

- 85.10MHz IF SAW Filter / 20.06 MHz Bandwidth
- Revision 0: 11. Mar. 2009

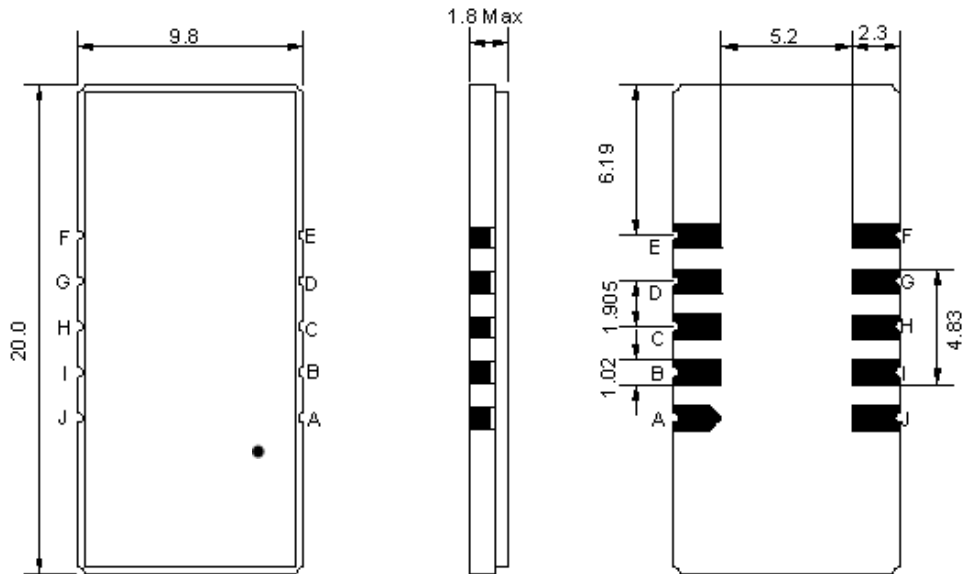
Electrical Characteristics

| MAXIMUM RATING | | | | |
|--|-----------------|---------|------------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Operation Temperature Range | °C | -20 | - | 70 |
| 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 | - | 85.10 | - |
| Insertion Loss at Fo | dB | - | 23.7 | 25.5 |
| Group Delay Variation (Fo±9.42MHz) | nsec | - | 35 | 60 |
| Absolute Delay at Fo | usec | - | 2.11 | - |
| Passband Ripple Variation (Fo±9.42MHz) | dB | - | 0.56 | 0.90 |
| Bandwidth at -1dB | MHz | 19.80 | 20.06 | - |
| Bandwidth at -10dB | MHz | - | 20.94 | - |
| Bandwidth at -20dB | MHz | - | 21.35 | - |
| Bandwidth at -40dB | MHz | - | 21.78 | 21.95 |
| Ultimate Rejection | dB | 50 | 53 | - |
| 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.

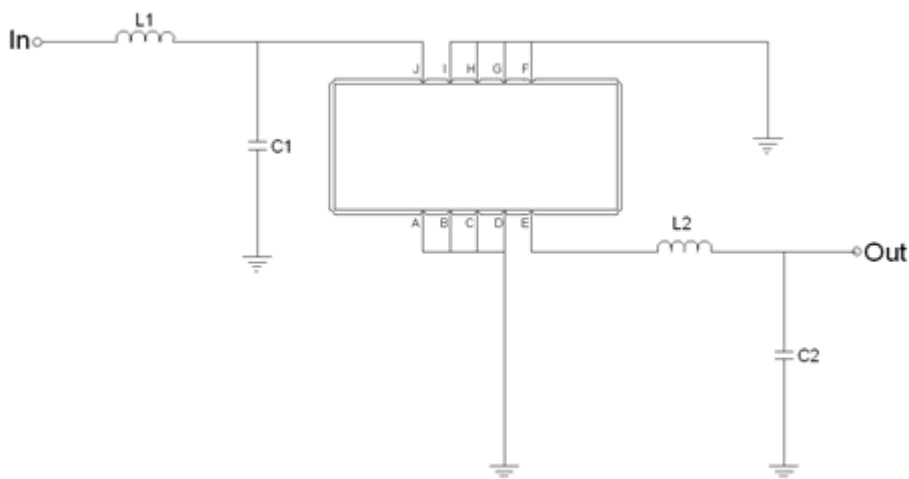
Package Dimensions



- ① TRANSKO: Brand
- ② TA08520C: 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



