

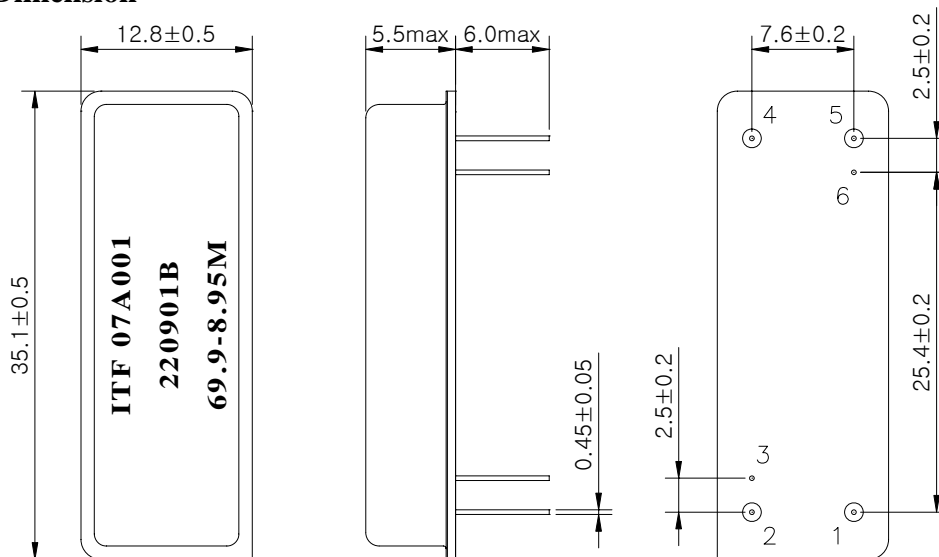
# SAW Bandpass Filter 220901B



## 1. Features

- IF bandpass filter
- High attenuation
- Single-ended operation
- SMD Package
- Maximum Storage Temperature Range : -40°C ~ 85°C
- Electrostatics Sensitive Device (ESD)

## 2. Package Dimension



### Package : D3512


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 |

|   |   |           |             |     |
|---|---|-----------|-------------|-----|
|  | <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.  | 220901B     |     |
|   |   | Rev. Date | 2007-03-06  |     |
|   |   | Rev.      | NM7002-CS01 | 1/5 |

# SAW Bandpass Filter 220901B



## 3. Specifications

Fo = 69.9 MHz


Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

|   |        | Minimum | Typical | Maximum |
|---|--------|---------|---------|---------|
| Center Frequency                        | MHz    | -       | 69.9    | -       |
| Insertion Loss                          | dB     | -       | 23.0    | 25.0    |
| 1dB Bandwidth                           | MHz    | -       | 8.96    | -       |
| 3dB Bandwidth                           | MHz    | 9.0     | 9.17    | -       |
| 40dB Bandwidth                          | MHz    | -       | 9.98    | 10.2    |
| Amplitude Ripple (Fo +/- 4.22 MHz)      | dB     | -       | 0.4     | 1.0     |
| Group Delay Variation (Fo +/- 4.22 MHz) | nsec   | -       | 45      | 100     |
| Absolute Delay                          | usec   | -       | 3.6     | -       |
| Ultimate Rejection                      | dB     | 50      | 52      | -       |
| 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

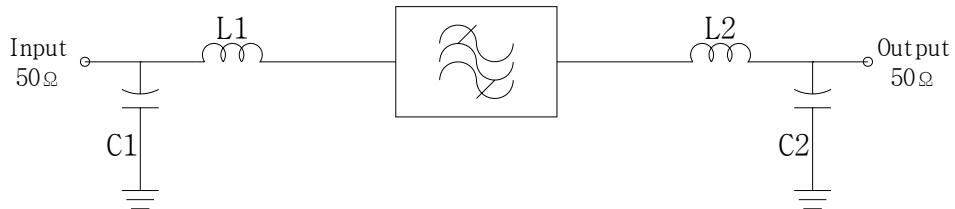
|   |   |           |             |     |
|---|---|-----------|-------------|-----|
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## 4. Matching Schematic

