

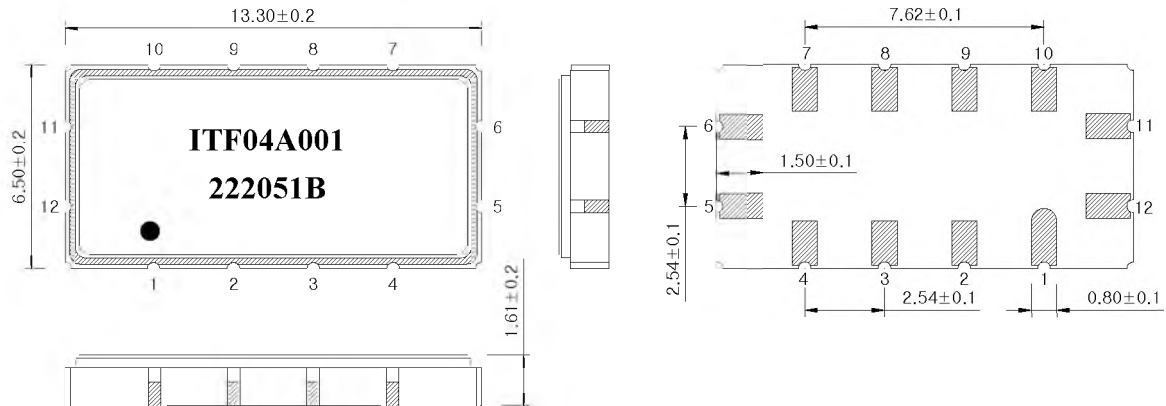
SAW Bandpass Filter 222051B



1. Features

- IF Bandpass Filter
- Low-Loss Filter
- Single-Ended Operation
- Ceramic Surface Mount Device (SMD) Package
- Maximum Storage Temperature Range : -40 °C ~ 85 °C
- Electrostatics Sensitive Device (ESD)

2. Package Dimensions



Package : S1365

Dimensions shown are nominal in millimeters

Body : Al₂O₃ Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 um, Over a 1.27 ~ 8.89 um Ni Plating

| Pad Configuration | |
|-------------------|-------------|
| 11 | Input |
| 5 | Output |
| 6, 12 | Ground |
| Other | Case ground |

SAW Bandpass Filter 222051B



3. Specifications

$F_0 = 62.5 \text{ MHz}$

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

| Operating Temperature Range : $-10^\circ\text{C} \sim +60^\circ\text{C}$ | | Minimum | Typical | Maximum |
|--|-----------------------|---------|---------|---------|
| Center Frequency | MHz | 62.15 | 62.5 | 62.85 |
| Insertion Loss | dB | - | 14.8 | 16.5 |
| 1dB Bandwidth | MHz | 19.7 | 19.9 | - |
| 3dB Bandwidth | MHz | 20.3 | 20.6 | - |
| 40dB Bandwidth | MHz | - | 23.7 | 24.2 |
| Amplitude Ripple ($F_0 \pm 9.3 \text{ MHz}$) | dB | - | 0.5 | 1.0 |
| Group Delay Variation ($F_0 \pm 9.3 \text{ MHz}$) | nsec | - | 50 | 120 |
| Absolute Delay | usec | - | 1.24 | - |
| Temperature Coefficient of Frequency | ppm/ $^\circ\text{C}$ | - | -86 | - |

| Room Temperature : $+25^\circ\text{C}$ | | Minimum | Typical | Maximum |
|---|------|---------|---------|---------|
| Amplitude Ripple ($F_0 \pm 9.5 \text{ MHz}$) | dB | - | 0.6 | 1.0 |
| Group Delay Variation ($F_0 \pm 9.5 \text{ MHz}$) | nsec | - | 50 | 120 |

Notes :

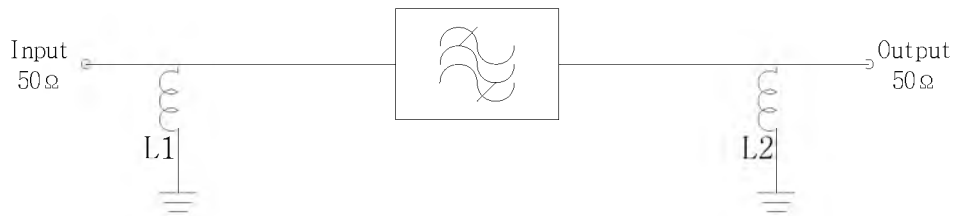
- 1) All specifications are based on the matching schematic shown below
- 2) All specifications are measured by Agilent Network analyzer and full 2 port calibration
- 3) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- 4) All attenuation measurements are measured relative to insertion loss

