

- 110.00 MHz IF SAW Bandpass Filter
- Revision 3: 21 May 2008

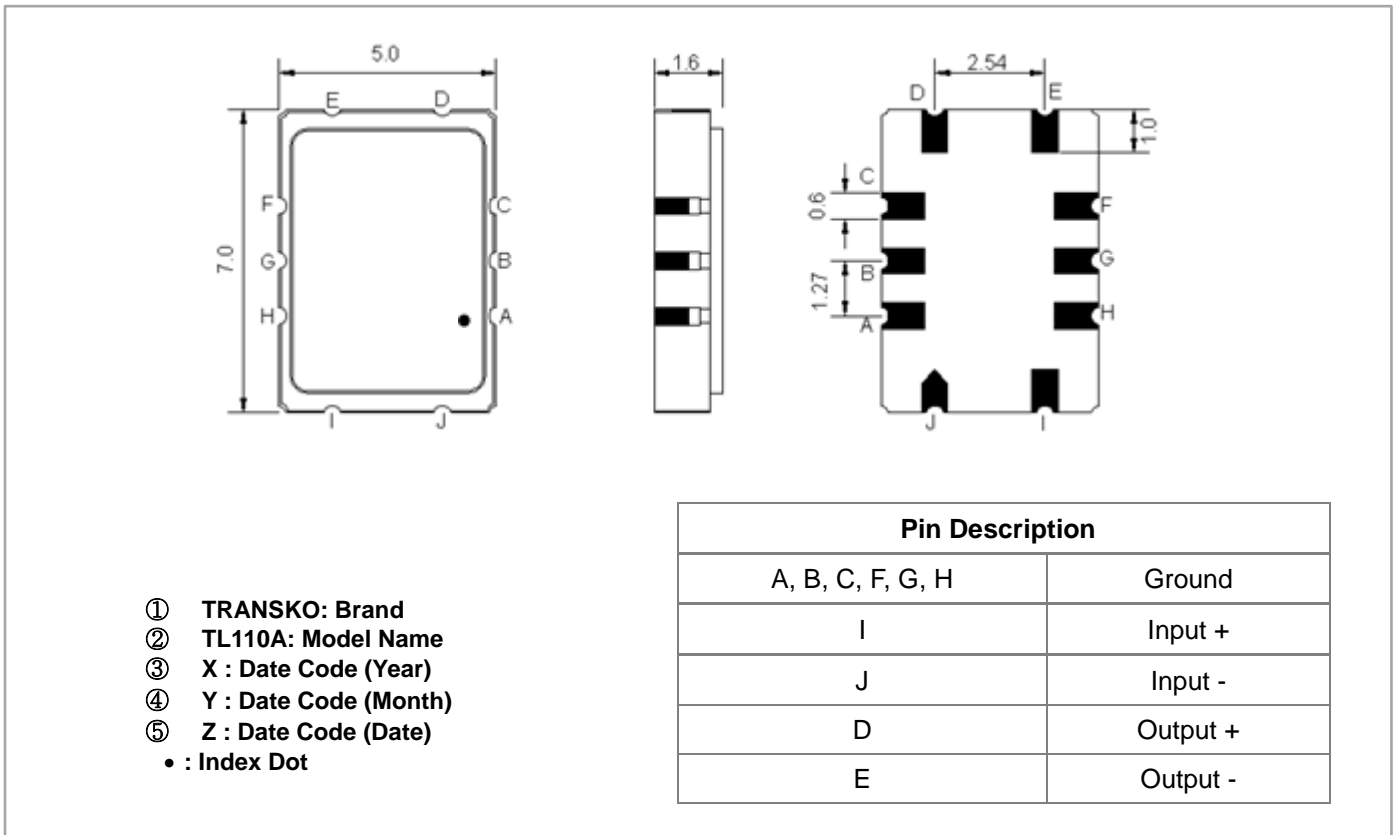
Electrical Characteristics

| MAXIMUM RATING | | | | |
|--|-----------------|---------|-----------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Operation Temperature Range | °C | -20 | - | 85 |
| Storage Temperature Range | °C | -40 | - | 105 |
| Maximum DC Voltage | V | - | - | 3 |
| Maximum Input Power | dBm | - | - | 20 |
| Source Impedance (Balanced) ⁽¹⁾ | Ω | - | 1000 | - |
| Load Impedance (Balanced) ⁽¹⁾ | Ω | - | 500 | - |
| Package type & size | S | | | |
| Length x Width | mm ² | - | 7.0 x 5.0 | - |
| Height | mm | - | - | 1.8 |

