

- 70.0 MHz IF SAW Filter / 16.18 MHz Bandwidth
- Revision 0: 10 Feb. 2009

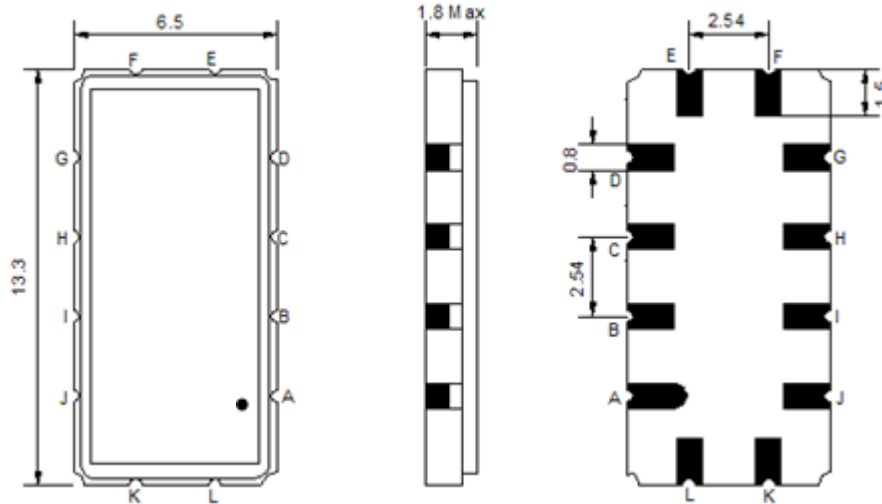
Electrical Characteristics

| MAXIMUM RATING | | | | |
|--|-----------------|---------|------------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Operation Temperature Range | °C | -10 | - | 75 |
| 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 | V | | | |
| Length x Width | mm ² | - | 13.3 x 6.5 | - |
| Height | mm | - | - | 1.8 |

| ELECTRICAL SPECIFICATION | | | | |
|--|--------|---------|---------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Center Frequency (Fo) | MHz | - | 70.00 | - |
| Insertion Loss at Fo | dB | - | 23.80 | 26.00 |
| Group Delay Variation at Fo ± 7.48 MHz | nsec | - | 30 | 60 |
| Absolute Delay at Fo | usec | - | 1.65 | - |
| Passband Ripple Variation at Fo ± 7.48 MHz | dB | - | 0.50 | 1.00 |
| Bandwidth at -1dB | MHz | 15.70 | 16.18 | - |
| Bandwidth at -3dB | MHz | - | 16.67 | - |
| Bandwidth at -30dB | MHz | - | 18.39 | 18.70 |
| Bandwidth at -40dB | MHz | - | 18.63 | - |
| Ultimate Rejection | dB | 45 | 49 | - |
| Temperature Coefficient | ppm/°C | - | -72 | - |

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.

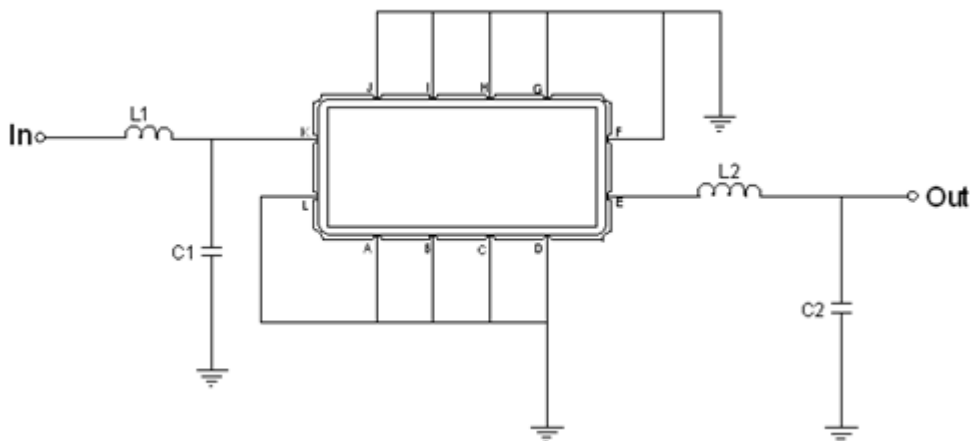
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TA07016A:** 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, J, L | Ground |
| K | Input |
| E | Output |

