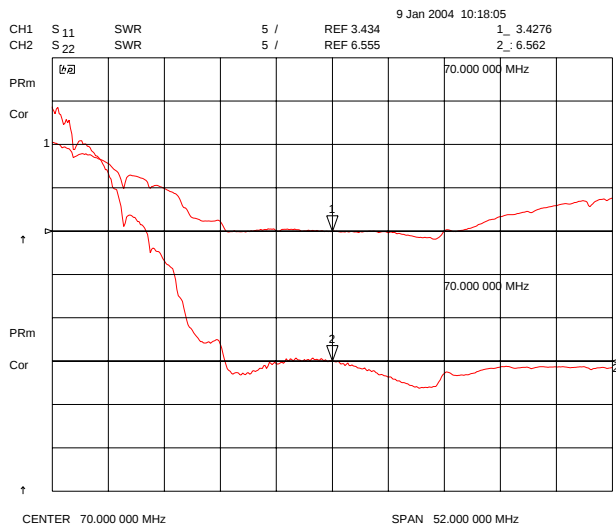
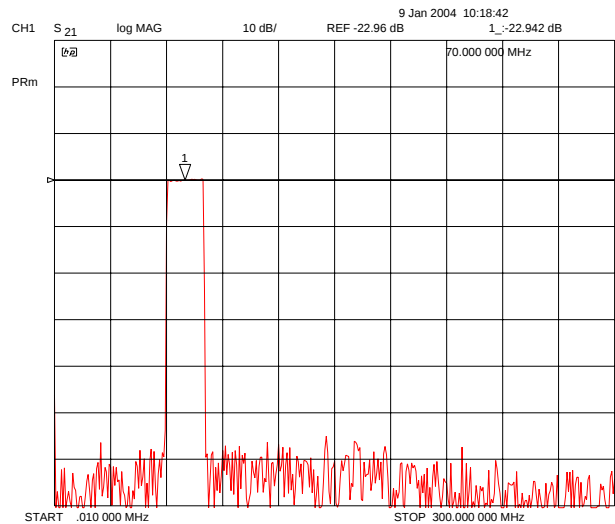
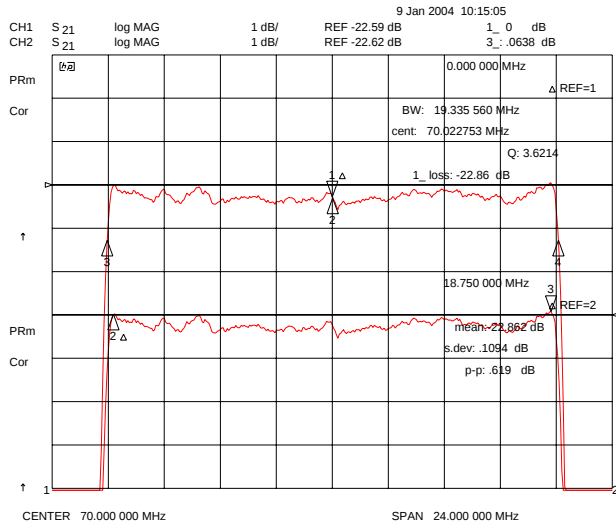
2004-06-02

Rev.

NM4010-CS01

4/5

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5/5