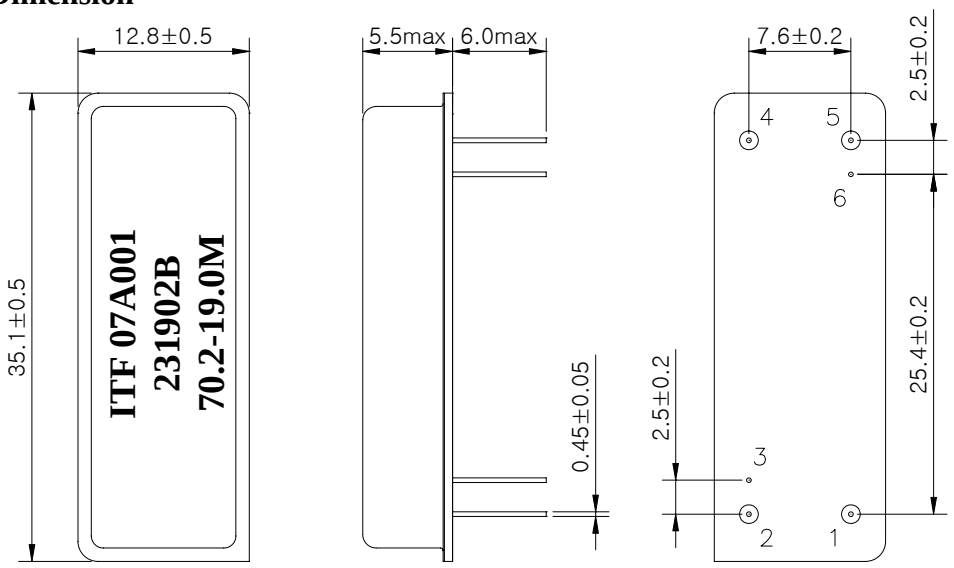
# SAW Bandpass Filter 231902B

## 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 : 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 |

## 3. Specifications

Fo = 70.2 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

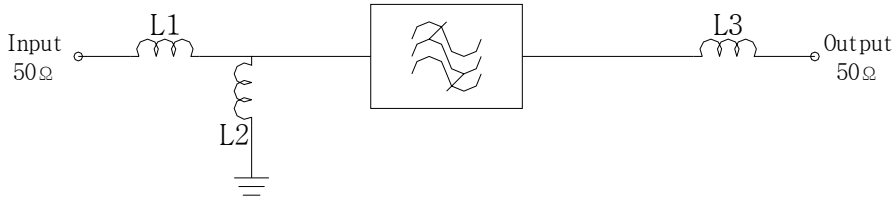
| | | Minimum | Typical | Maximum |
|---|---|---|---|---|
| Center Frequency | MHz | - | 70.2 | - |
| Insertion Loss | dB | - | 24.3 | - |
| 1dB Bandwidth | MHz | - | 19.0 | - |
| 3dB Bandwidth | MHz | 19.1 | 19.21 | - |
| 50dB Bandwidth | MHz | - | 20.14 | 20.2 |
| Amplitude Ripple (Fo +/- 9.22 MHz) | dB | - | 0.45 | 1.0 |
| Group Delay Variation (Fo +/- 9.22 MHz) | nsec | - | 40 | 100 |
| Absolute Delay | usec | - | 3.34 | - |
| Ultimate Rejection | dB | 50 | 55 | - |
| Relative Attenuation<br>Fo +/- 10MHz | dB | 26 | 32 | |
| 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

## 4. Matching Schematic

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




L1 = 82nH, L2 = 390nH, L3 = 82H

## 5. Marking Configuration

ITF[1] 07A001[2]

231902B[3]

70.2[4] -19.0M[5]

