

- 70.0 MHz IF SAW Filter / 7.28 MHz Bandwidth
- Revision 0: 7 Apr. 2008

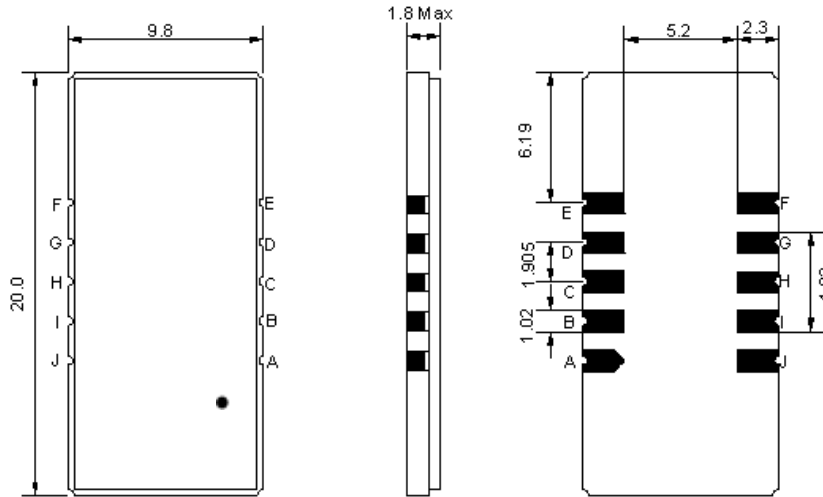
Electrical Characteristics

| MAXIMUM RATING | | | | |
|--|-----------------|---------|------------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Operation Temperature Range | °C | - | 25 | - |
| 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 | - | 70.0 | - |
| Insertion Loss at Fo | dB | - | 27.7 | 29.0 |
| Group Delay Variation at Fo ±3.5 MHz | nsec | - | 50 | 100 |
| Absolute Delay at Fo | usec | - | 3.36 | - |
| Passband Ripple Variation at Fo ±3.5 MHz | dB | - | 0.55 | 1.0 |
| Bandwidth at -1dB | MHz | - | 7.28 | - |
| Bandwidth at -10dB | MHz | - | 8.09 | - |
| Bandwidth at -20dB | MHz | - | 8.46 | - |
| Bandwidth at -25dB | MHz | - | 8.59 | - |
| Bandwidth at -35dB | MHz | - | 8.78 | - |
| Ultimate Rejection | dB | 45 | 50 | - |
| 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.

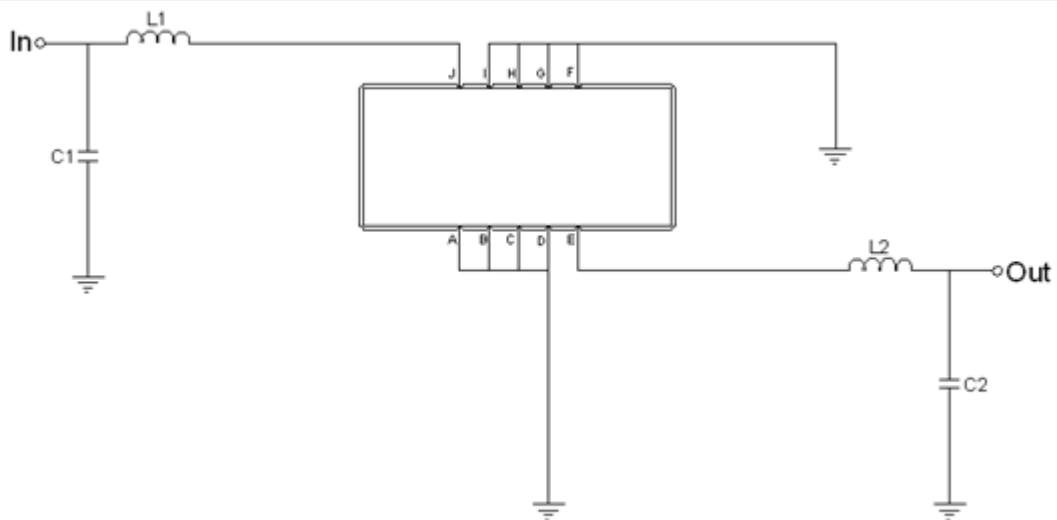
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TA07007A:** 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

