

- 175.00 MHz IF SAW Filter / 0.96 MHz Bandwidth
- Revision 0: 04 Apr. 2012

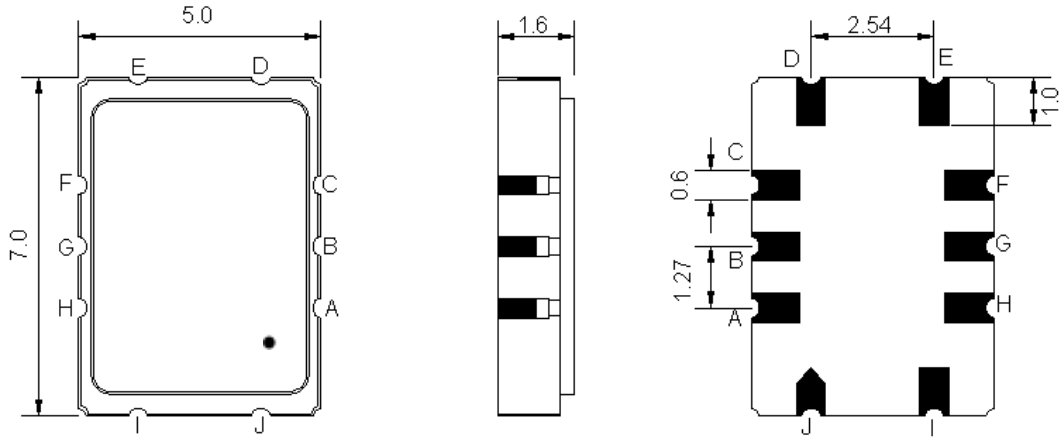
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-40	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	-
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	S			
Length x Width	mm <sup>2</sup>	-	7.0 x 5.0	-
Height	mm	-	-	1.7

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	175.00	-
Insertion Loss at Fo	dB	-	8.5	10.5
Group Delay Variation (Fo±0.2MHz)	nsec	-	55	300
Absolute Delay at Fo	usec	-	0.75	1.30
Amplitude Ripple variation (Fo±0.2MHz)	dB	-	0.30	1.50
Bandwidth at -1dB	MHz	0.90	0.96	-
Bandwidth at -2.5dB	MHz	-	1.32	-
Bandwidth at -3dB	MHz	-	1.42	-
Bandwidth at -5dB	MHz	-	1.70	-
Bandwidth at -30dB	MHz	-	3.25	-
Bandwidth at -40dB	MHz	-	3.55	3.95
Ultimate rejection (up to 1GHz)	dB	40	50	-
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.

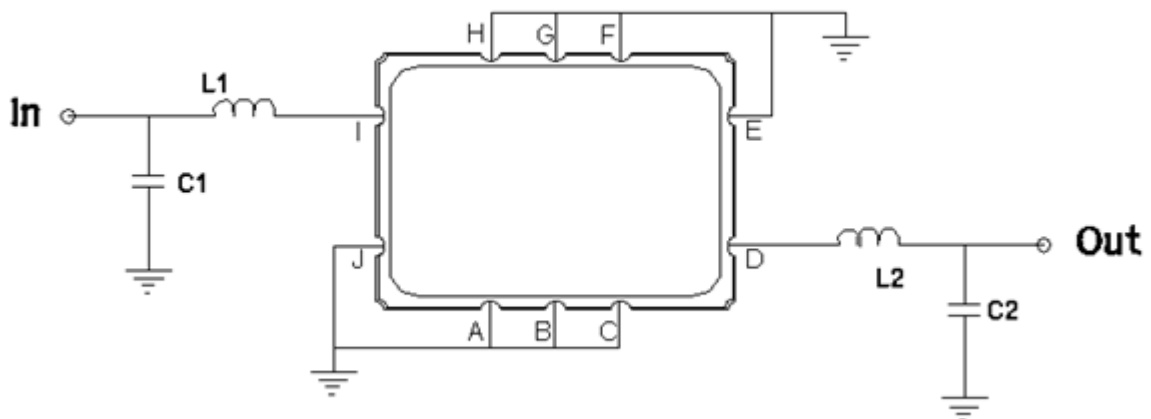
## Package Dimensions



- ① TRANSKO: Brand
- ② TL17501A: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

