

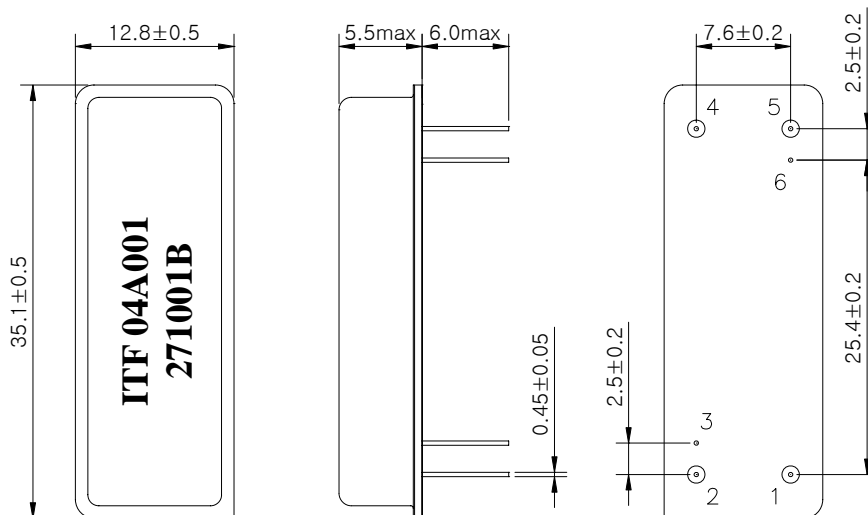
SAW Bandpass Filter 271001B



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 : 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 |

| | | | | |
|--|---|-----------|-------------|-----|
| | ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809 | Part No. | 271001B | |
| | | Rev. Date | 2004-04-26 | |
| | | Rev. | NM3027-CS03 | 1/6 |

SAW Bandpass Filter 271001B



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 | - | 24.5 | 26.0 |
| 3dB Bandwidth | MHz | 10.9 | 10.95 | 11.1 |
| 40dB Bandwidth | MHz | - | 11.7 | 12.0 |
| Amplitude Ripple (Fo +/- 5.2 MHz) | dB | - | 0.8 | 1.0 |
| Group Delay Variation (Fo +/- 5.2 MHz) | nsec | - | 50 | 150 |
| Relative Attenuation | | | | |
| 30.000 to 63.925 MHz | dB | 48 | 50 | - |
| 63.925 to 64.125 MHz | dB | 38 | 42 | - |
| 75.875 to 76.075 MHz | dB | 38 | 42 | - |
| 76.075 to 100.00 MHz | dB | 48 | 50 | - |
| Absolute Delay | usec | - | 3.42 | - |
| 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

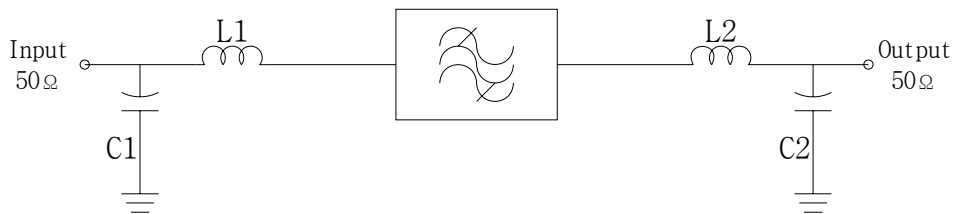
| | | | | |
|--|---|-----------|-------------|-----|
| | ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809 | Part No. | 271001B | |
| | | Rev. Date | 2004-04-26 | |
| | | Rev. | NM3027-CS03 | 2/6 |

