

- 100.0 MHz IF SAW Filter / 10.40 MHz Bandwidth
- Revision 0: 19. Oct. 2010

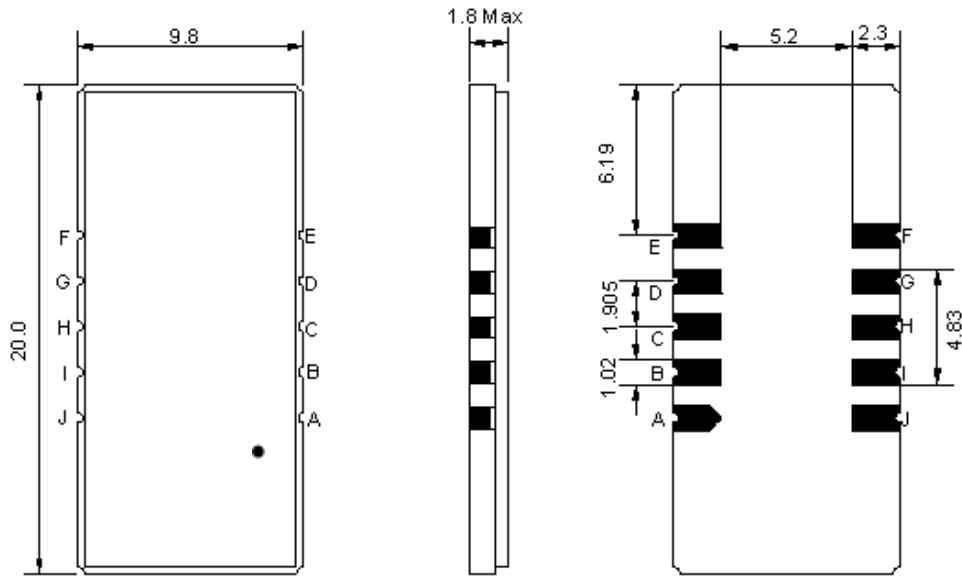
Electrical Characteristics

| MAXIMUM RATING | | | | |
|--|-----------------|---------|------------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Operation Temperature Range | °C | -20 | - | 80 |
| Storage Temperature Range | °C | -40 | - | +85 |
| Maximum DC Voltage | V | - | - | 10 |
| Maximum Input Power | dBm | - | - | 10 |
| Source Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Load Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Package type & size | D1 | | | |
| Length x Width | mm ² | - | 20.0 x 9.8 | - |
| Height | mm | - | - | 1.8 |

| ELECTRICAL SPECIFICATION | | | | |
|-------------------------------------|--------|---------|---------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Center Frequency (Fo) | MHz | - | 100.00 | - |
| Insertion Loss at Fo | dB | - | 23.80 | 25.00 |
| Group Delay Variation (Fo±4.425MHz) | ns | - | 18 | 40 |
| Absolute Delay | us | - | 2.56 | - |
| Passband Ripple (Fo±4.425MHz) | dB | - | 0.30 | 0.80 |
| Bandwidth at -1dB | MHz | 10.20 | 10.40 | - |
| Bandwidth at -3dB | MHz | - | 10.95 | - |
| Bandwidth at -40dB | MHz | - | 12.85 | 13.00 |
| Relative Attenuation | | | | |
| Lower Sidelobe | dB | 50 | 55 | - |
| Upper Sidelobe | dB | 50 | 55 | - |
| Temperature coefficient | ppm/°C | - | -20 | - |

Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

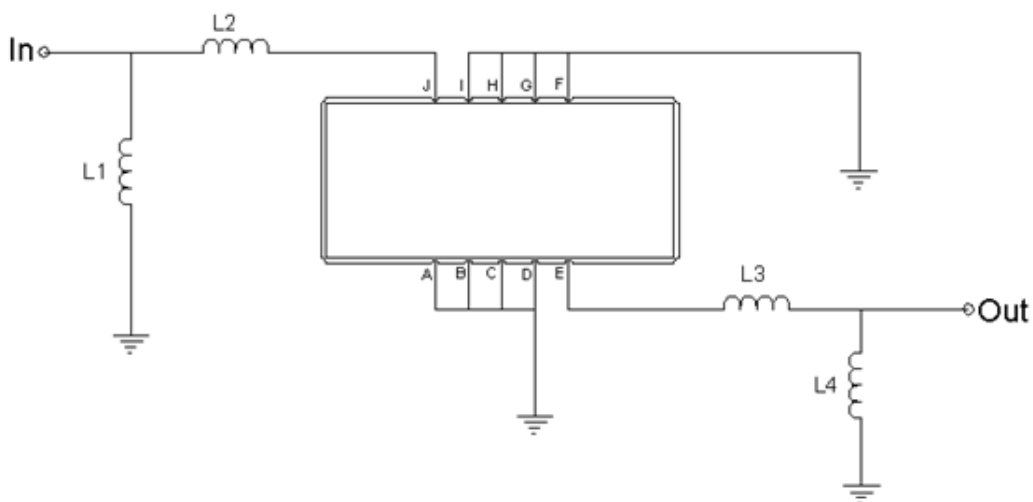
Package Dimensions



- ① TRANSKO: Brand
- ② TA10010B: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

