

- 55.00 MHz IF SAW Filter / 10.0 MHz Bandwidth
- Revision 0: 10 Jun. 2008

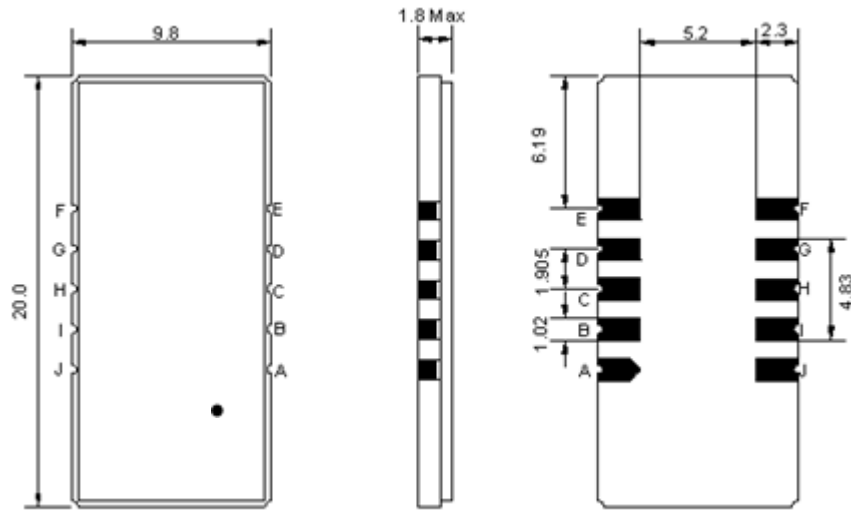
Electrical Characteristics

| MAXIMUM RATING | | | | |
|--|-----------------|---------|------------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Operating Temperature Range | °C | 0 | - | 60 |
| Storage Temperature Range | °C | -30 | - | 80 |
| 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 | 54.90 | 55.00 | 55.10 |
| Insertion Loss at Fo | dB | - | 12.7 | 15.0 |
| Group Delay Variation (Fo±4.5MHz) | ns | - | 75 | 150 |
| Absolute Delay | us | - | 1.79 | - |
| Passband Ripple (Fo±4.5MHz) | dB | - | 0.40 | 1.00 |
| Bandwidth at -1dB | MHz | 9.80 | 10.00 | - |
| Bandwidth at -3dB | MHz | - | 10.45 | - |
| Bandwidth at -20dB | MHz | - | 11.55 | - |
| Bandwidth at -40dB | MHz | - | 12.25 | 12.60 |
| Ultimate Rejection | dB | - | 45 | - |
| Temperature coefficient | ppm/°C | - | -86 | - |

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.

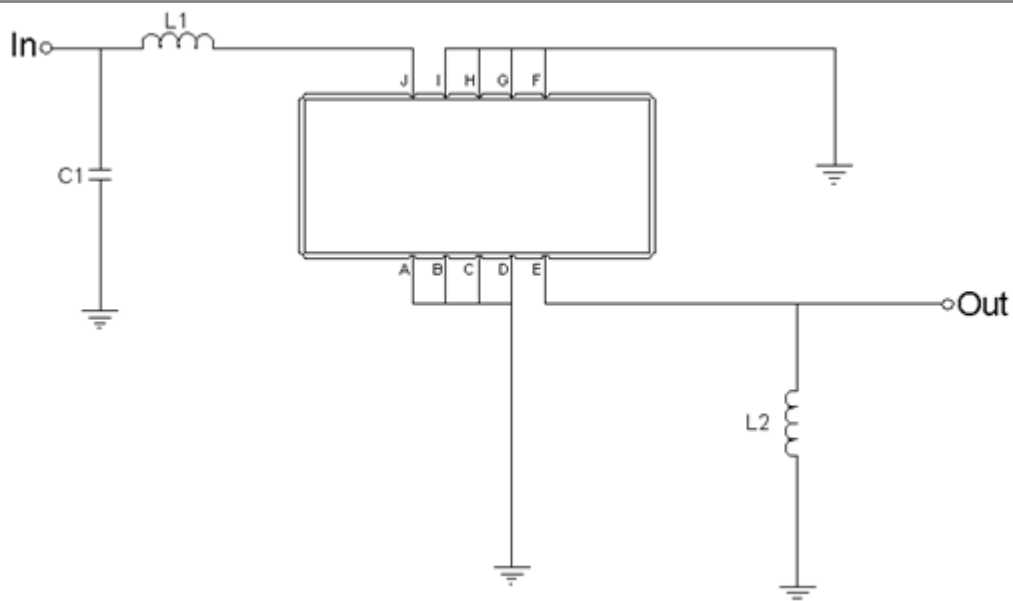
Package Dimensions



- ① TRANSKO: Brand
- ② TL05509B: 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



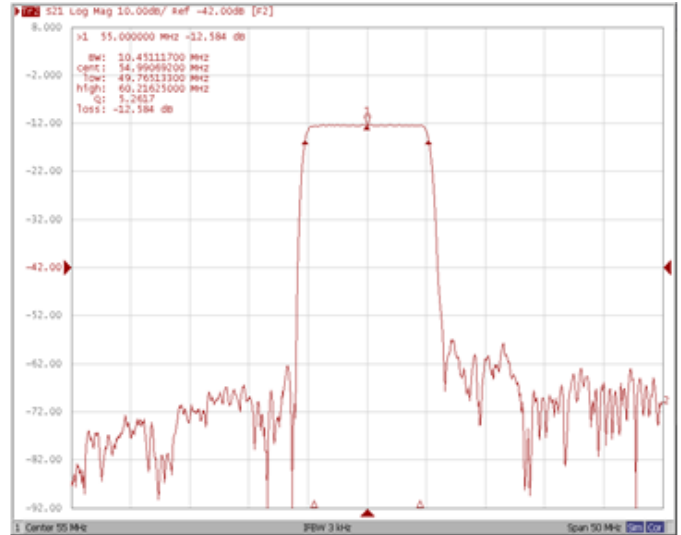
| Test Fixture & Values | |
|-----------------------|-------------------|
| Input | L1=100nH, C1=50pF |
| Output | L2=56nH |
| Source/Load Impedance | 50 Ω |

