

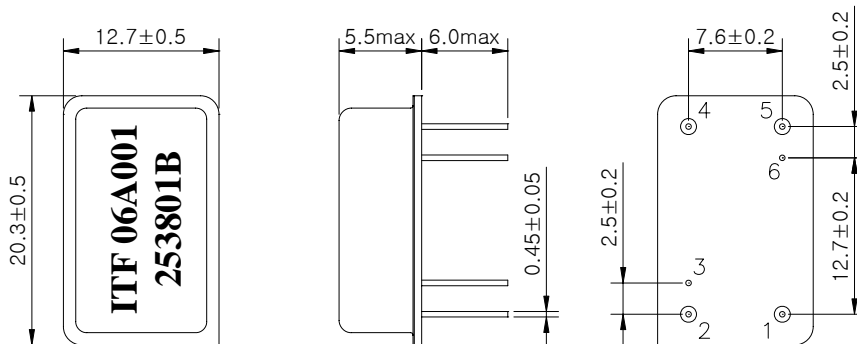
# SAW Bandpass Filter 253801B



## 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.  | 253801B     |     |
|   |   | Rev. Date | 2006-05-10  |     |
|   |   | Rev.      | NM6010-CS01 | 1/5 |

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## 3. Specifications

Fo = 140.0 MHz


Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

|   |        | Minimum | Typical | Maximum |
|---|--------|---------|---------|---------|
| Center Frequency                        | MHz    | -       | 140.0   | -       |
| Insertion Loss                          | dB     | -       | 23.0    | 25.0    |
| 1dB Bandwidth                           | MHz    | 36.0    | -       | -       |
| 3dB Bandwidth                           | MHz    | -       | 38.0    | -       |
| 40dB Bandwidth                          | MHz    | -       | 42.3    | 43.0    |
| Amplitude Ripple (Fo +/- 17.5 MHz)      | dB     | -       | 0.6     | 1.0     |
| Group Delay Variation (Fo +/- 17.5 MHz) | nsec   | -       | 20      | 50      |
| Absolute Delay                          | usec   | -       | 1.2     | -       |
| 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

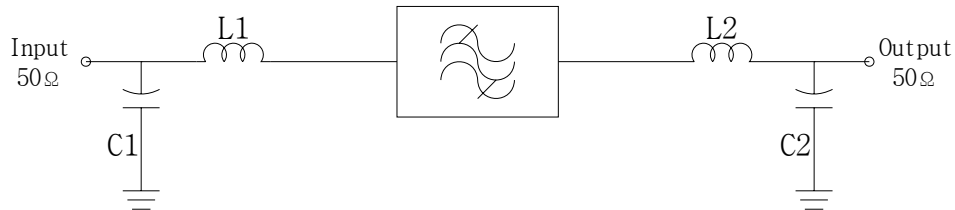
|   |   |           |             |     |
|---|---|-----------|-------------|-----|
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## 4. Matching Schematic

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



L1 = 82nH, L2 = 68nH

C1 = 8pF, C2 = 8pF

## 5. Marking Configuration

ITF<sup>1)</sup> 06A001<sup>2)</sup>

253801B<sup>3)</sup>

1) Manufacturer name

2) Lot Number

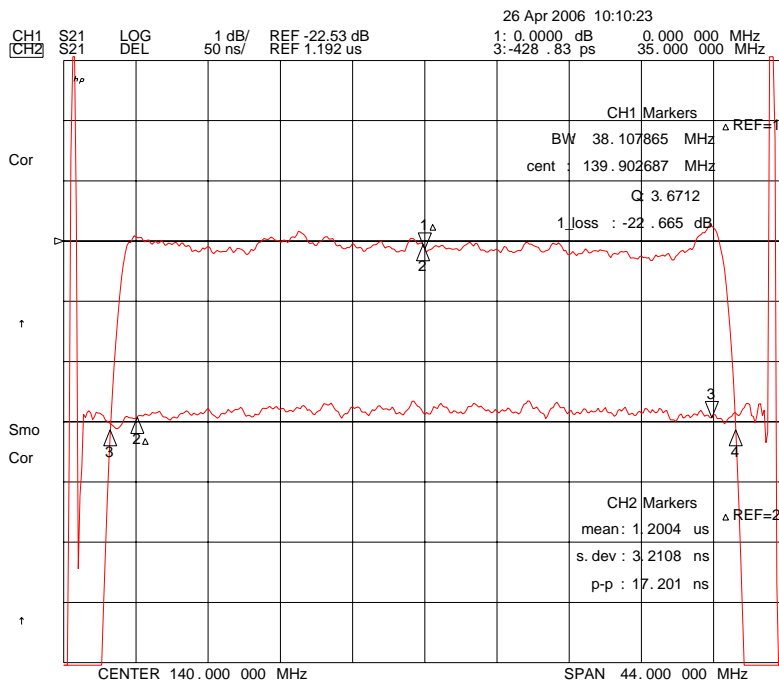
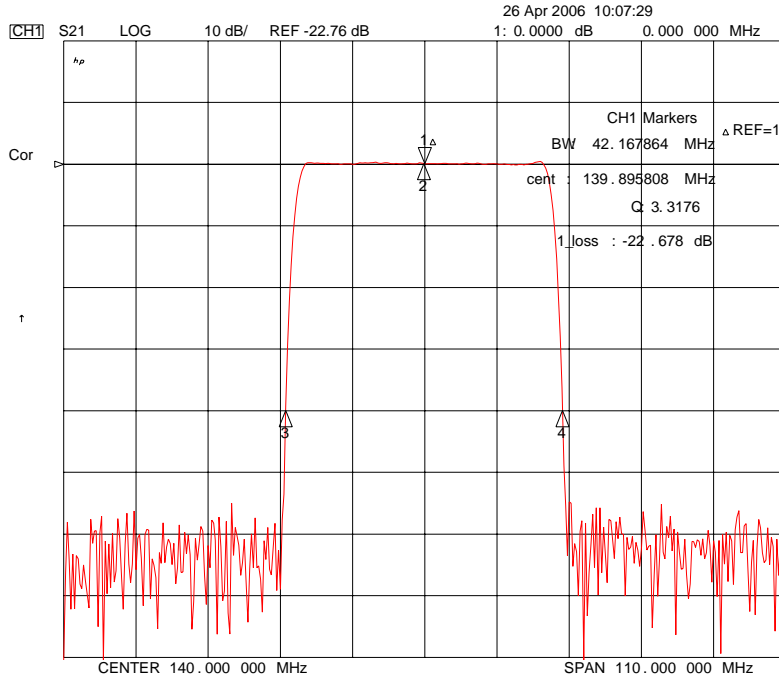
3) Part Number

