

- 110.0 MHz IF SAW Filter / 2.18 MHz Bandwidth
- Revision 0: 06. Feb. 2008

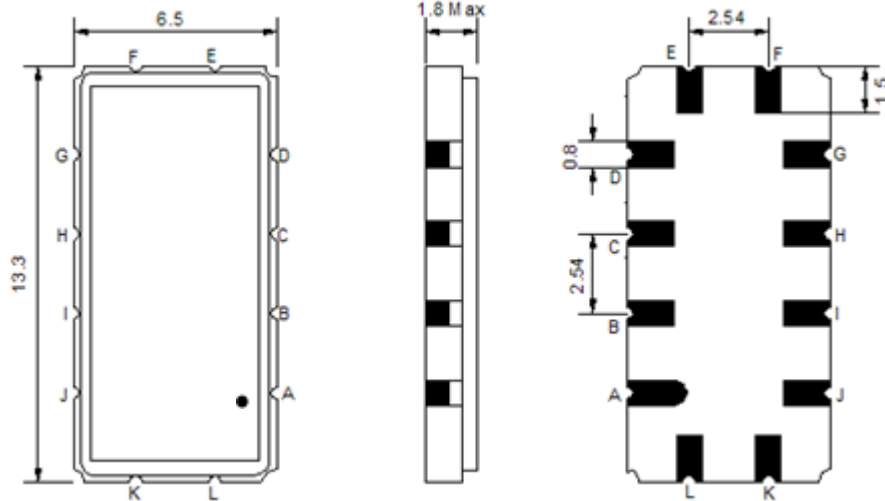
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation Temperature Range	°C	-5	-	70
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	V			
Length x Width	mm <sup>2</sup>	-	13.3 x 6.5	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	109.9	110.0	110.1
Insertion Loss at Fo	dB	-	20	22
Amplitude Ripple within fo ±0.9 MHz	dB <sub>p-p</sub>	-	0.3	0.9
Group Delay Variation within fo ±0.9 MHz	nsec	-	70	150
Absolute Delay at Fo	µsec	-	1.77	2.0
Bandwidth at -1.0 dB	MHz	1.80	2.18	-
Bandwidth at -3.0 dB	MHz	-	2.45	-
Bandwidth at -40.0 dB	MHz	-	3.60	3.80
Ultimate Rejection	dB	40	47	-
Temperature Coefficient	ppm/°C	-	-0.03	-

**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.

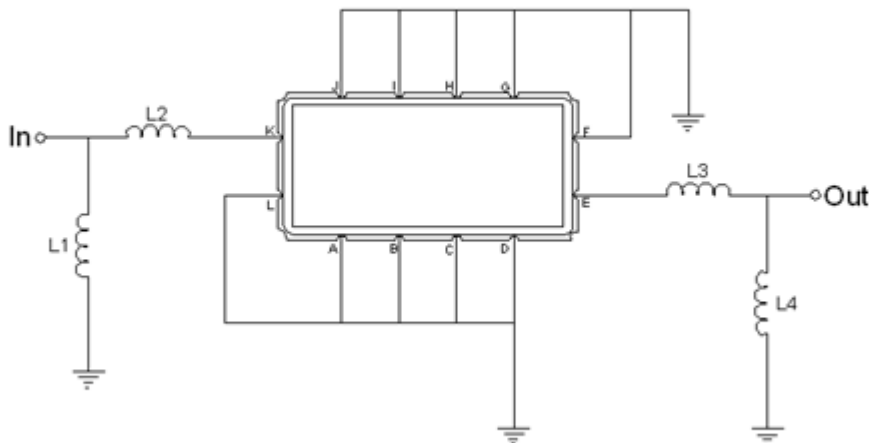
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TA11002A:** 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