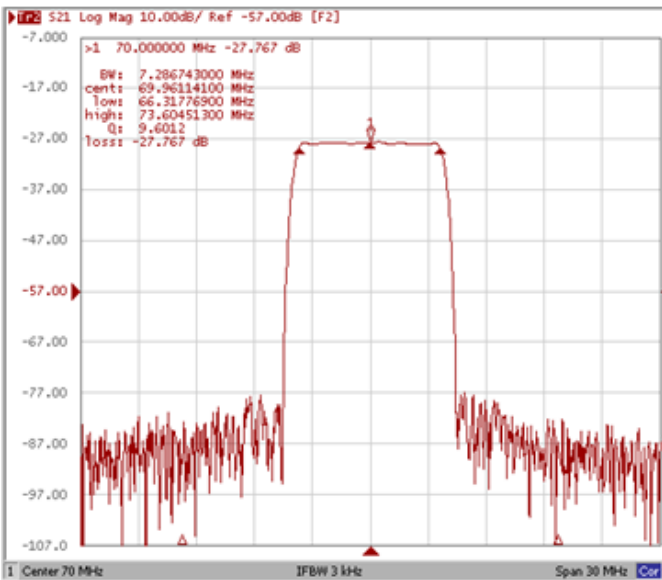


| Test Fixture & Values | |
|------------------------------|--------------------------|
| Input | L1 = 180 nH , C1 = 43 pF |
| Output | L2 = 220 nH , C2 = 36 pF |
| Source/Load Impedance | 50 Ω |

