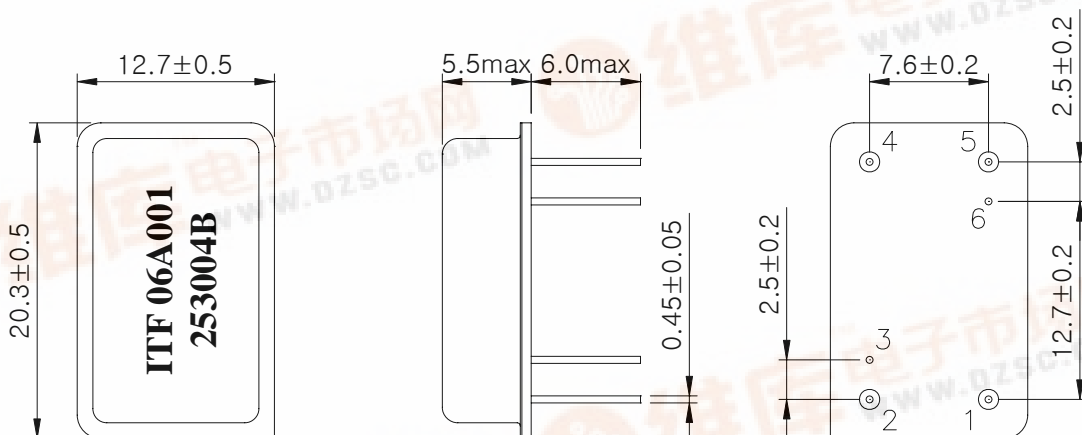


SAW Bandpass Filter 253004B

1. Features

- IF bandpass filter
- High attenuation
- Single-ended operation
- DIP Package
- Maximum Storage Temperature Range : -30°C ~ 80°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 |

| | | | | |
|--|---|-----------|-------------|-----|
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| | | Rev. Date | 2006-09-11 | |
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SAW Bandpass Filter 253004B

3. Specifications

Fo = 125.0 MHz

Terminating source impedance : 50Ω and matching network


Terminating load impedance : 50Ω and matching network

| Operating Temperature Range : -30℃ ~ +80℃ | | Minimum | Typical | Maximum |
|---|-------|---------|---------|---------|
| Center Frequency | MHz | - | 125.0 | - |
| Insertion Loss | dB | - | 21.0 | 23.0 |
| 1dB Bandwidth | MHz | - | 29.6 | - |
| 3dB Bandwidth | MHz | 30.3 | 30.55 | - |
| 50dB Bandwidth | MHz | - | 34.73 | 35.0 |
| Amplitude Ripple (Fo +/- 13.5 MHz) | dB | - | 0.6 | 1.0 |
| Group Delay Variation (Fo +/- 13.5 MHz) | nsec | - | 30 | 50 |
| Absolute Delay | usec | - | 0.95 | 1 |
| Ultimate Rejection | dB | 50 | 55 | - |
| Temperature Coefficient of Frequency | ppm/℃ | - | -80 | - |

| Room temperature : + 25℃ | | Minimum | Typical | Maximum |
|---|------|---------|---------|---------|
| Center Frequency | MHz | - | 125.0 | - |
| Insertion Loss | dB | - | 21.0 | 23.0 |
| Amplitude Ripple (Fo +/- 14.0 MHz) | dB | - | 0.6 | 1.0 |
| Group Delay Variation (Fo +/- 14.0 MHz) | nsec | - | 30 | 50 |

Notes :

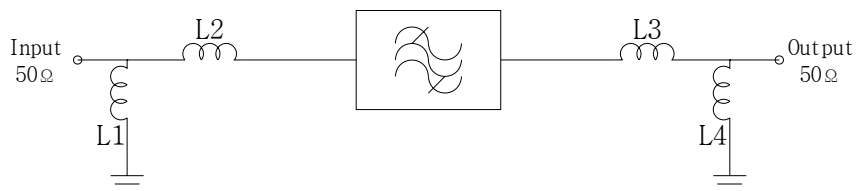
- 1) All specifications are based on the matching schematic shown below
- 2) All specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature
- 3) All attenuation measurements are measured relative to insertion loss