Testing Environment

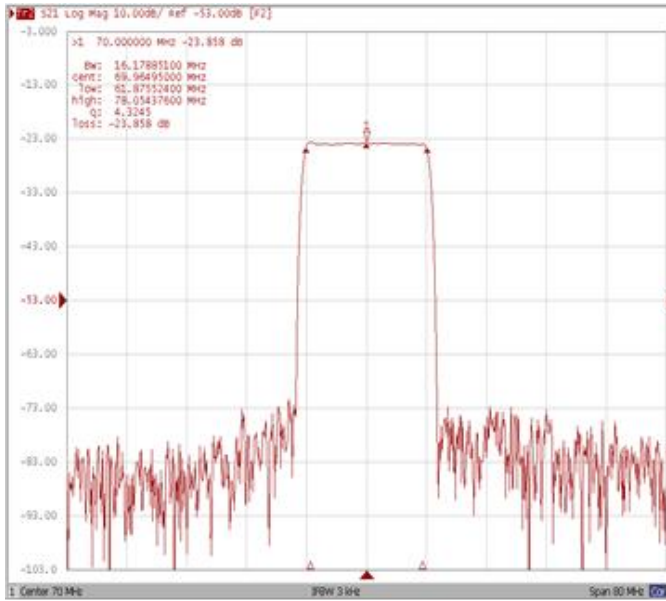


| Test Fixture & Values | |
|------------------------------|---------------------|
| Input | L1 = 180nH, C1=12pF |
| Output | L2 = 180nH, C2=10pF |
| Source/Load Impedance | 50 Ω |