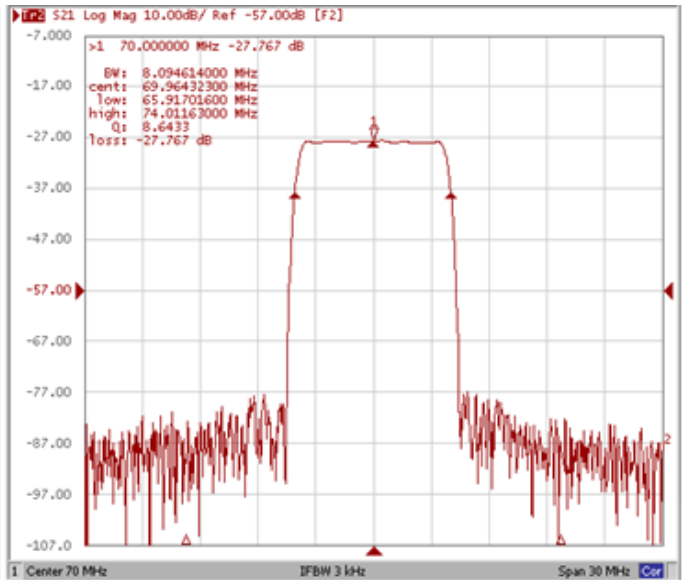
Frequency Characteristics

Frequency Response

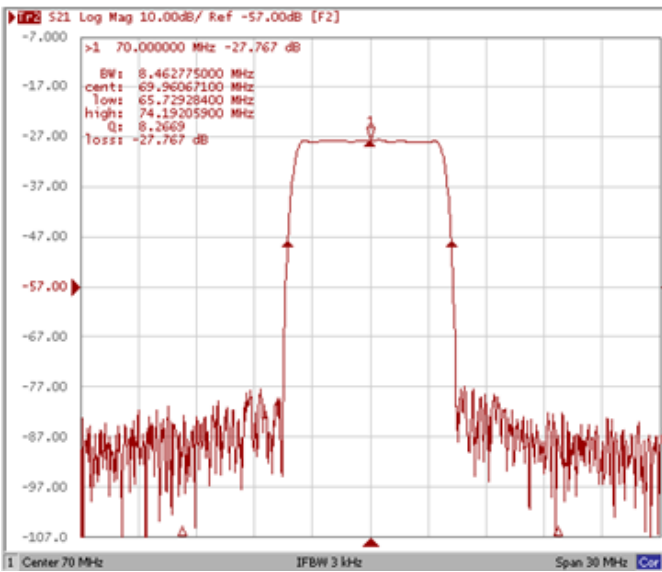
Bandwidth at -1.0 dB



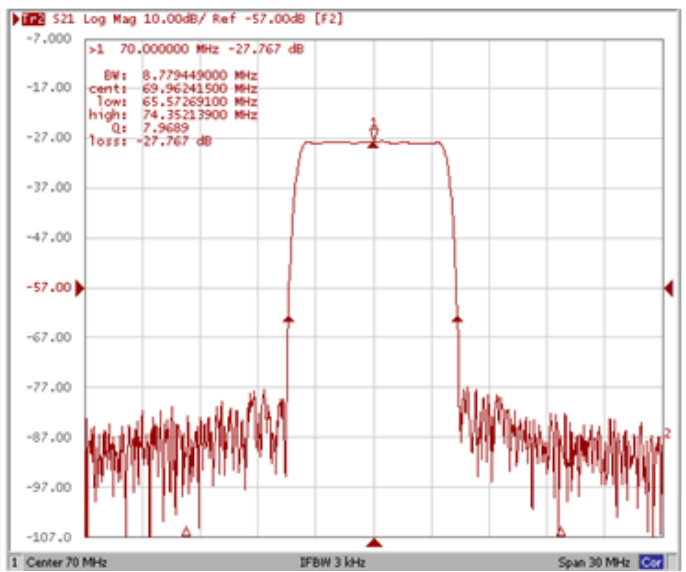
Bandwidth at -10.0 dB



Bandwidth at -20.0 dB



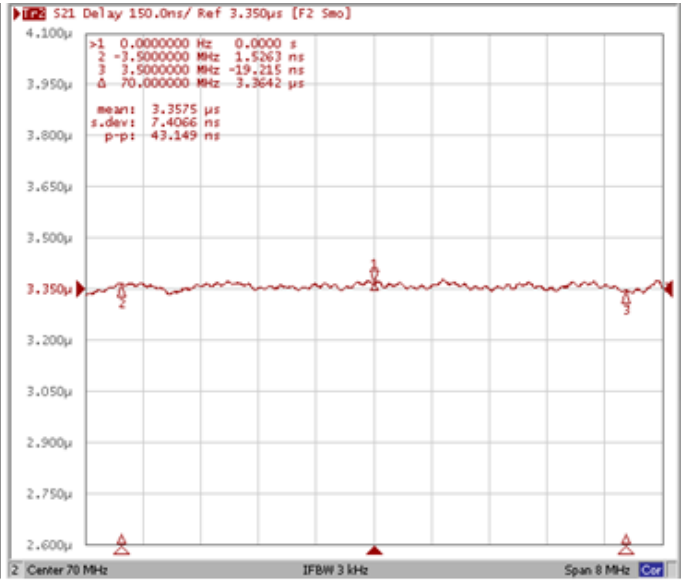
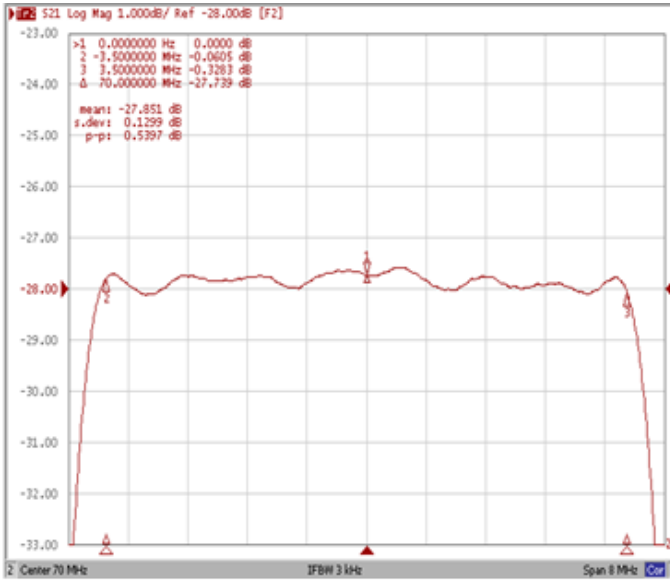
Bandwidth at -35.0 dB



Frequency Response

Ripple Variation Fo±3.5MHz

Group Delay Variation Fo±3.5MHz



Smith Chart

SWR