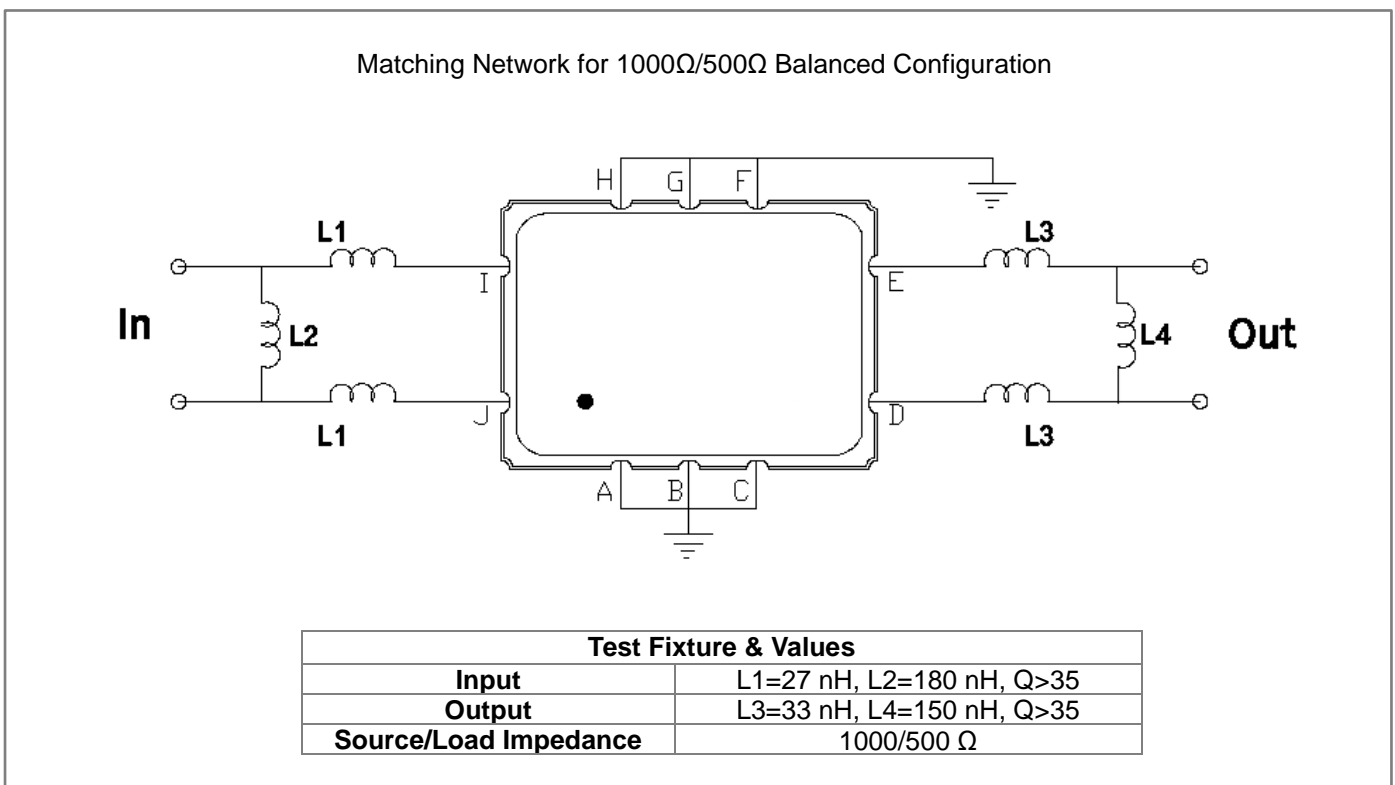
| ELECTRICAL SPECIFICATION | | | | |
|--|-------------------|---------|---------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Center Frequency (Fo) | MHz | - | 110.0 | - |
| Insertion Loss at Fo | dB | - | 10.0 | 11.5 |
| Amplitude Ripple (Fo±0.3MHz) | dB _{p-p} | - | 0.55 | 1.0 |
| Phase Linearity (Fo±0.615MHz) | deg | - | 3.5 | 4.5 |
| Phase Linearity (Fo±0.620MHz) | deg | - | 3.5 | 4.5 |
| Temperature Coefficient | ppm/°C | - | -0.03 | - |
| Bandwidth at -5.0 dB | MHz | ±0.630 | ±0.660 | - |
| Bandwidth at -33.0 dB | MHz | - | ±0.890 | - |
| Template on the amplitude, reference is loss at Fc | | | | |
| Attenuation at Fc ± 0.63MHz | dB | - | 4.5 | 5.0 |
| Attenuation at Fc ± 0.9MHz | dB | 32 | 35 | - |
| Attenuation at Fc ± 1.7MHz | dB | 33 | 36 | - |
| Attenuation at Fc ± 2MHz | dB | 35 | 37 | - |
| Attenuation at Fc ± 9MHz | dB | 45 | 48 | - |