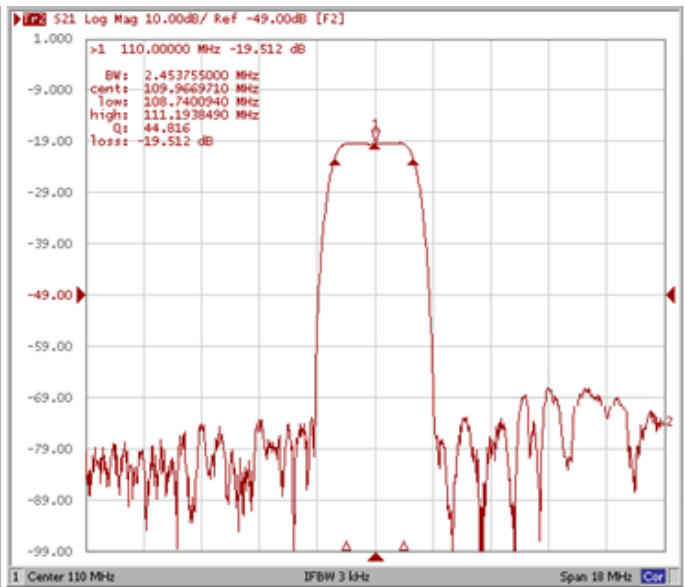
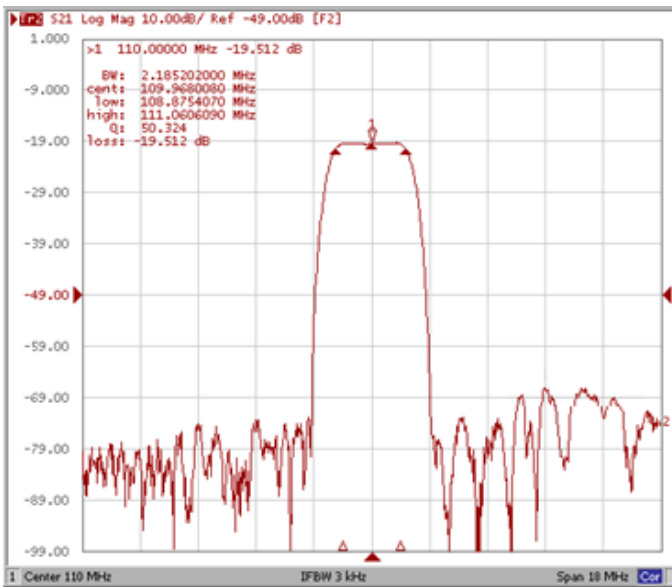
Test Fixture & Values	
<b>Input</b>	L1=56nH, L2=82nH
<b>Output</b>	L3=56nH, L4=56nH
<b>Source/Load Impedance</b>	50 Ω

## Frequency Characteristics

### Frequency Response

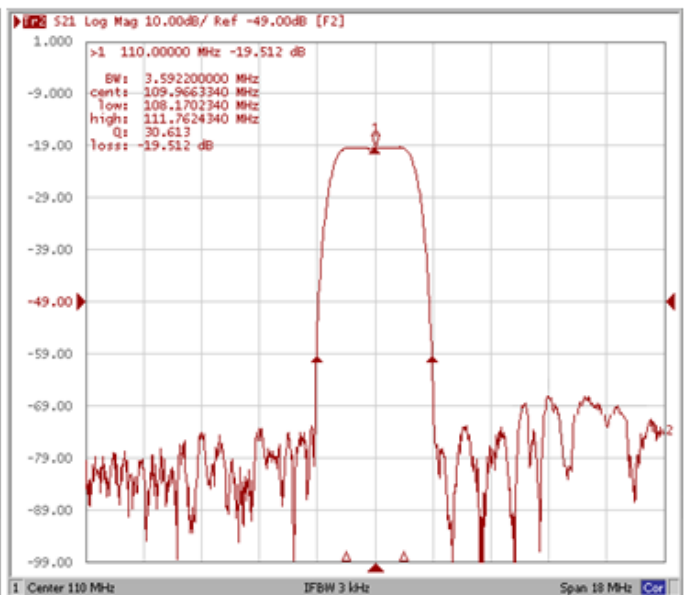
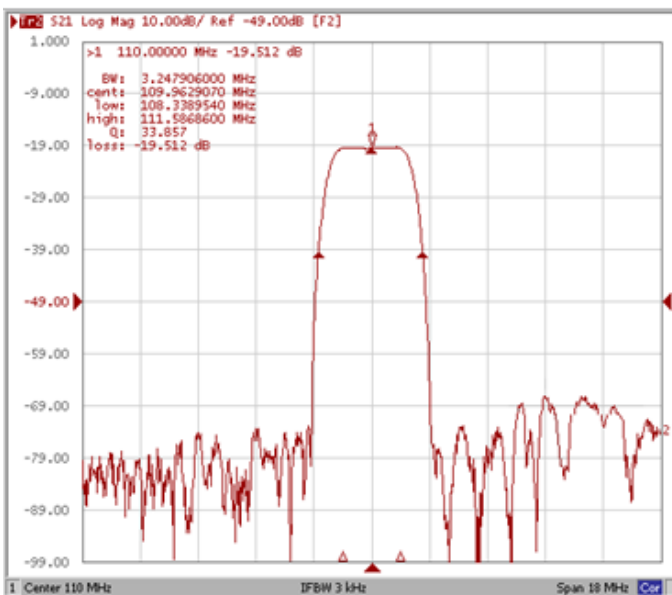
**Bandwidth at -1.0 dB**

