

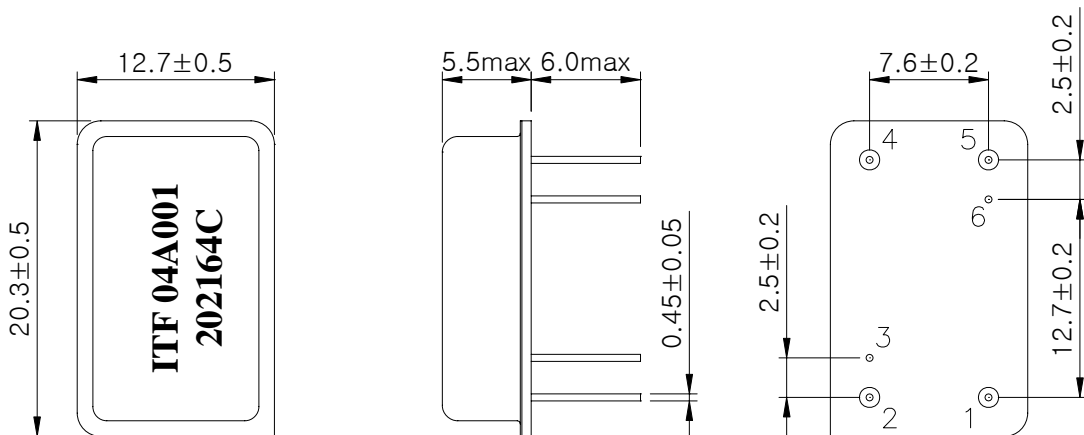
# SAW Bandpass Filter 202164C



## 1. Features

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

## 2. Package Dimension



### Package : D2012

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.  | 202164C     |     |
|  |   | Rev. Date | 2004-09-07  |     |
|  |   | Rev.      | NM4022-CS01 | 1/5 |

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## 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    | 69.95   | 70.0    | 70.05   |
| Insertion Loss                         | dB     | -       | 22.5    | 25.0    |
| 1dB Bandwidth                          | MHz    | -       | 4.0     | -       |
| 3dB Bandwidth                          | MHz    | 4.0     | 4.4     | -       |
| 40dB Bandwidth                         | MHz    | -       | 6.12    | 6.3     |
| Amplitude Ripple (Fo +/- 1.8 MHz)      | dB     | -       | 0.6     | 1.0     |
| Group Delay Variation (Fo +/- 1.8 MHz) | nsec   | -       | 60      | 150     |
| Absolute Delay                         | usec   | -       | 2.84    | -       |
| Ultimate Rejection                     | dB     | 50      | 55      | -       |
| Temperature Coefficient of Frequency   | ppm/°C | -       | -23     | -       |

### 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

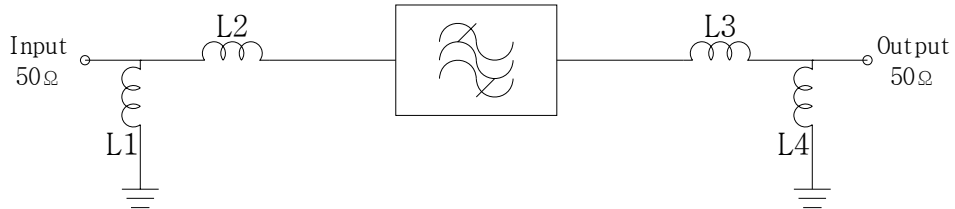
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|---|---|-----------|-------------|-----|
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## 4. Matching Schematic