1) Manufacturer name

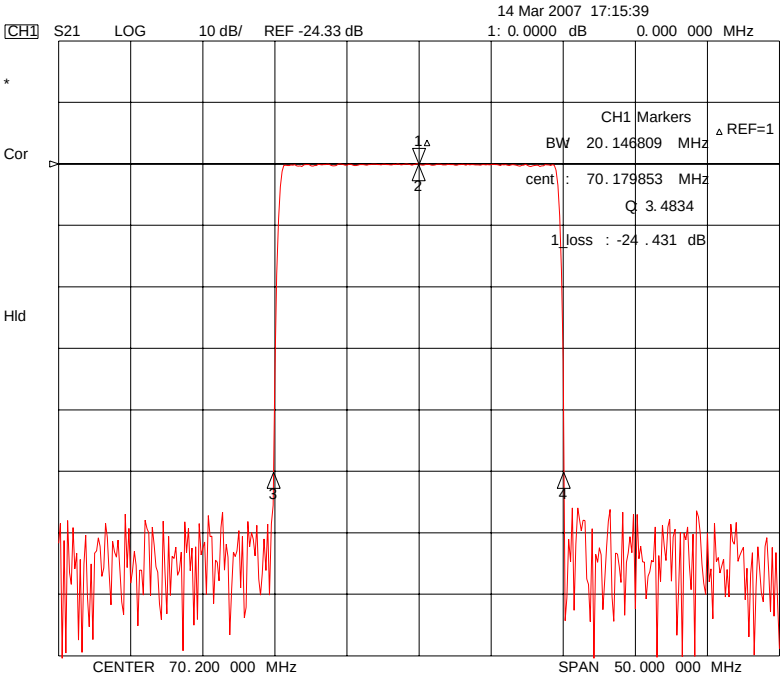
2) Lot Number

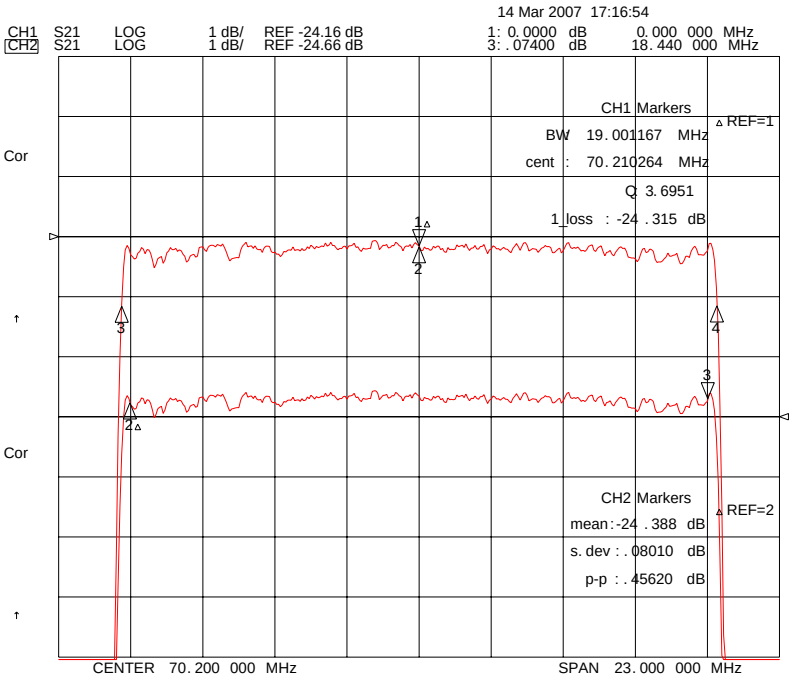
3) Part Number

4) Center Frequecy

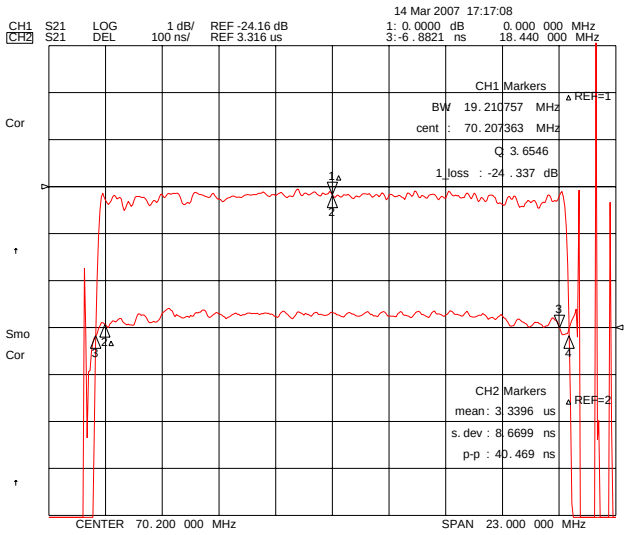
5) 1dB-Bandwidth

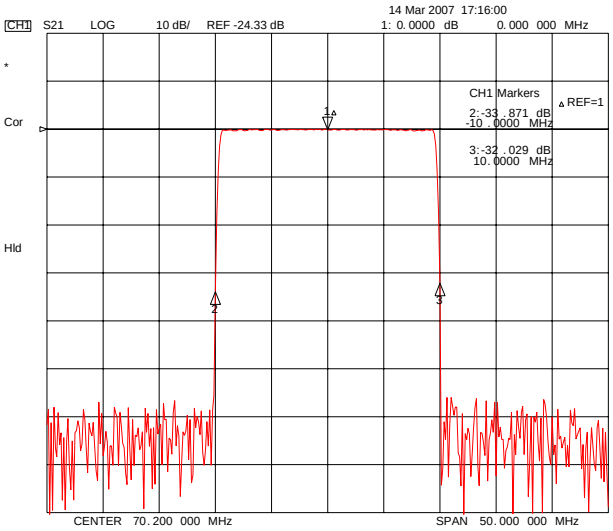
## 6. Typical Performance ( at +25℃ )

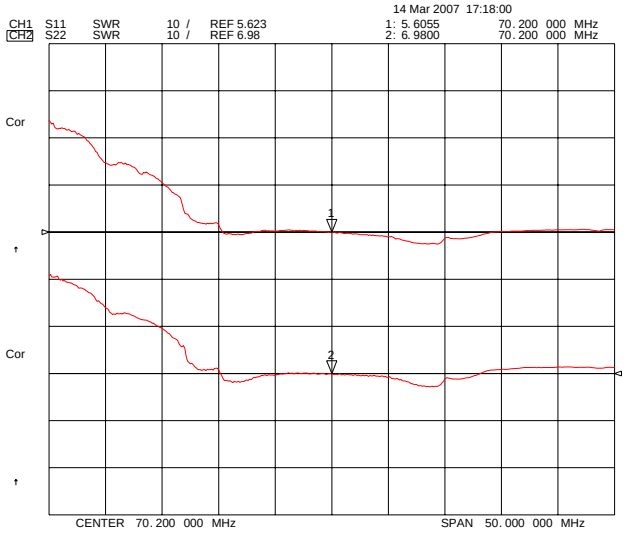