SAW Bandpass Filter 271001B



4. Matching Schematic

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



L1 = 56 nH, L2 = 68 nH

C1 = C2 = 47 pF

5. Marking Configuration


ITF¹⁾ 04A001²⁾

271001B³⁾

1) Manufacturer name

2) Lot Number

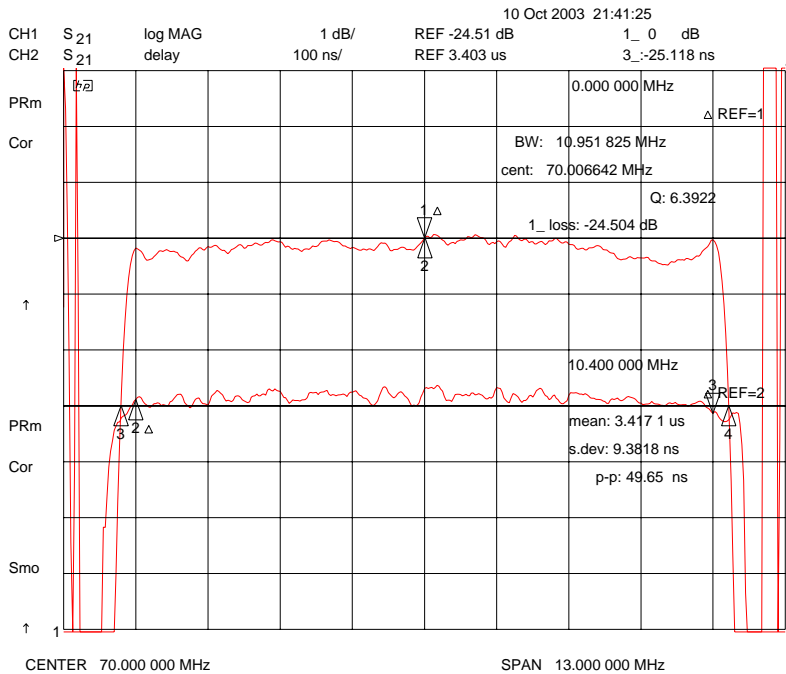
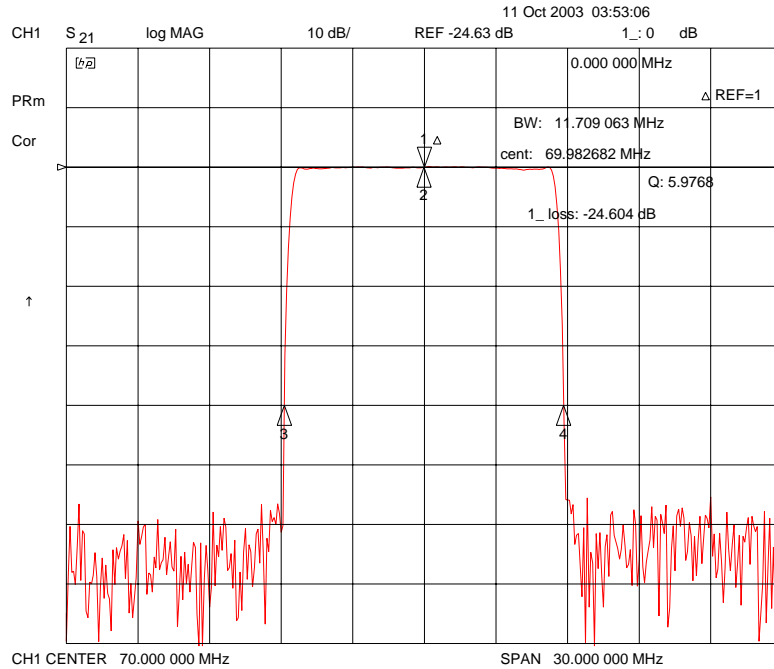
3) Part Number

| | | | | |
|---|---|-----------|-------------|-----|
|  Integrated Technology Future | ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809 | Part No. | 271001B | |
| | | Rev. Date | 2004-04-26 | |
| | | Rev. | NM3027-CS03 | 3/6 |

SAW Bandpass Filter 271001B



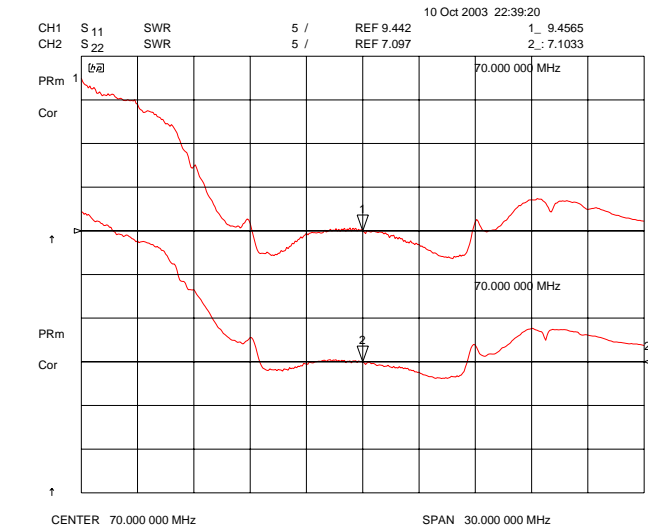
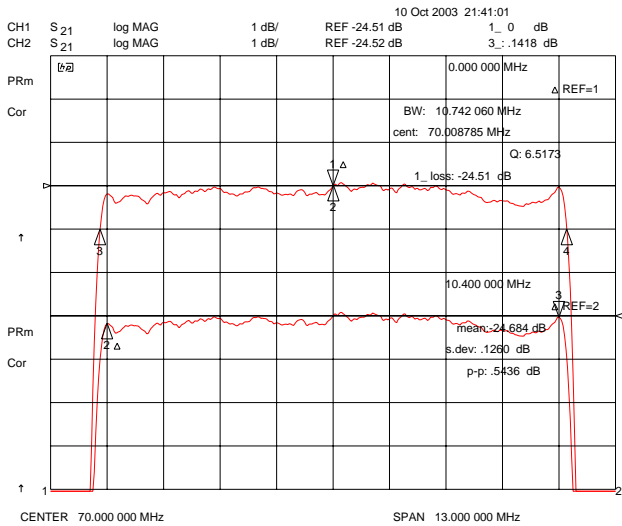
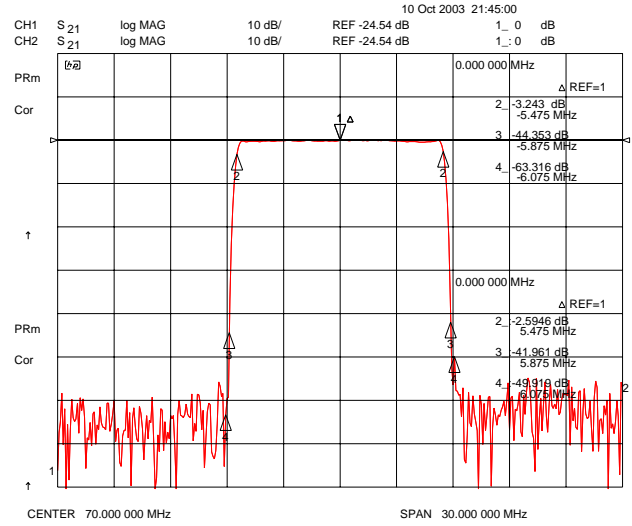
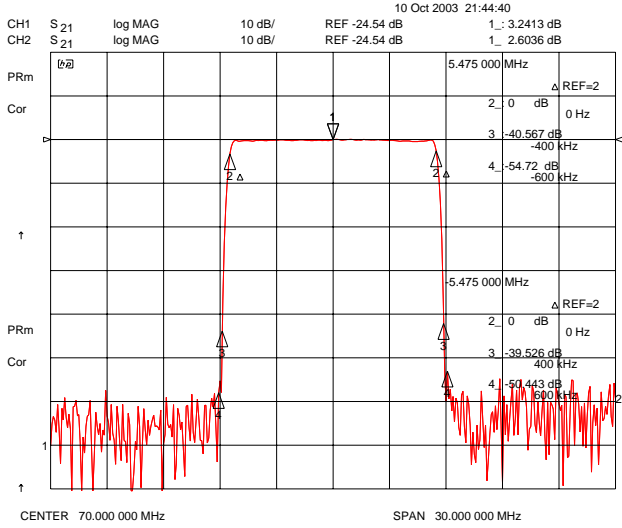
6. Typical Performance (at +25°C)