| Pin Description | |
|------------------------|--------|
| A, B, C, D, F, G, H, I | Ground |
| J | Input |
| E | Output |

Testing Environment



| Test Fixture & Values | |
|-----------------------|------------------------|
| Input | L1 = 56 nH, L2 = 22 nH |
| Output | L3 = 22 nH, L4 = 56 nH |
| Source/Load Impedance | 50 Ω |

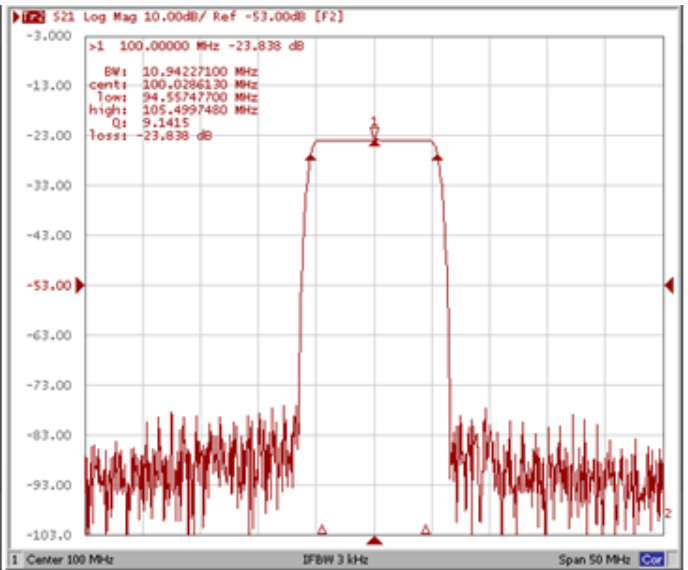
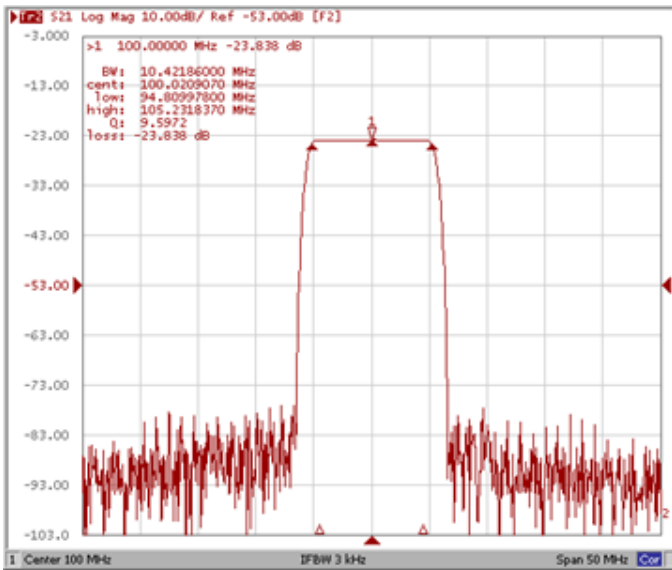
Frequency Characteristics