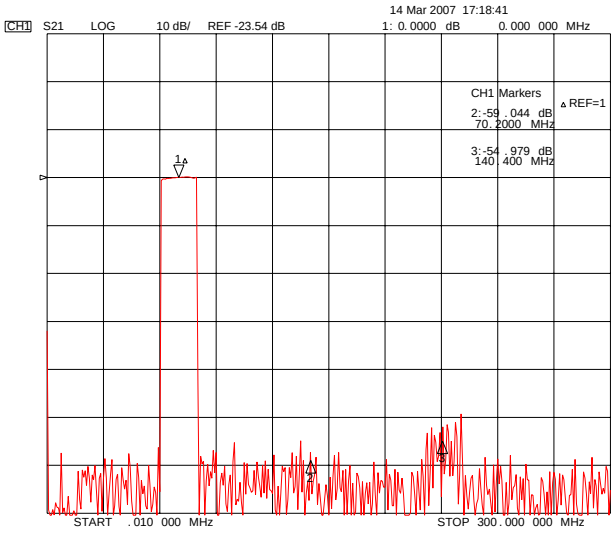



# SAW Bandpass Filter 231902B




| | | | | |
|---|---|---|---|---|
| Integrated Technology Future | **I T F Co., Ltd.**<br>102-901, Bucheon Technopark 364,<br>Samjeong-Dong, Ojeong-Gu, Bucheon-City,<br>Gyounggi-Do, Korea 421-809 | Part No. | 231902B | |
| | | Rev. Date | 2007-04-11 | |
| | | Rev. | NM7006-CS01 | 5/5 |