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

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



$$L1 = L4 = 180\text{nH},$$

$$L2 = L3 = 39\text{nH}$$

5. Marking Configuration


ITF¹⁾06A001²⁾

253004B³⁾

1) Manufacturer name

2) Lot Number

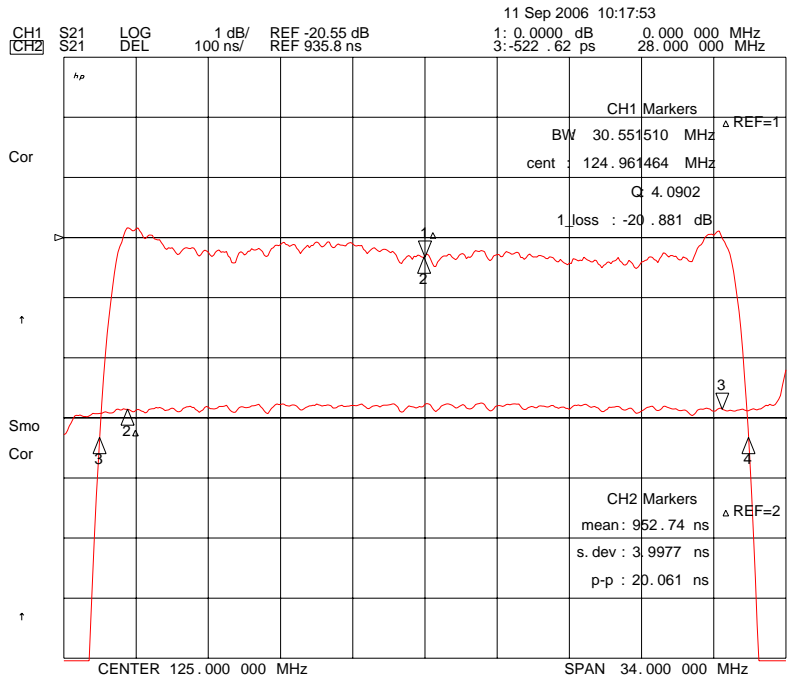
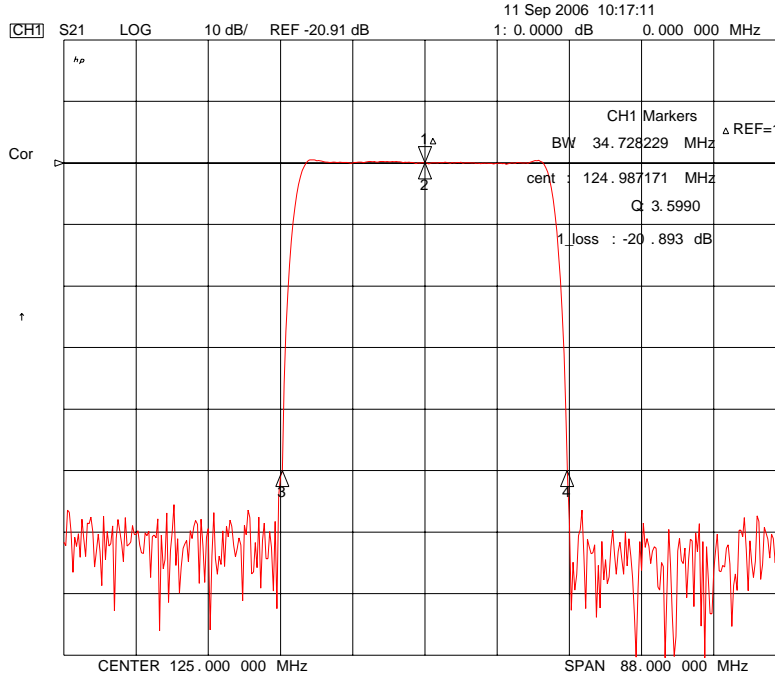
3) Part Number

| | | | | |
|---|---|-----------|-------------|-----|
|  Integrated Technology Future | ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809 | Part No. | 253004B | |
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6. Typical Performance (at +25°C)



