

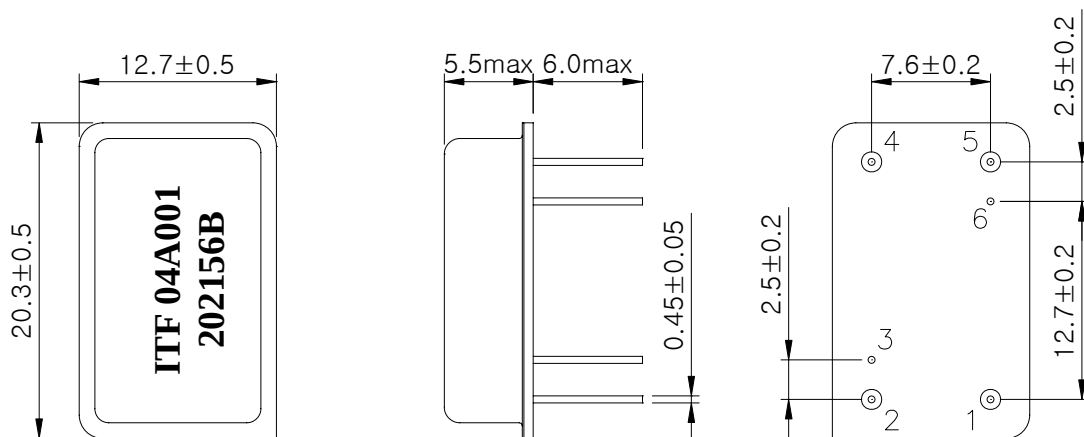
# SAW Bandpass Filter 202156B



## 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 : 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 |

|                                                                                                                     |                                                                                                                                   |             |            |
|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------|------------|
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|                                                                                                                     |                                                                                                                                   | Rev. Date   | 2004-06-03 |
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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    | 69.94   | 70.0    | 70.06   |
| Insertion Loss                         | dB     | -       | 22.5    | 25.0    |
| 1dB Bandwidth                          | MHz    | -       | 11.9    | -       |
| 3dB Bandwidth                          | MHz    | 12.0    | 12.3    | -       |
| 40dB Bandwidth                         | MHz    | -       | 13.7    | 14.0    |
| Amplitude Ripple (Fo +/- 5.7 MHz)      | dB     | -       | 0.6     | 1.0     |
| Group Delay Variation (Fo +/- 5.7 MHz) | nsec   | -       | 70      | 200     |
| Absolute Delay                         | usec   | -       | 2.74    | -       |
| Ultimate Rejection                     | dB     | 45      | 48      | -       |
| Temperature Coefficient of Frequency   | ppm/°C | -       | -94     | -       |

### 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 )



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

## 5. Marking Configuration

ITF<sup>1)</sup> 04A001<sup>2)</sup>  
202156B<sup>3)</sup>

1) Manufacturer name

2) Lot Number

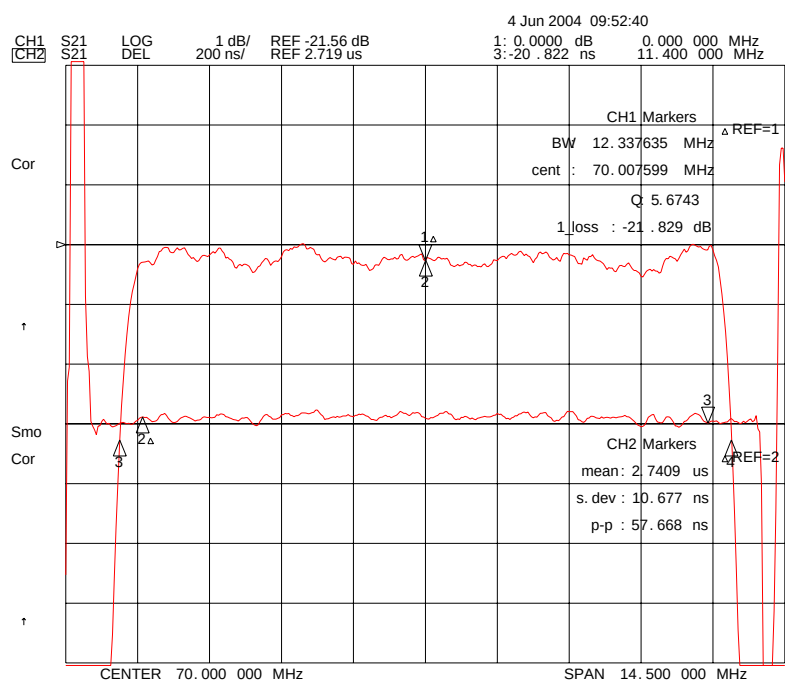
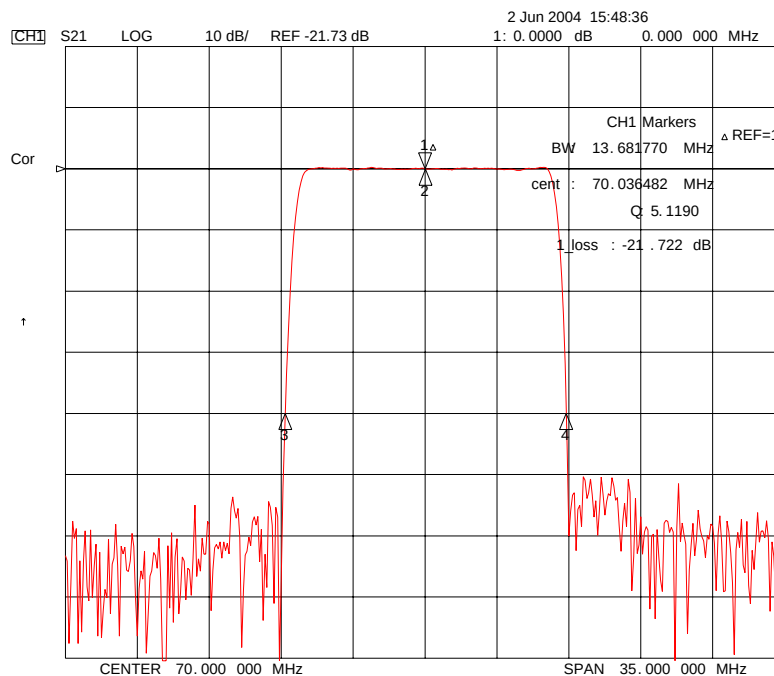
3) Part Number