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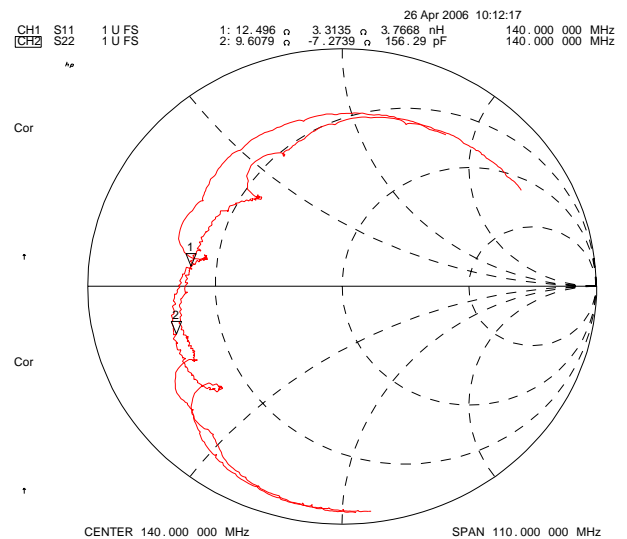
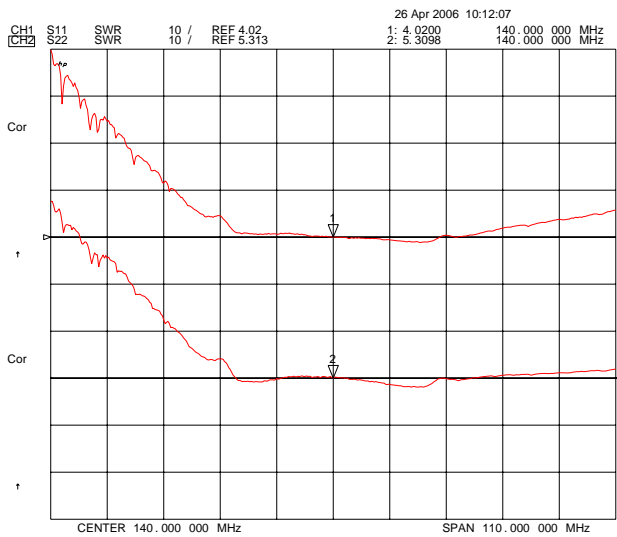
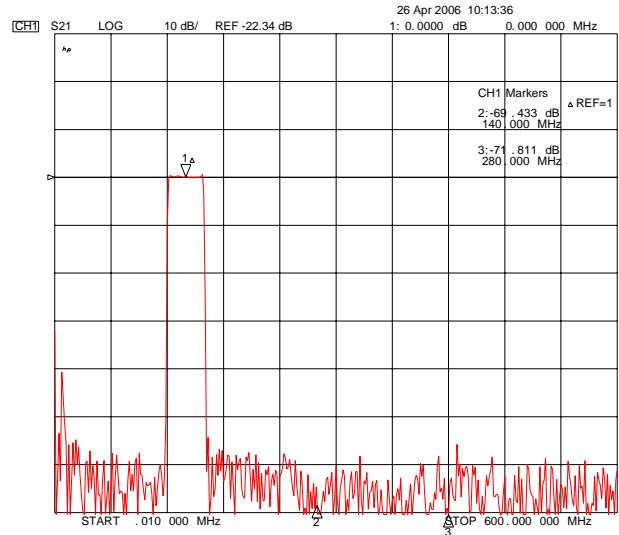
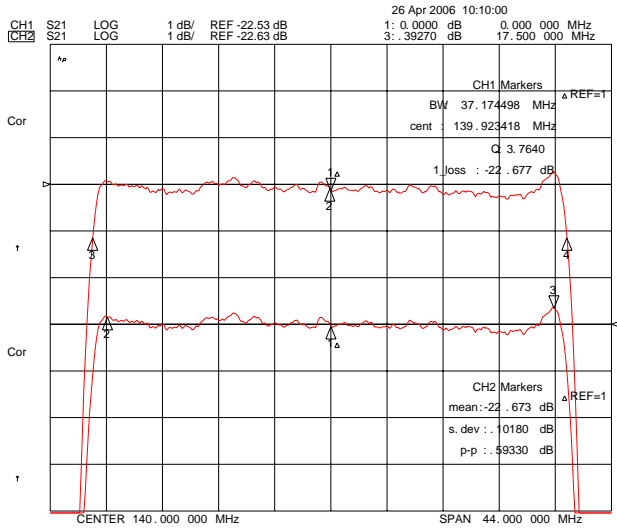
## 6. Typical Performance ( at +25°C )



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| Rev.      | NM6010-CS01 | 5/5 |