Pin Description	
A, B, C, E, F, G, H, J	Ground
I	Input
D	Output

## Testing Environment



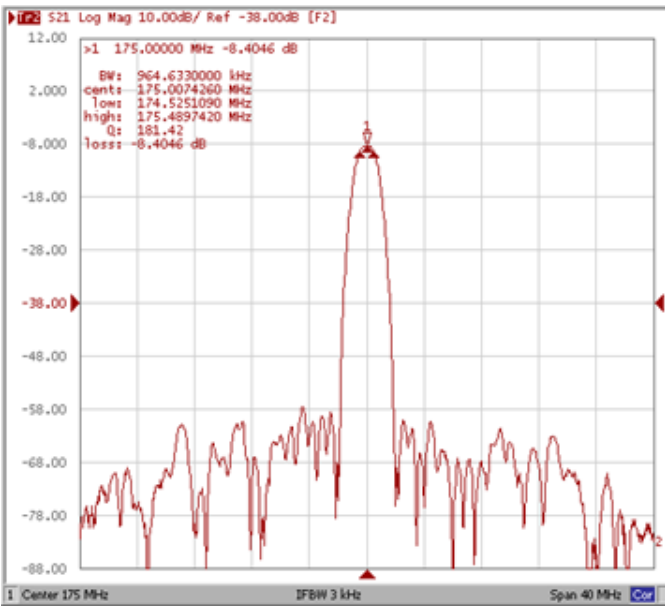
Test Fixture & Values	
Input	L1 = 120 nH Q >40, C1 = 30 pF
Output	L2 = 100+27 nH Q >40, C2 = 36 pF
Source/Load Impedance	50 $\Omega$