Frequency Characteristics

Frequency Response

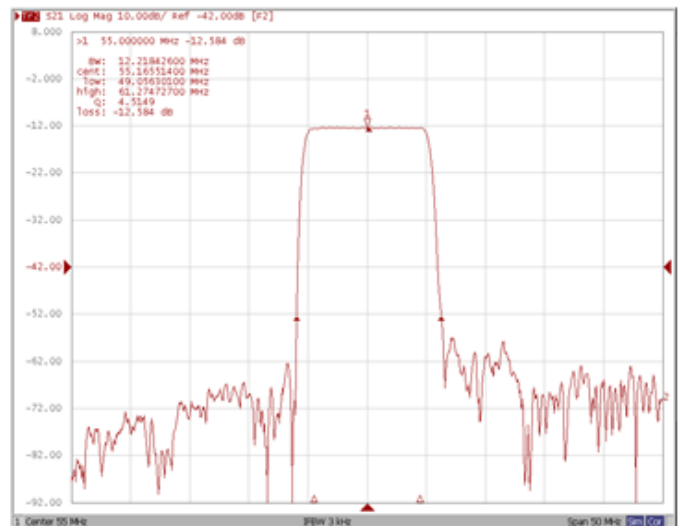
Bandwidth at -1.0 dB

Bandwidth at -3.0 dB



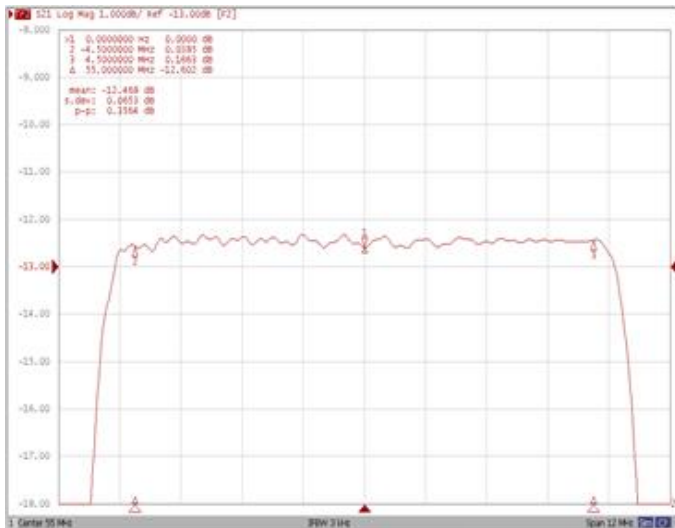
Bandwidth at -20.0 dB

Bandwidth at -40.0 dB

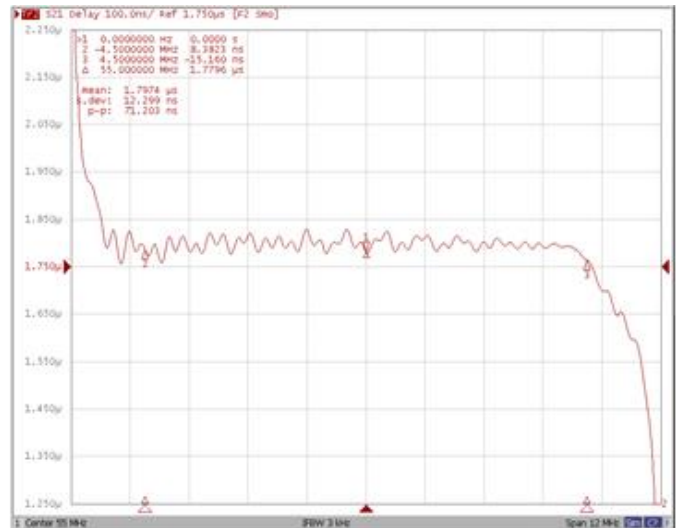


Frequency Response

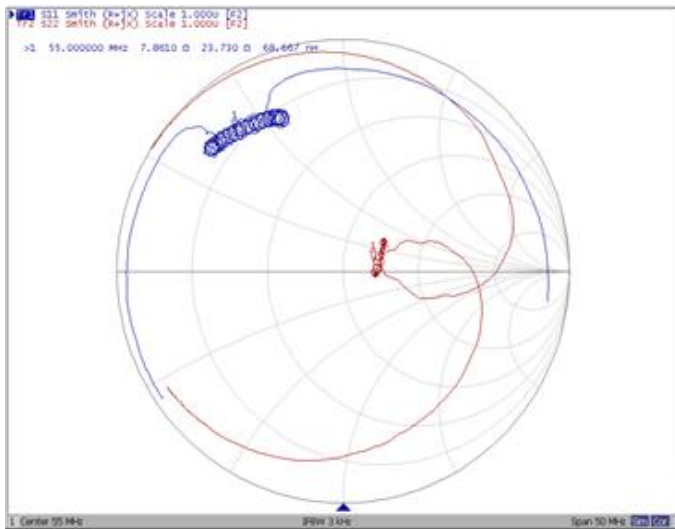
Ripple Variation Fo±4.5MHz



Group Delay Variation Fo±4.5MHz



Smith Chart



VSWR