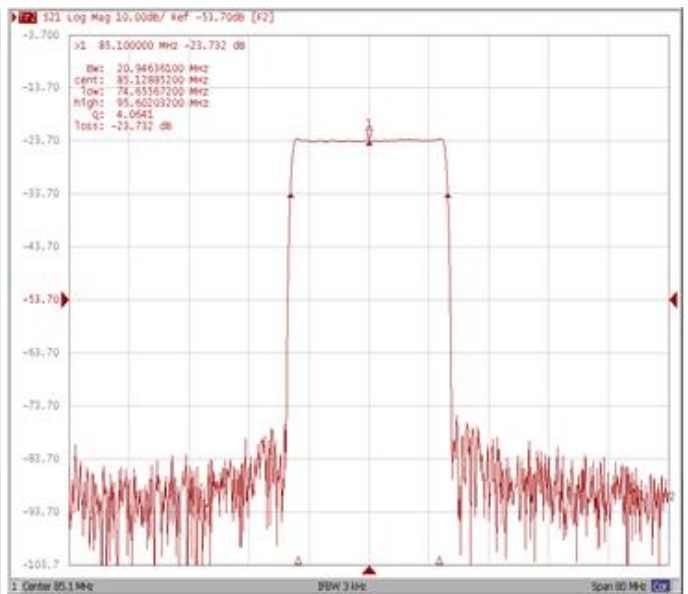
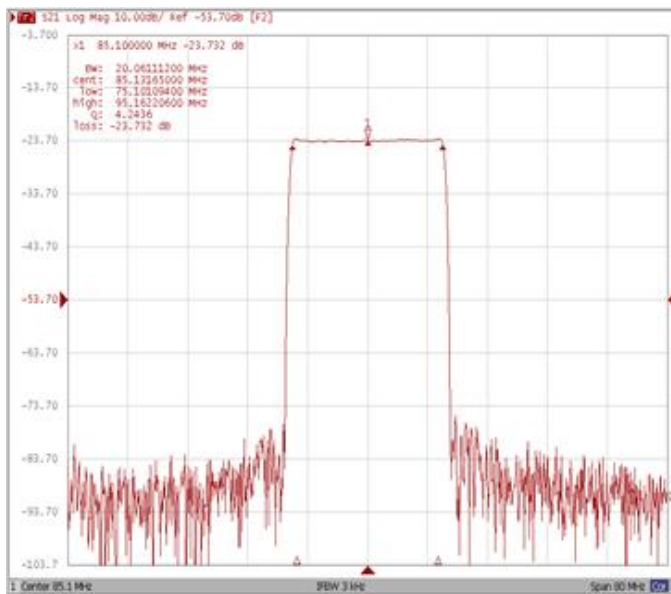
| Test Fixture & Values | |
|-----------------------|-------------------------|
| Input | L1 = 100 nH, C1 = 4 pF |
| Output | L2 = 120 nH, C2 = 36 pF |
| Source/Load Impedance | 50 Ω |

