# 103.0 MHz SAW Filter

**Patr Number 251859B**

## 1. Features

- Typical 1dB bandwidth of 18.9 MHz
- High attenuation
- Single Ended Operation
- Surface Mounted Package (SMD)

**RoHS Compliant**

Tested by SGS Testing Korea

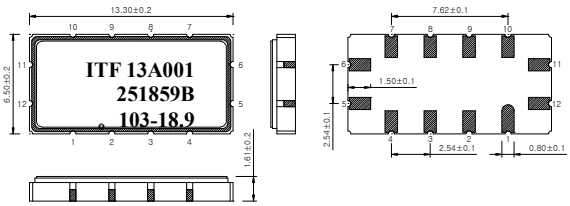
## 2. Electrical Specifications

Source and Load Impedance = 50Ω

| Room Temperature : +25℃ | | Minimum | Typical | Maximum |
|---|---|---|---|---|
| Center Frequency (fo) | MHz | - | 103.0 | - |
| Insertion Loss | dB | - | 21.5 | 23.5 |
| 1dB Bandwidth | MHz | 18.80 | 18.90 | - |
| 3dB Bandwidth | MHz | - | 19.40 | - |
| 40dB Bandwidth | MHz | - | 21.18 | 21.40 |
| Amplitude Ripple (fo ± 9.05 MHz) | dB | - | 0.5 | 1.2 |
| Group Delay Variation (fo ± 9.05 MHz) | nsec | - | 30 | 60 |
| Absolute Delay | usec | - | 1.60 | 2.0 |
| Ultimate Rejection | dB | 45 | 50 | - |
| Temperature Coefficient of Frequency | ppm/℃ | - | -72 | - |
| Relative Attenuation | | | | |
| fo ± 10.4925 MHz | dBc | - | 28 | - |
| fo ± 10.7425 MHz | dBc | 40 | 50 | |

*** Input POWER : +10dBm**

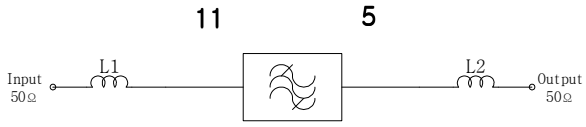
### S1365 Package Dimension




Dimensions shown are nominal in millimeters

Body : $Al_2O_3$
Lid : Kovar, Ni Plated
Termination : Au plating 0.3 ~ 1.0um, over a 1.27 ~ 8.89um Ni Plating

### Matching Schematic




**L1 = 82nH, L2 = 68nH**

| Pin Configuration | | | |
|---|---|---|---|
| **Input** | **11** | **Ground** | **12,6** |
| **Output** | **5** | **Others** | **Ground** |


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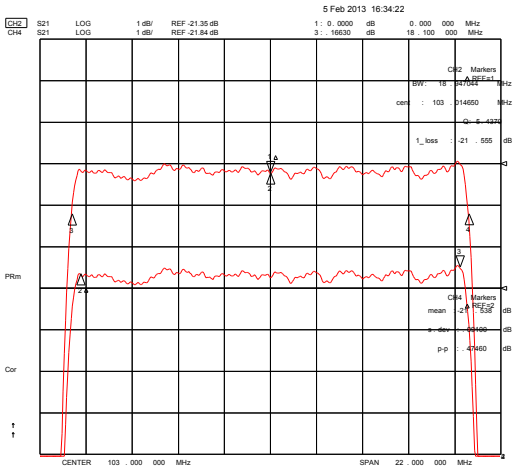
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sales@itf.co.kr



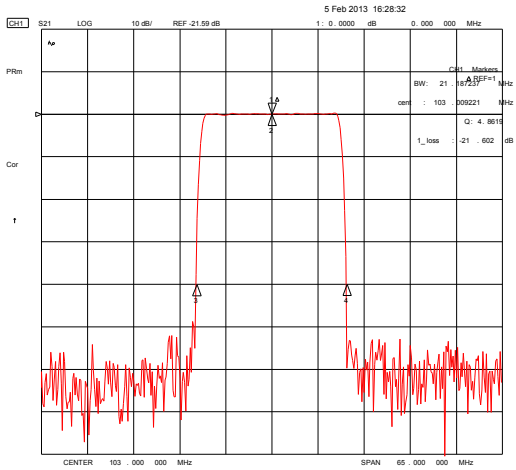
**2013. 03. 11**
**Rev 1.0**

## 3. Typical Performance ( at +25℃ )

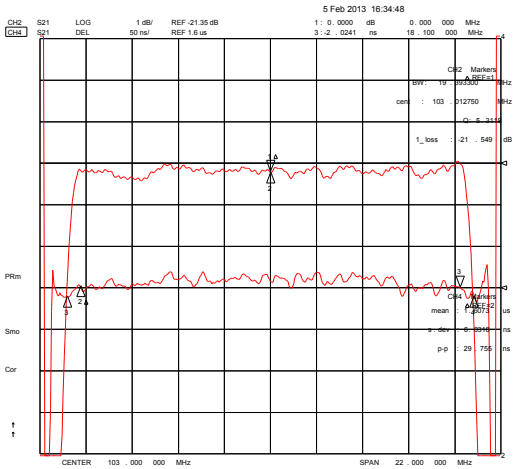
### 1dB Bandwidth & Ripple



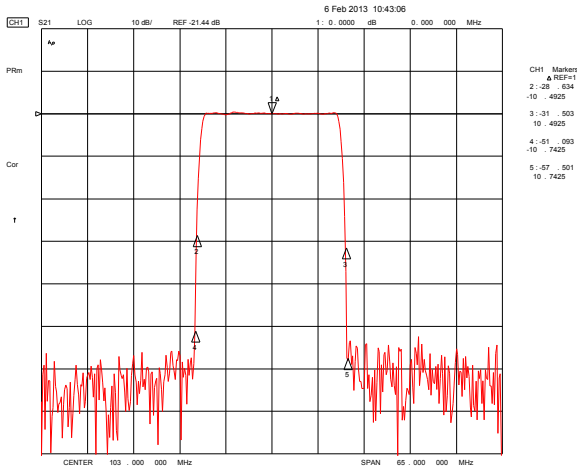

### 40dB Bandwidth



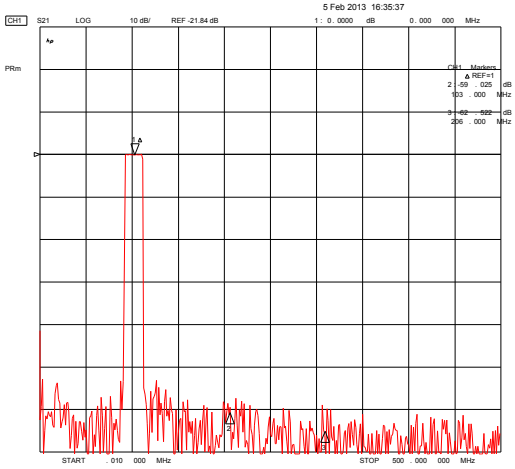

### 3dB Bandwidth & Group Delay




### Relative Attenuation




### Wideband Properties




### SWR(S11 & S22)