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



$$L1 = L2 = 68\text{nH},$$

$$C1 = C2 = 51\text{pF}$$

## 5. Marking Configuration

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

220901B<sup>3)</sup>

69.9<sup>4)</sup>-8.95M<sup>5)</sup>

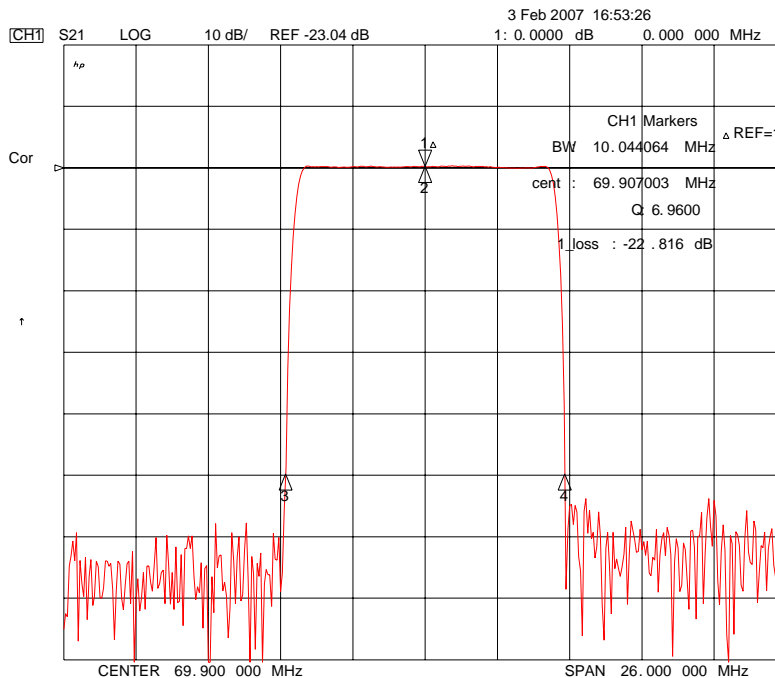
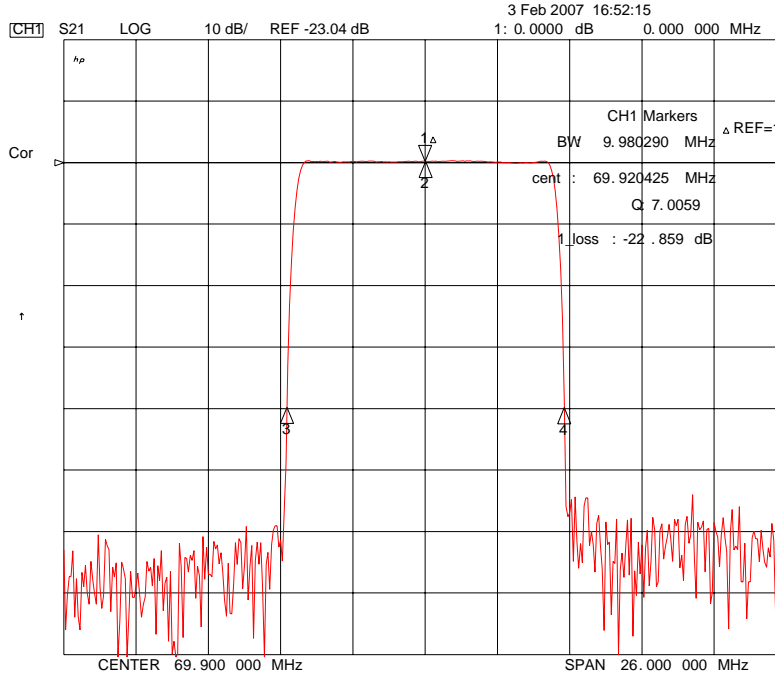
- 1) Manufacturer name
- 2) Lot Number
- 3) Part Number
- 4) Center Frequency
- 5) 1dB Band-width

|  |   |           |             |     |
|--|---|-----------|-------------|-----|
|  | <b>ITF Co., Ltd.</b>  | Part No.  | 220901B     |     |
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## 6. Typical Performance ( at +25°C )