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



$$L2 = L3 = 82 \text{ nH,}$$

$$L1 = L4 = 68 \text{ nH}$$

## 5. Marking Configuration


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

202164C<sup>3)</sup>

1) Manufacturer name

2) Lot Number

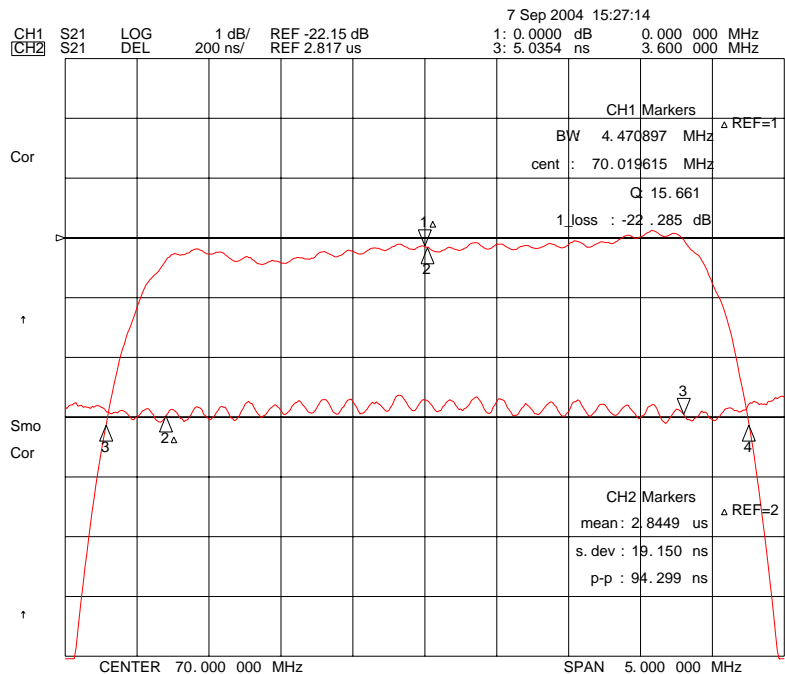
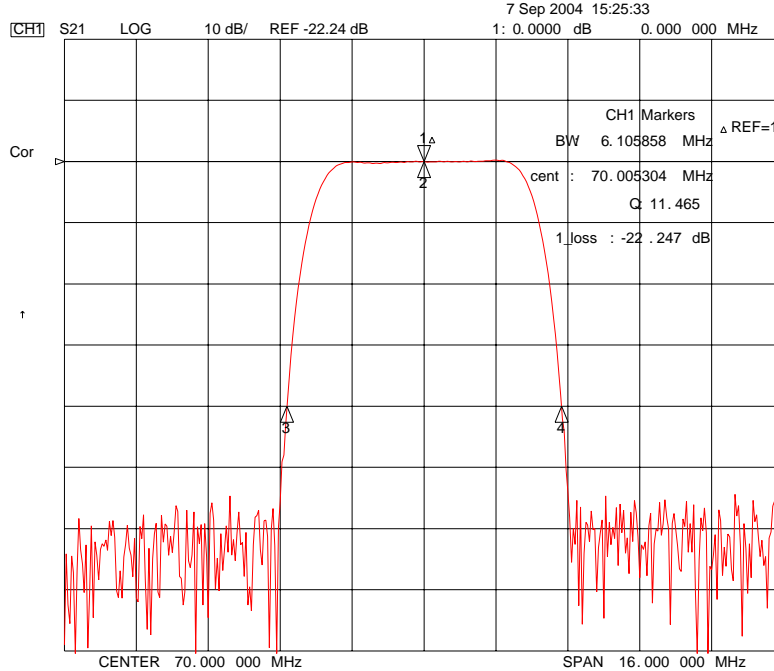
3) Part Number