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



Testing Environment

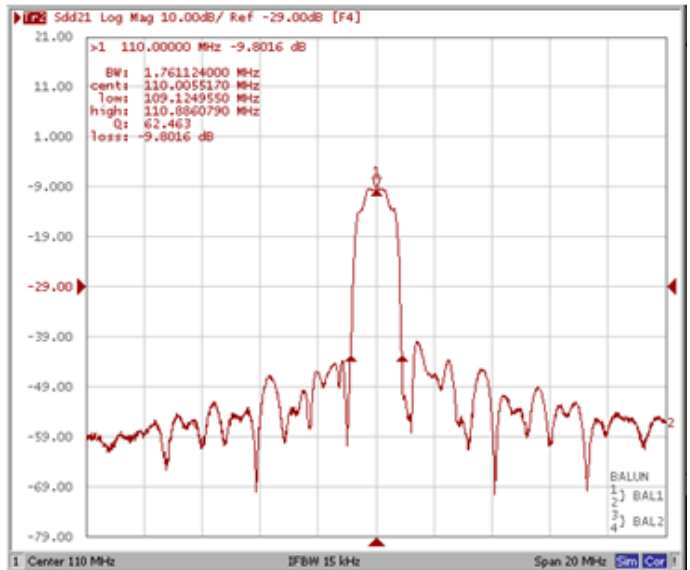
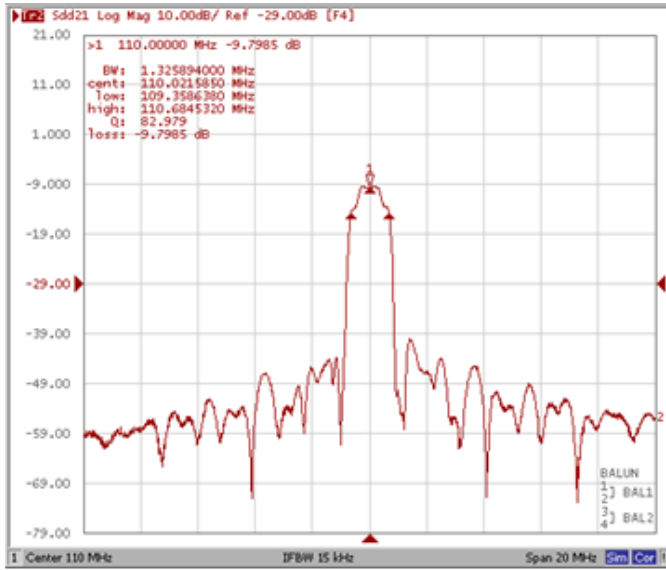


