# 81.5 MHz SAW Filter
## Part Number 241003B

## 1. Features

- Typical 1dB bandwidth of 10.2 MHz
- High attenuation
- Single Ended Operation
- Dual In-line Package (DIP)

**RoHS Compliant**

Tested by SGS Testing Korea

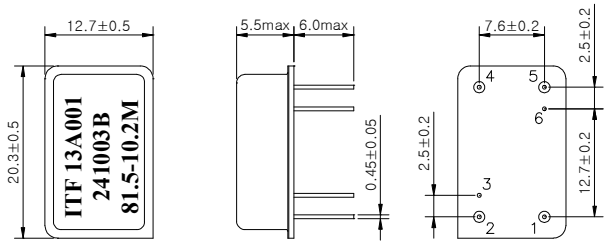
## 2. Electrical Specifications

Source and Load Impedance = 50Ω

| Operating Temperature : -30℃ ~ +80℃ | | Minimum | Typical | Maximum |
|---|---|---|---|---|
| Center Frequency (fo) | MHz | - | 81.5 | - |
| Insertion Loss | dB | - | 21.0 | 22.5 |
| 1 dB Bandwidth | MHz | 10.0 | 10.22 | - |
| 3dB Bandwidth | MHz | - | 10.55 | - |
| 40dB Bandwidth | MHz | - | 11.95 | 12.0 |
| Amplitude Ripple (fo ± 4.51 MHz) | dB | - | 0.4 | 1.0 |
| Group Delay Variation (fo ± 4.51 MHz) | nsec | - | 50 | 100 |
| Absolute Delay | usec | - | 2.08 | 2.10 |
| Ultimate Rejection | dB | 50 | 55 | - |
| Temperature Coefficient of Frequency | ppm/℃ | | -72 | |

| Room Temperature : +25℃ | | Minimum | Typical | Maximum |
|---|---|---|---|---|
| Insertion Loss | dB | - | 21.0 | 22.5 |
| Amplitude Ripple (fo ± 4.84 MHz) | dB | - | 0.4 | 1.0 |
| Group Delay Variation (fo ± 4.84 MHz) | nsec | - | 50 | 100 |

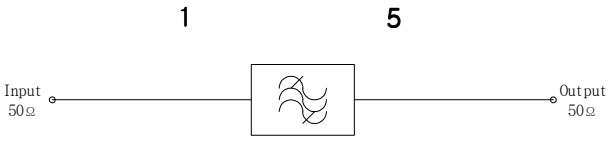
### D2012 Package Dimension




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




### Unmatching Required

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


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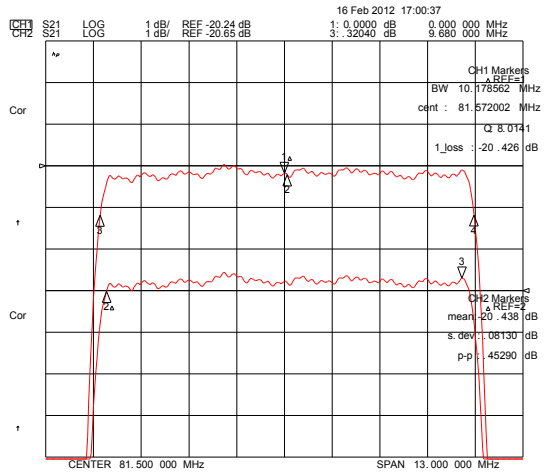
http://www.itf.co.kr
sales@itf.co.kr