Frequency Characteristics

Frequency Response

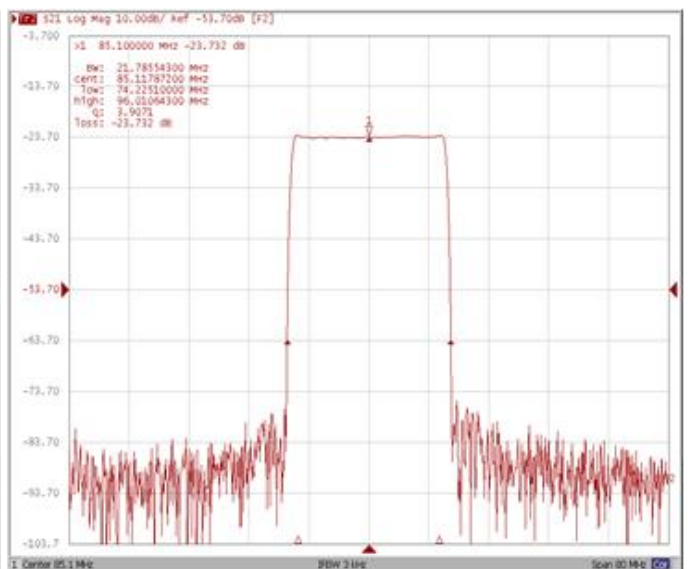
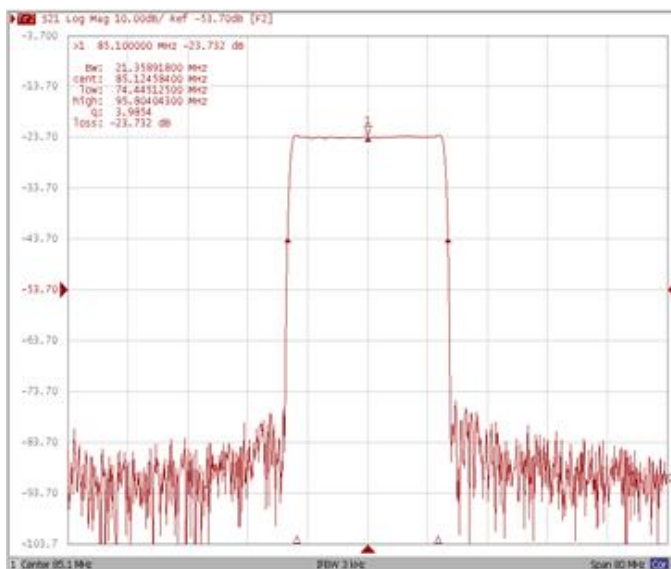
Bandwidth at -1.0 dB

Bandwidth at -10.0 dB



Bandwidth at -20.0 dB

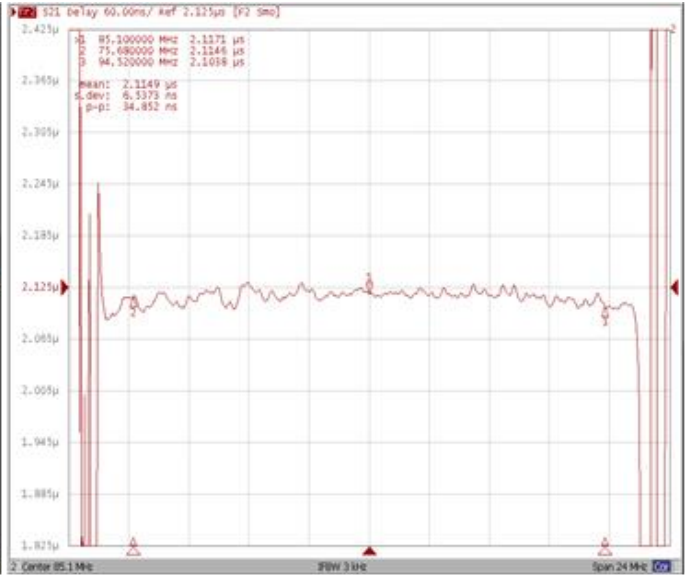
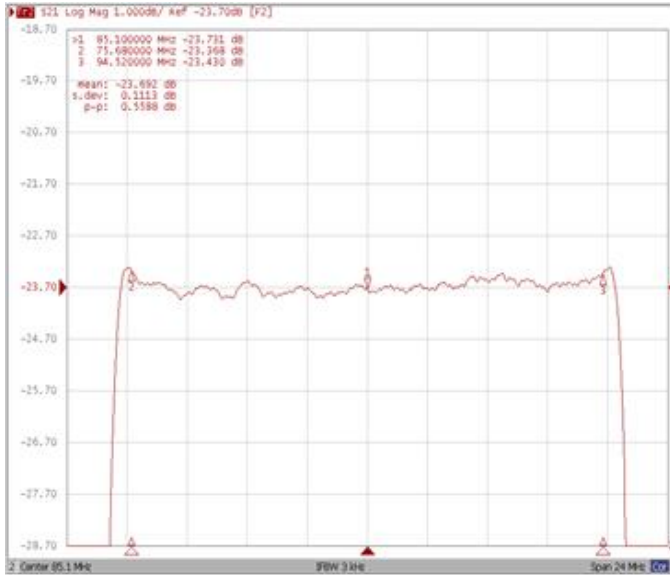
Bandwidth at -40.0 dB



Frequency Response

Ripple Variation Fo±9.42MHz

Group Delay Variation Fo±9.42MHz



Smith Chart

VSWR