ITF Co., Ltd.
102-901, Bucheon Technopark 364,
Samjeong-Dong, Ojeong-Gu, Bucheon-City,
Gyeonggi-Do, Korea 421-809

| | | |
|-----------|-------------|-----|
| Part No. | 271001B | |
| Rev. Date | 2004-04-26 | |
| Rev. | NM3027-CS03 | 4/6 |

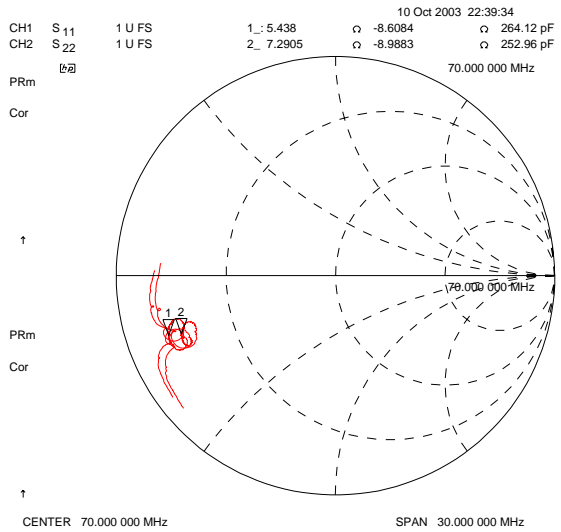
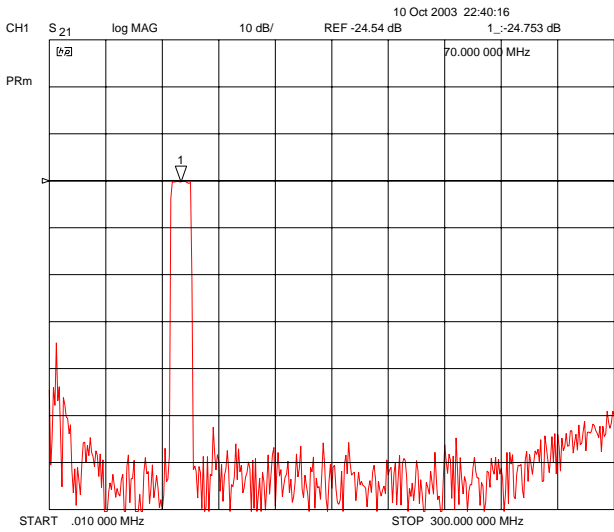
SAW Bandpass Filter 271001B



ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

| | | |
|-----------|-------------|-----|
| Part No. | 271001B | |
| Rev. Date | 2004-04-26 | |
| Rev. | NM3027-CS03 | 5/6 |

SAW Bandpass Filter 271001B



ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

| | | |
|-----------|-------------|-----|
| Part No. | 271001B | |
| Rev. Date | 2004-04-26 | |
| Rev. | NM3027-CS03 | 6/6 |