Frequency Characteristics

Frequency Response

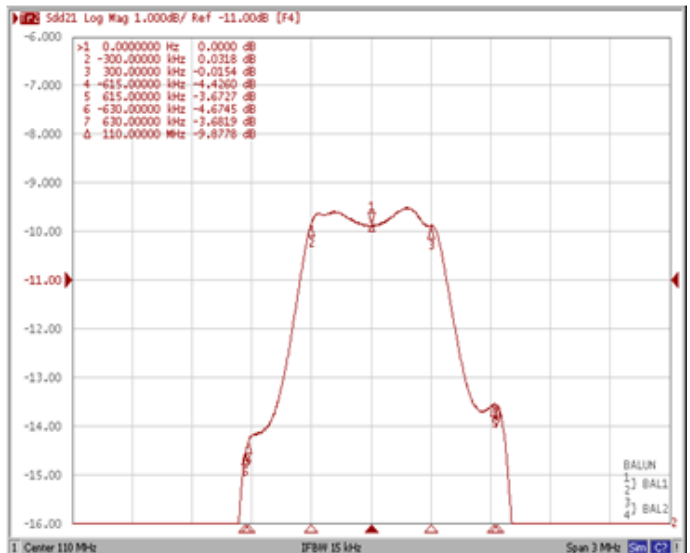
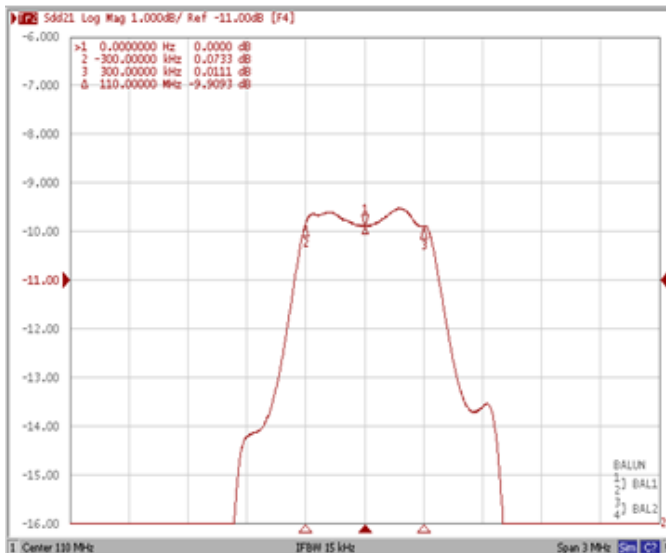
Bandwidth at -5.0 dB

Bandwidth at -33.0 dB



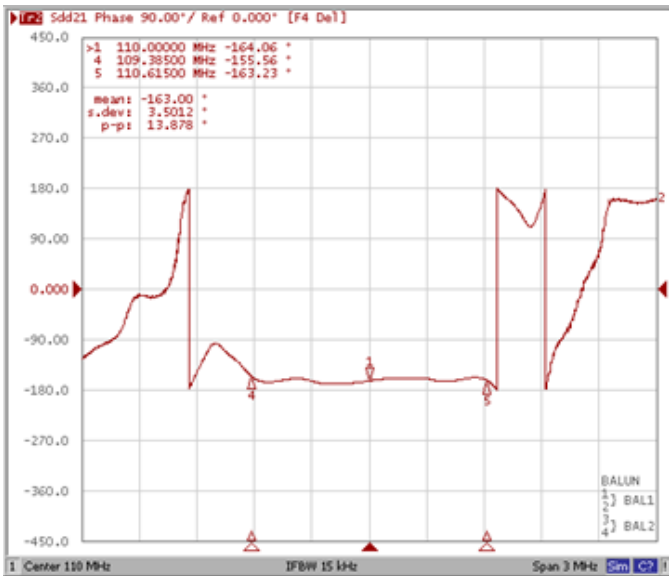
Amplitude Ripple ($F_0 \pm 0.3\text{MHz}$)

Attenuation



Frequency Response

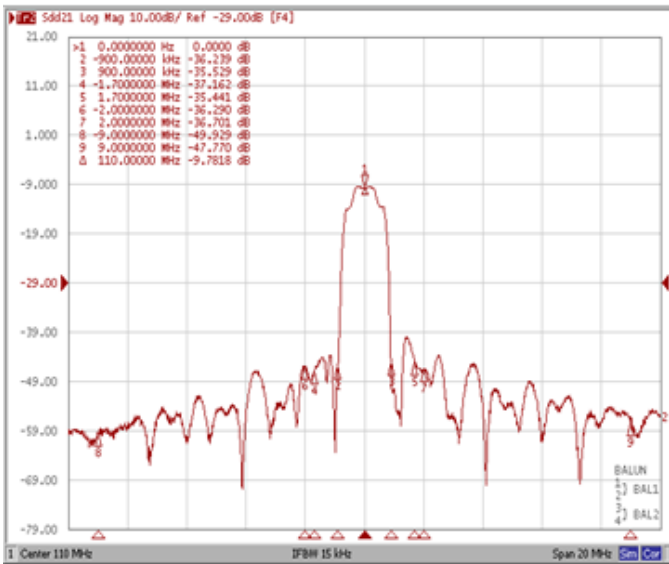
Phase Linearity (Fo±0.615MHz)



Phase Linearity (Fo±0.620MHz)



Attenuation



Smith Chart