SAW Bandpass Filter 222051B



4. Matching Schematic

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



$L1 = 150 \text{ nH}$, $L2 = 82 \text{ nH}$

5. Marking Configuration

ITF¹⁾04A001²⁾

222051B³⁾

● ⁴⁾

1) Manufacturer name

2) Lot Number

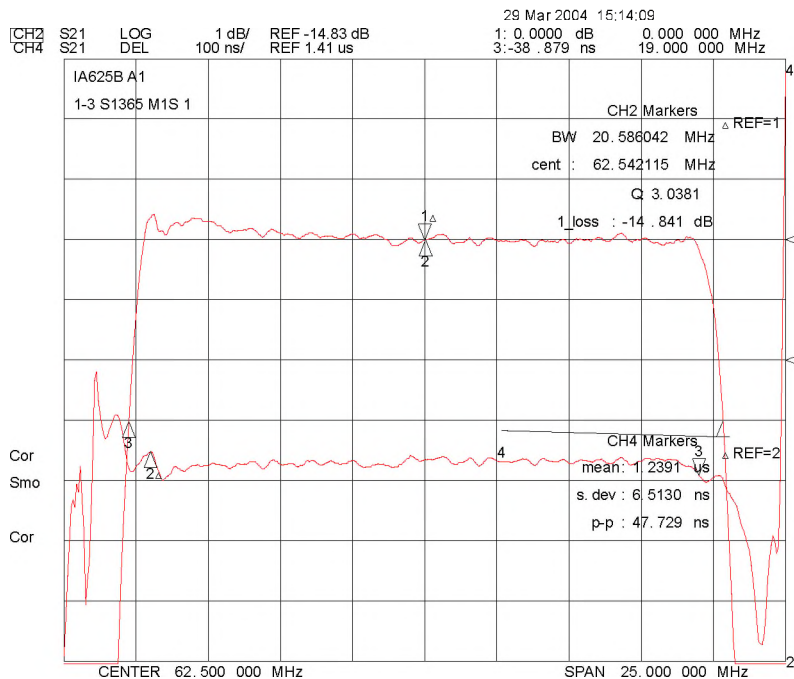
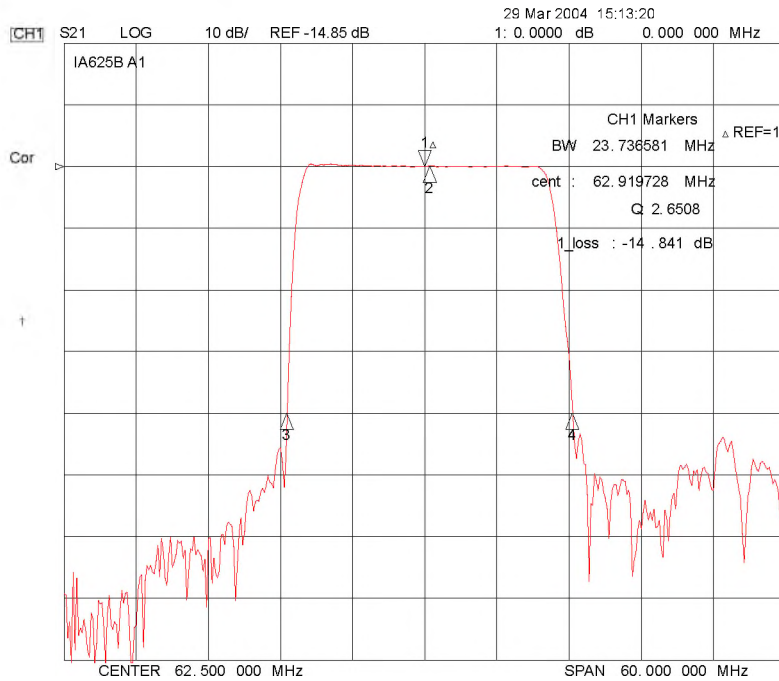
3) Part Number

4) Pad Number 1 Index

SAW Bandpass Filter 222051B



6. Typical Performance (at +25℃)



SAW Bandpass Filter 222051B

