Integrated Technology Future

# 46.1 MHz SAW Filter
## Part Number 210002B

## 1. Features

- Typical 1dB bandwidth of 0.35MHz
- High attenuation
- Single Ended Operation
- Dual In-line Package (DIP)

**RoHS Compliant**

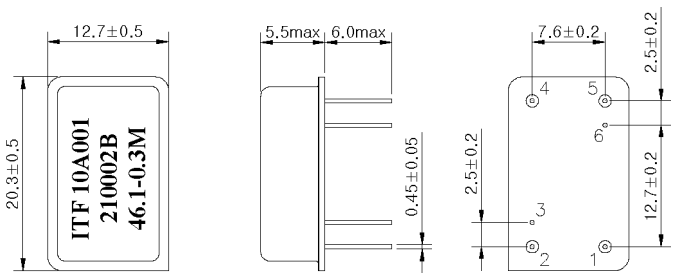
Tested by SGS Testing Korea

## 2. Electrical Specifications

Source and Load Impedance = 50Ω

| Operating Temperature : +25℃ | | Minimum | Typical | Maximum |
|---|---|---|---|---|
| Center Frequency (fo) | MHz | - | 46.1 | - |
| Insertion Loss | dB | - | 15.0 | 17.5 |
| 1dB Bandwidth | MHz | - | 0.35 | - |
| 3dB Bandwidth | MHz | 0.4 | 0.55 | - |
| 40dB Bandwidth | MHz | - | 1.65 | 1.8 |
| Amplitude Ripple (fo ± 0.1 MHz) | dB | - | 0.2 | 1.0 |
| Group Delay Variation (fo ± 0.1 MHz) | nsec | - | 200 | 350 |
| Absolute Delay | usec | - | 1.9 | - |
| Ultimate Rejection | dB | 50 | 57 | - |
| Temperature Coefficient of Frequency | ppm/℃[2] | - | -0.03 | - |

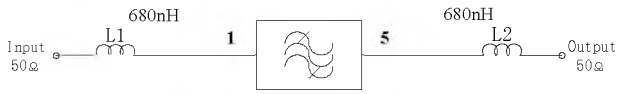
### D2012 Package Dimension




Dimensions shown are nominal in millimeters

Base : Fe(SPCC), Au plating over Ni plated
Cap : Cu & Cr Alloy, Ni Plated
Termination : Kovar, Au Plated

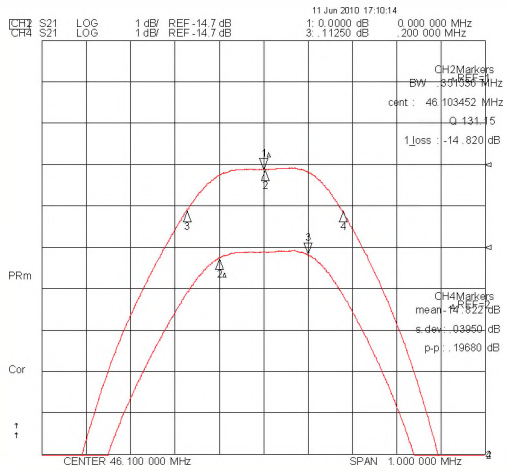
### Matching Schematic



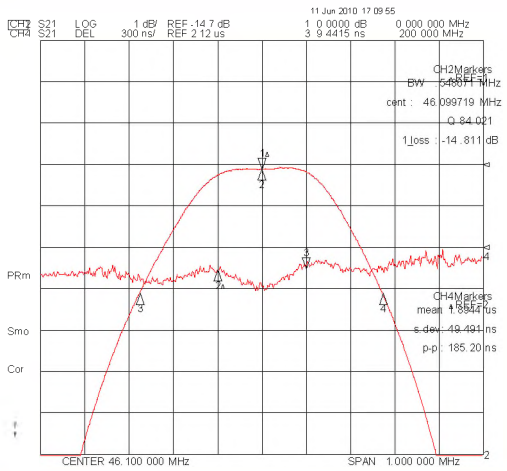

| Pin Configuration | | | |
|---|---|---|---|
| Input | 1 | Ground | 2, 4 |
| Output | 5 | Others | Ground |

## 3. Typical Performance ( at +25℃ )

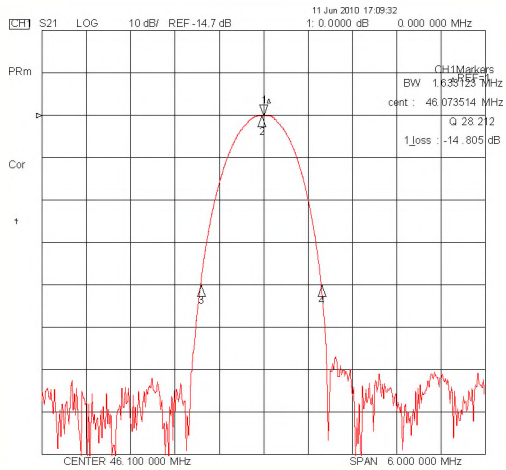
### 1dB Bandwidth & Ripple



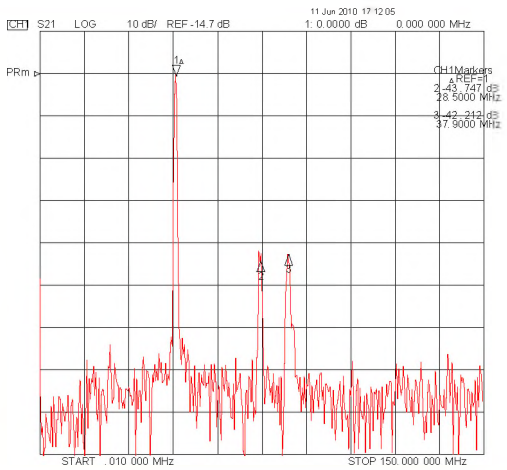

### 3dB Bandwidth & Group Delay



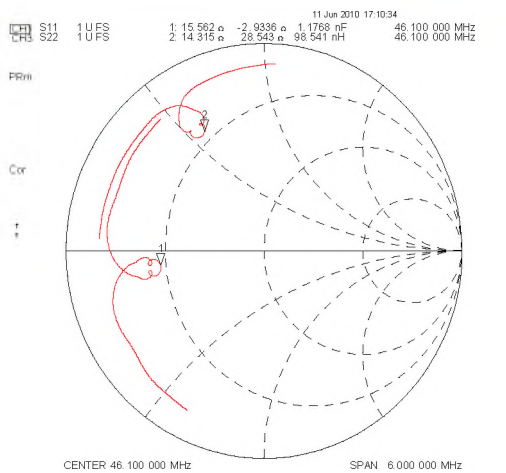

### 40dB Bandwidth




### Wideband Properties




### Smith Chart(S11 & S22)




### SWR(S11 & S22)