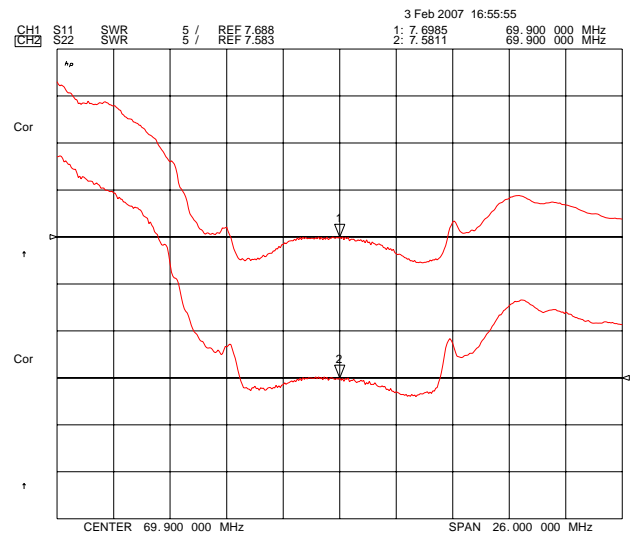
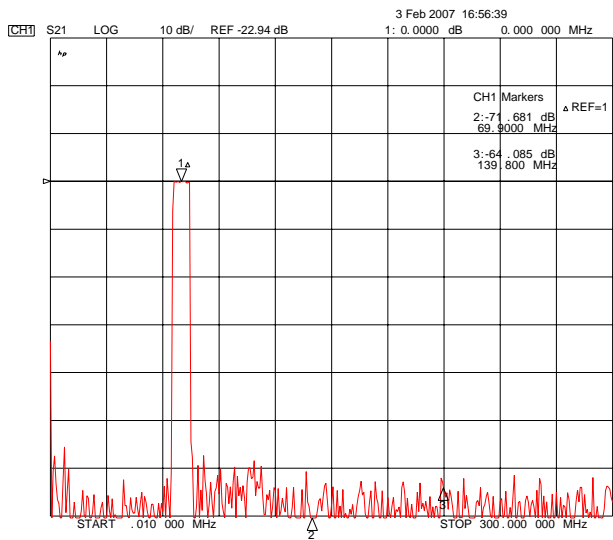
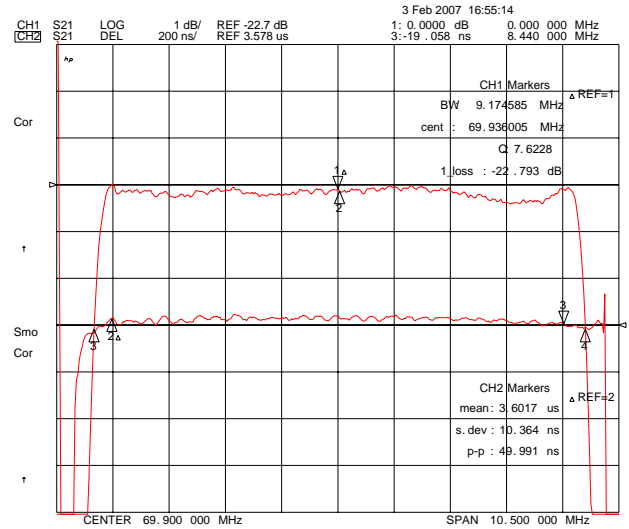
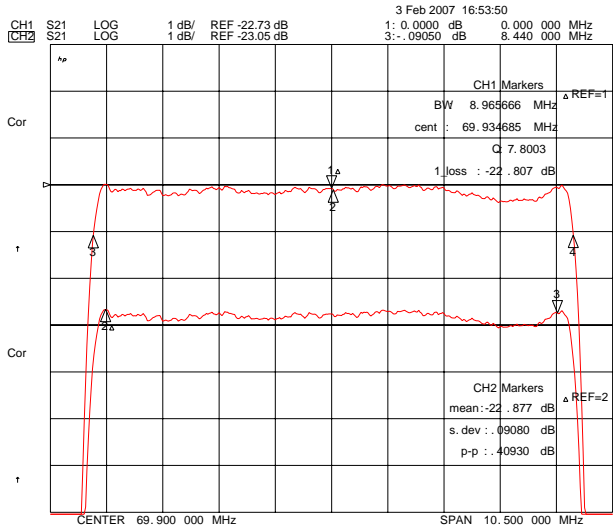
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