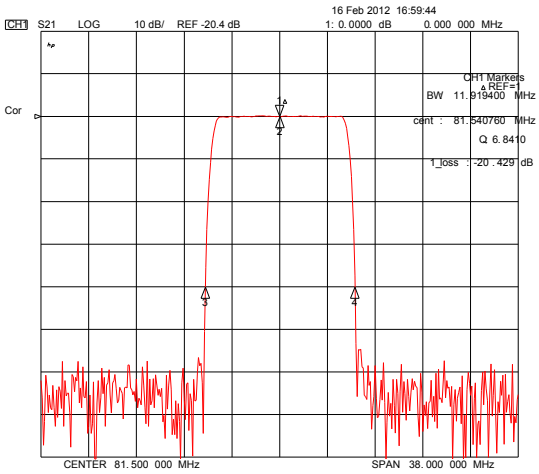
**2013. 03. 25**
**Rev 1.0**

## 3. Typical Performance ( at +25℃ )

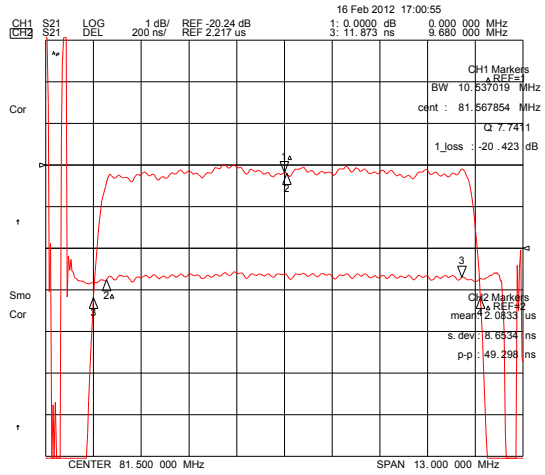
### 1dB Bandwidth & Ripple



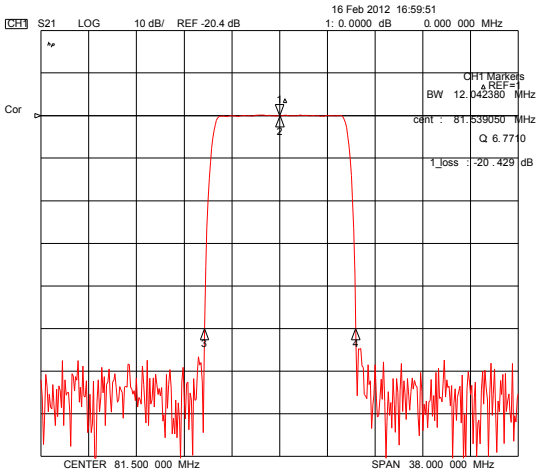

### 40dB Bandwidth



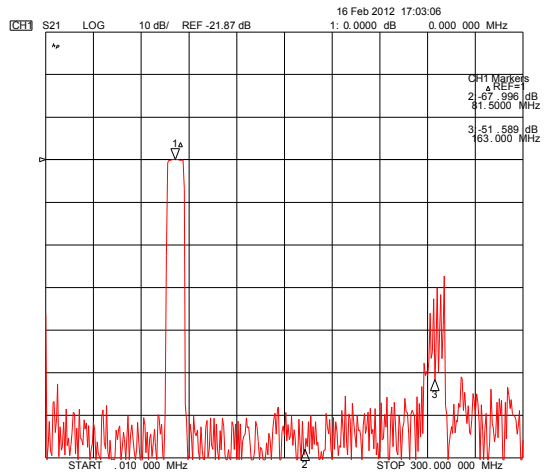

### 3dB Bandwidth & Group Delay



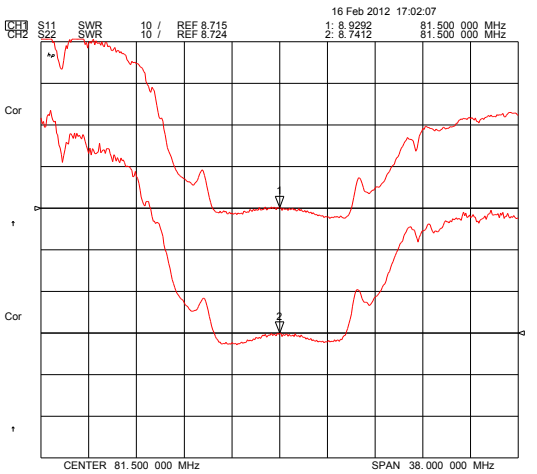

### 50dB Bandwidth




### Wideband Properties




### SWR(S11 & S22)




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