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



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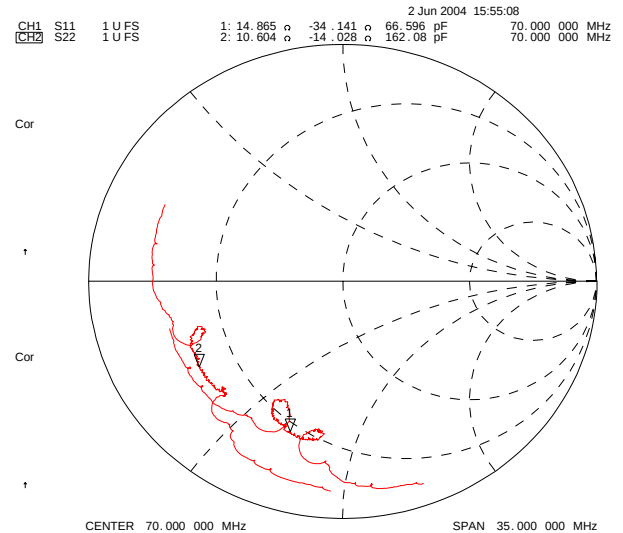
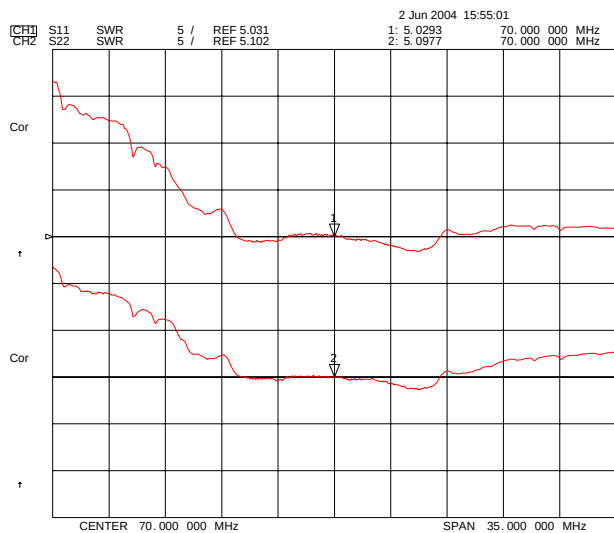
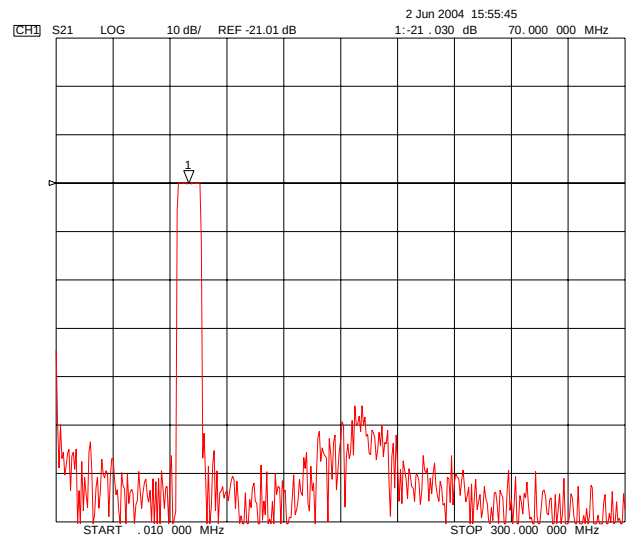
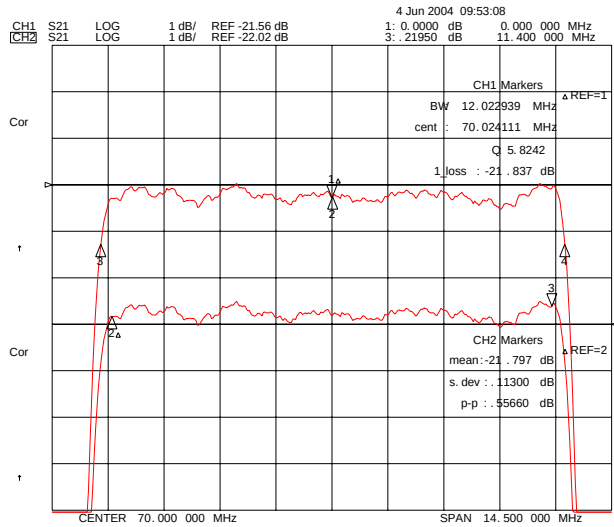
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