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



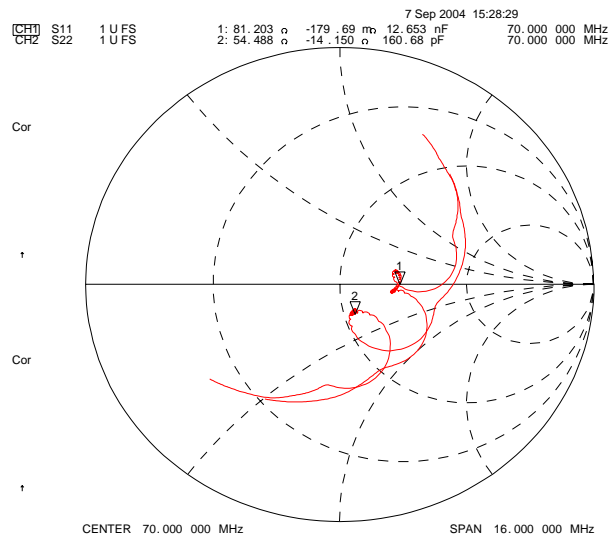
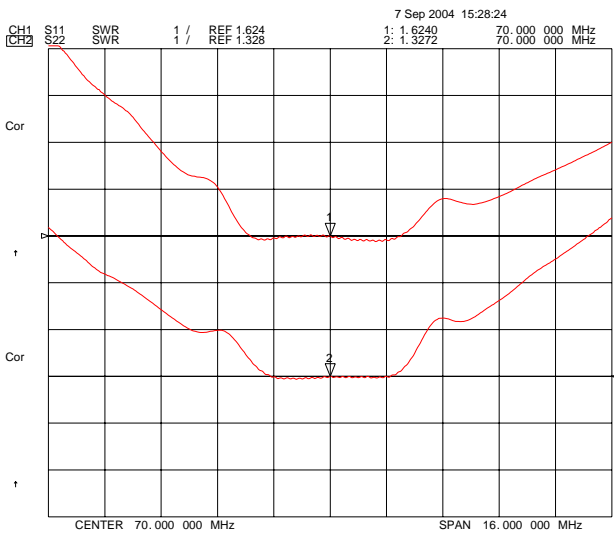
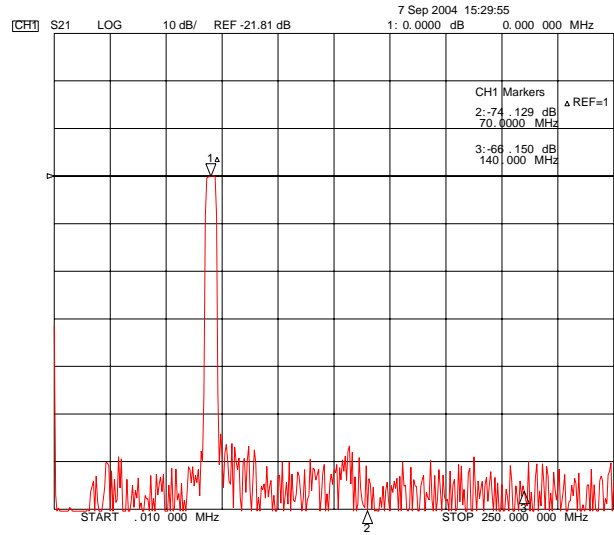
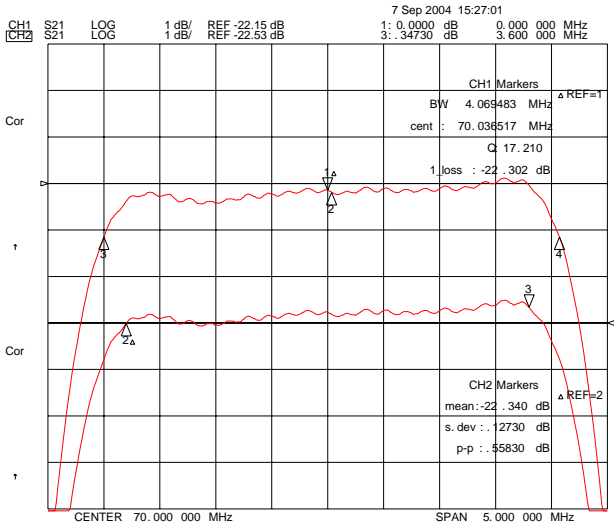
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