## Frequency Characteristics

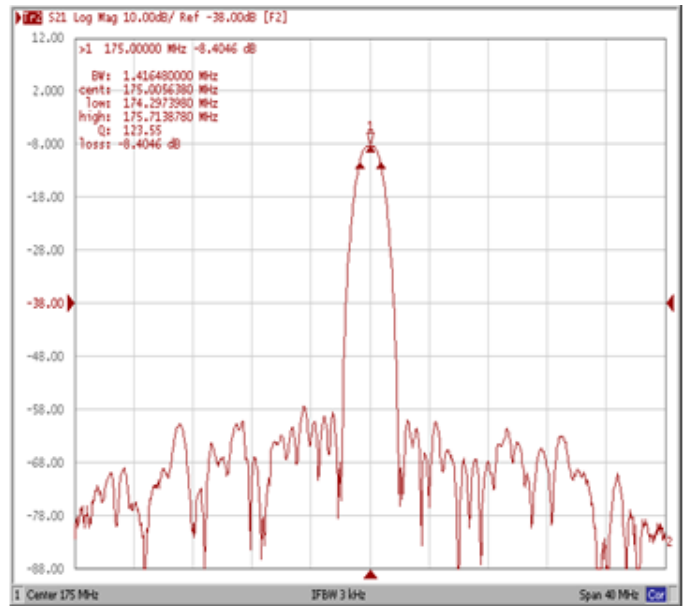
### Frequency Response

Room Temp.: 25°

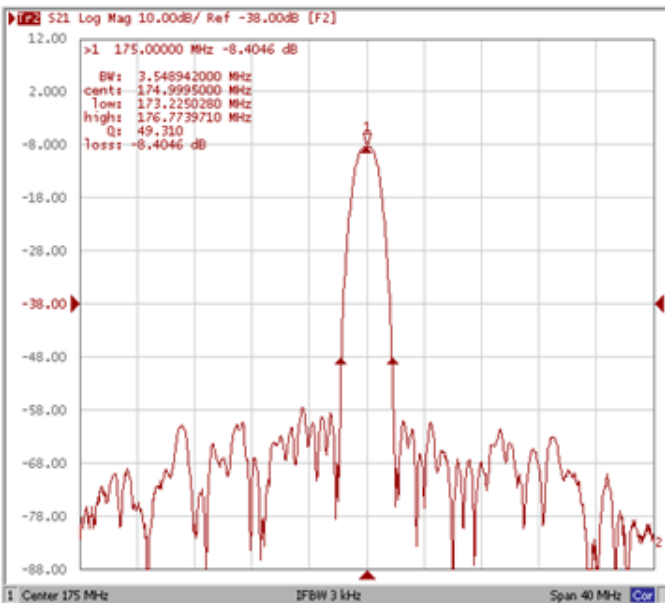
#### Bandwidth at -1.0 dB



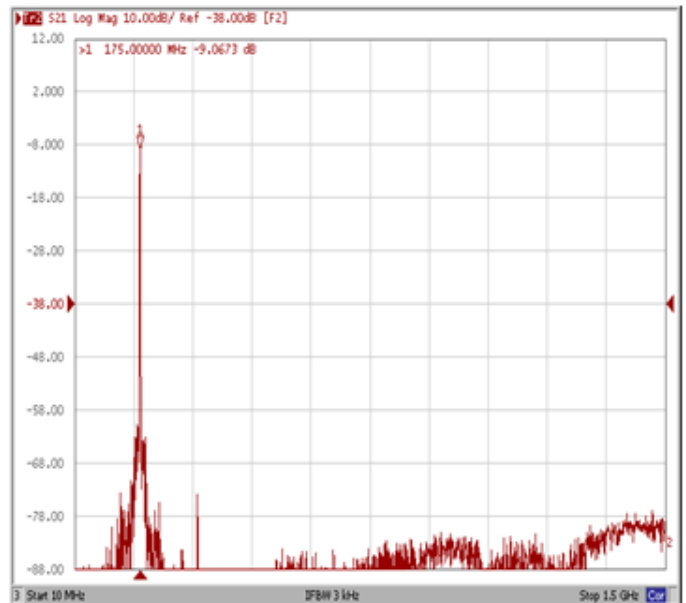
#### Bandwidth at -3.0 dB



#### Bandwidth at -40 dB

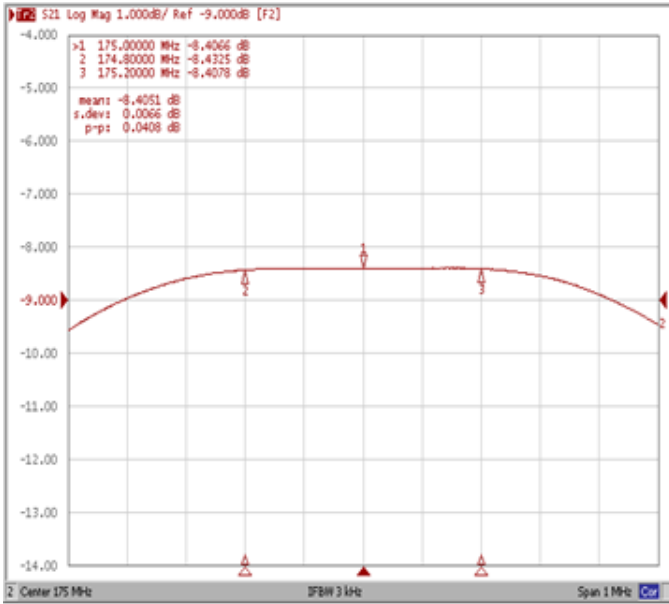


#### Ultimate rejection (up to 1GHz)

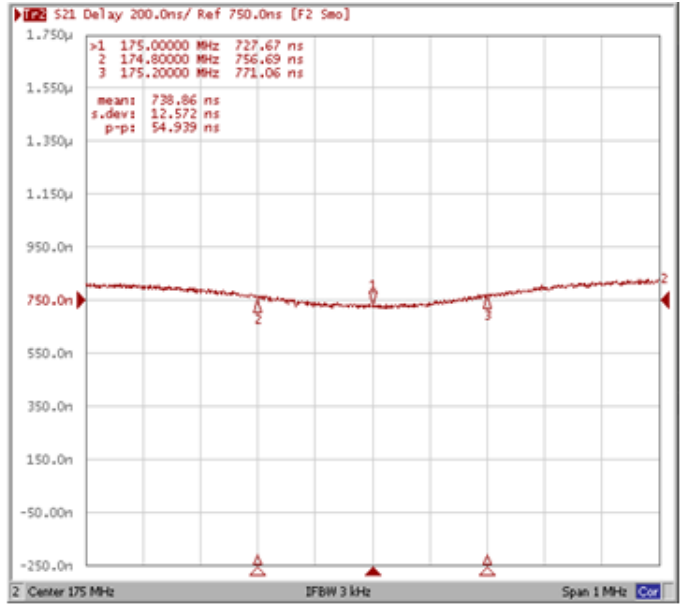


**Frequency Response**

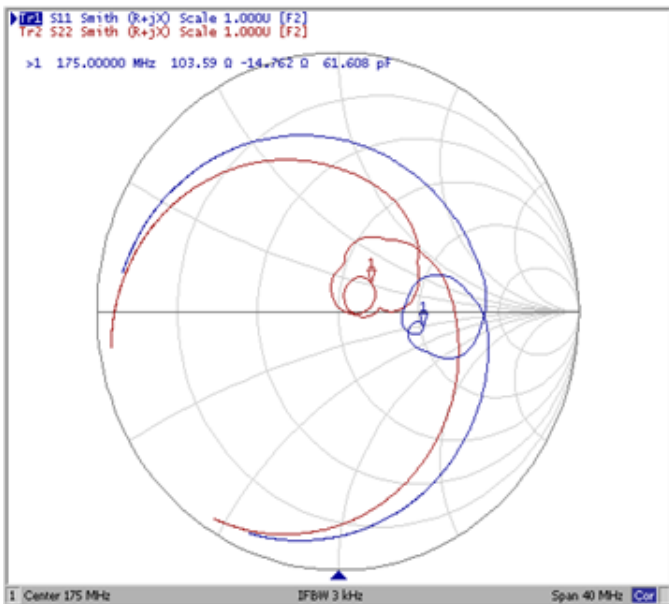
**Ripple Variation Fo±0.2MHz**



**Group Delay Variation Fo±0.2MHz**



**Smith Chart**



**VSWR**