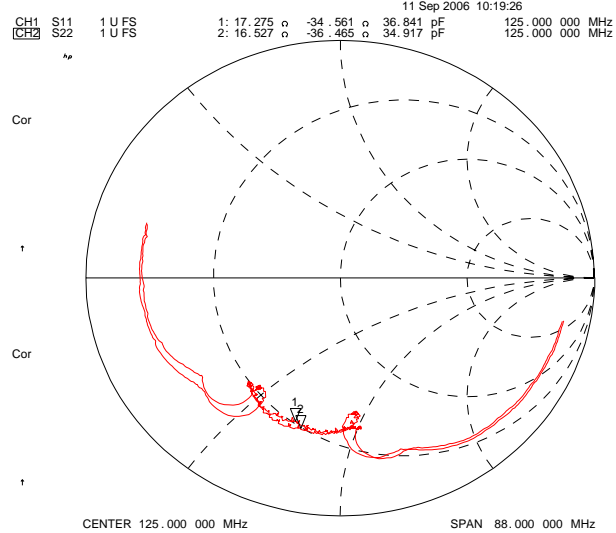
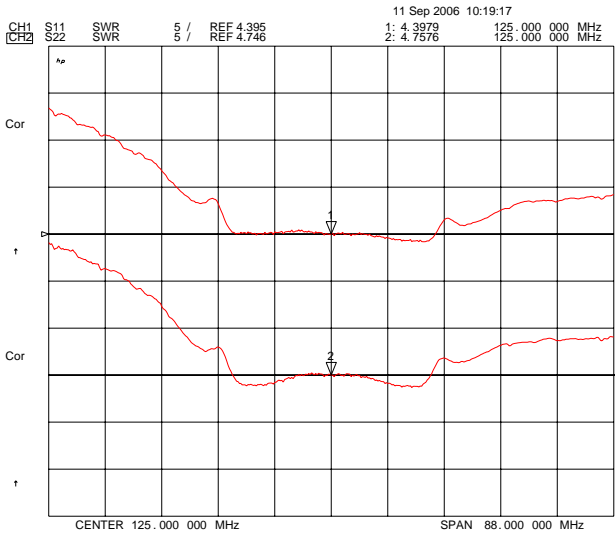
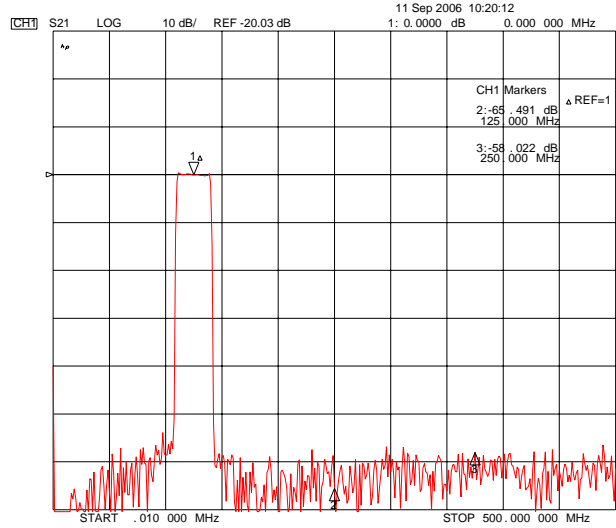
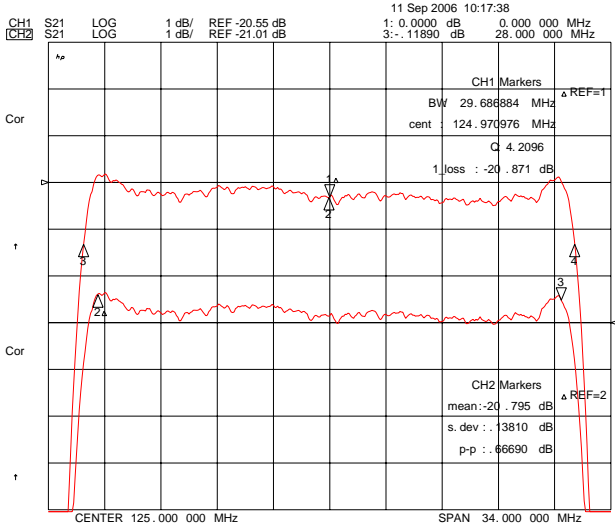
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