**Bandwidth at -3.0 dB**



**Bandwidth at -20.0 dB**

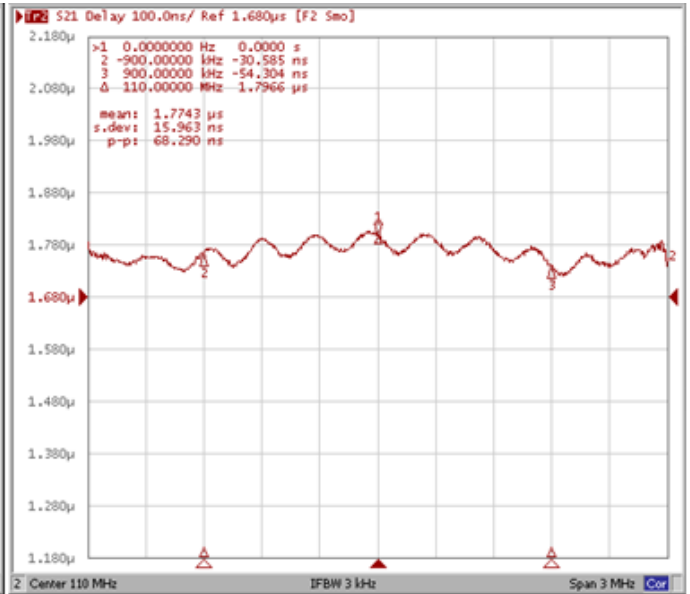
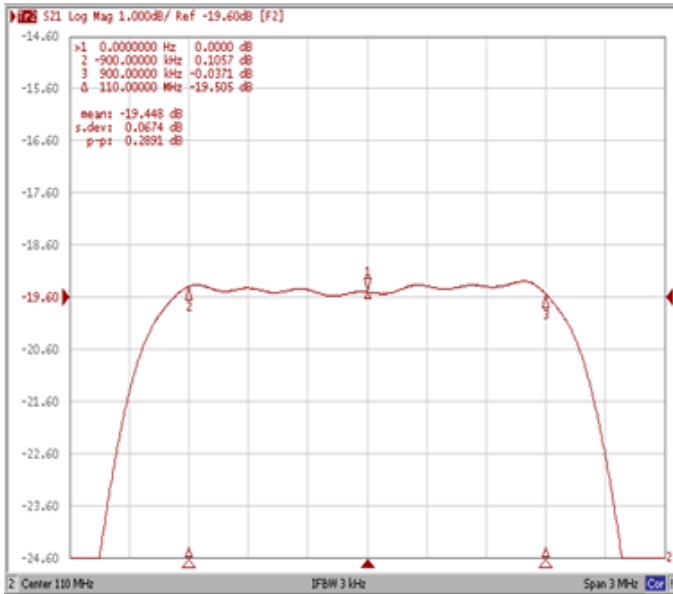
**Bandwidth at -40.0 dB**



**Frequency Response**

**Ripple Variation Fo±0.9MHz**

**Group Delay Variation Fo±0.9MHz**



**Smith Chart**

**SWR**