Frequency Response

Operating Temperature : +25 °C

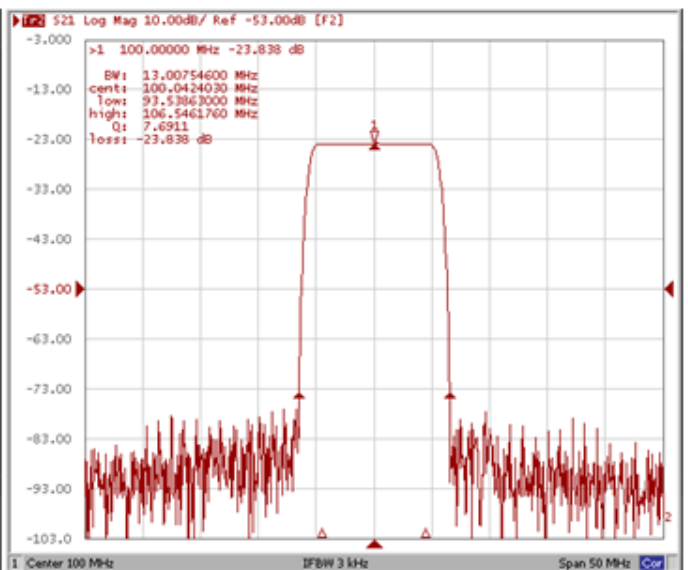
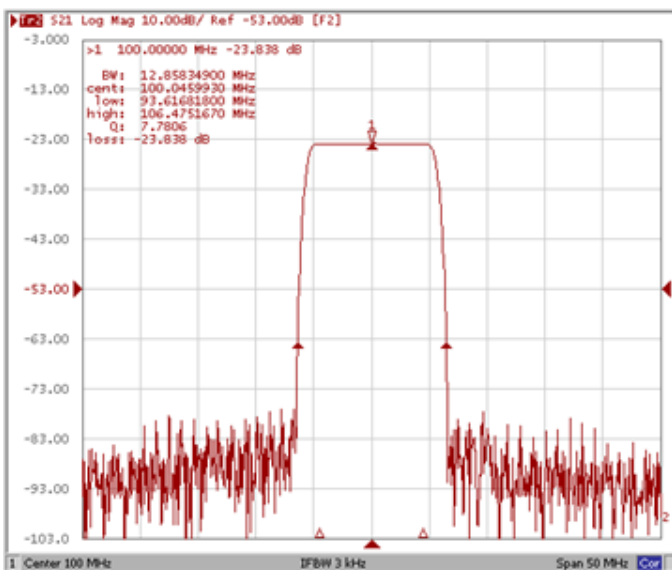
Bandwidth at -1.0 dB

Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

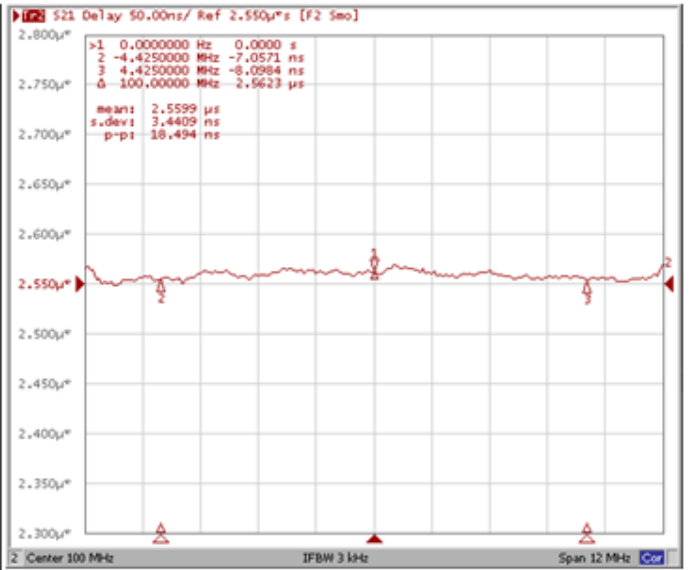
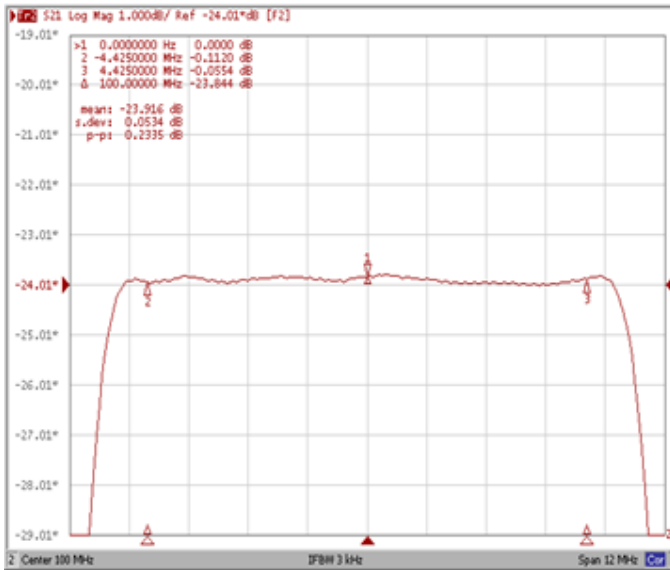
Bandwidth at -50.0 dB



Frequency Response

Ripple Variation Fo±4.425MHz

Group Delay Variation Fo±4.425MHz



Smith Chart

VSWR