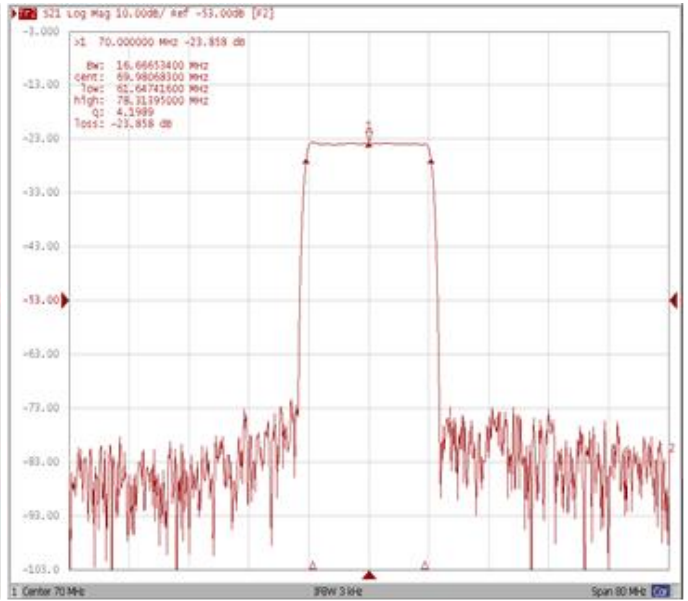
Frequency Characteristics

Frequency Response

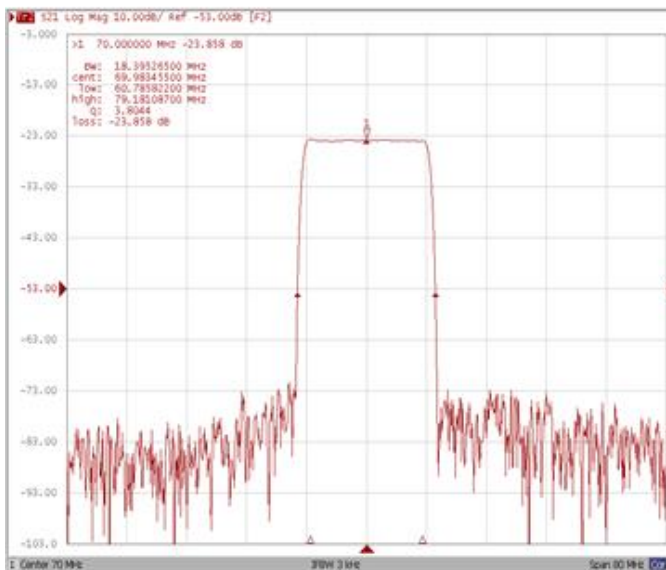
Bandwidth at -1.0 dB



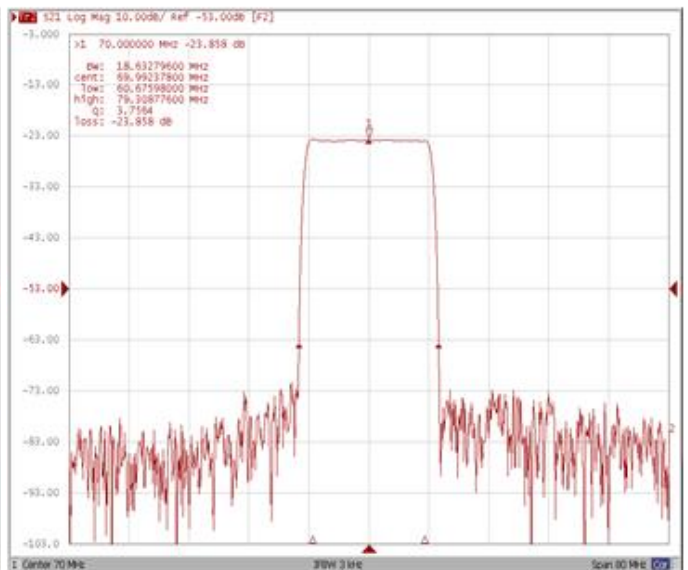
Bandwidth at -3.0 dB



Bandwidth at -30.0 dB



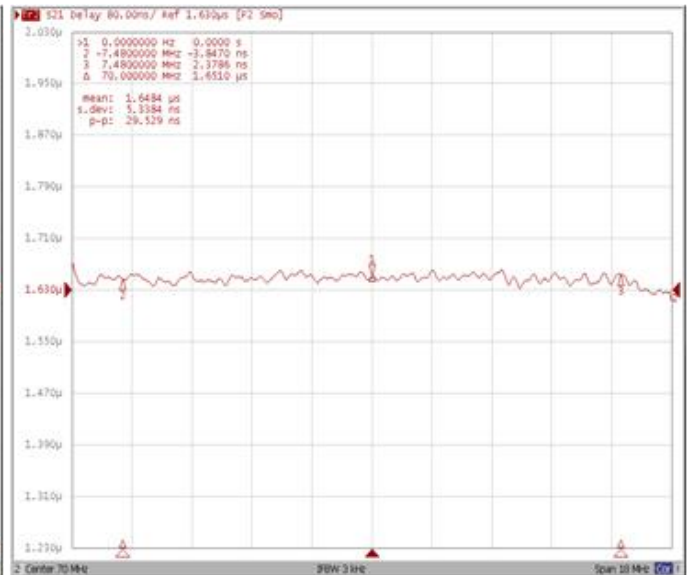
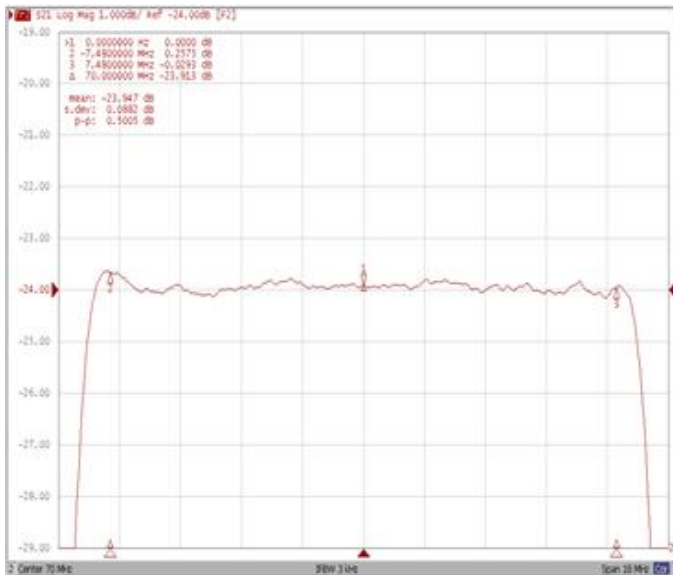
Bandwidth at -40.0 dB



Frequency Response

Ripple Variation Fo±7.48MHz

Group Delay Variation Fo±7.48MHz



Smith Chart

VSWR

