

- 97.0 MHz IF SAW Filter / 21.30 MHz Bandwidth
- Revision 0: 15 Apr. 2011

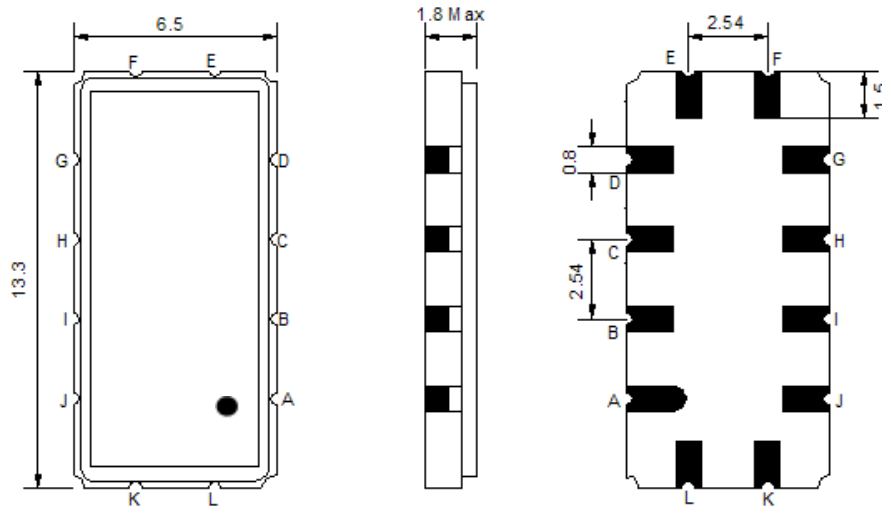
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-10	-	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	-	97.00	-
Insertion Loss at Fo	dB	-	12.00	14.00
Group Delay Variation (Fo±9.50MHz)	nsec	-	22	50
Absolute Delay at Fo	usec	-	0.90	1.00
Passband Ripple (Fo±9.50MHz)	dB	-	0.30	0.80
Bandwidth at -1dB	MHz	21.00	21.30	-
Bandwidth at -3dB	MHz	-	22.20	-
Bandwidth at -40dB	MHz	-	26.40	26.70
Ultimate Rejection	dB	40	48	-
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.

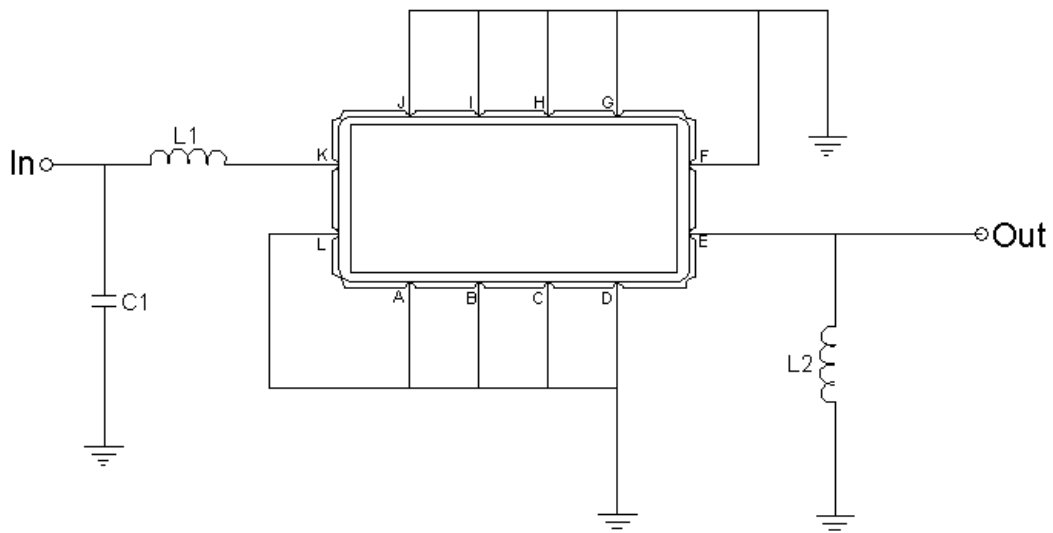
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL09721A:** 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

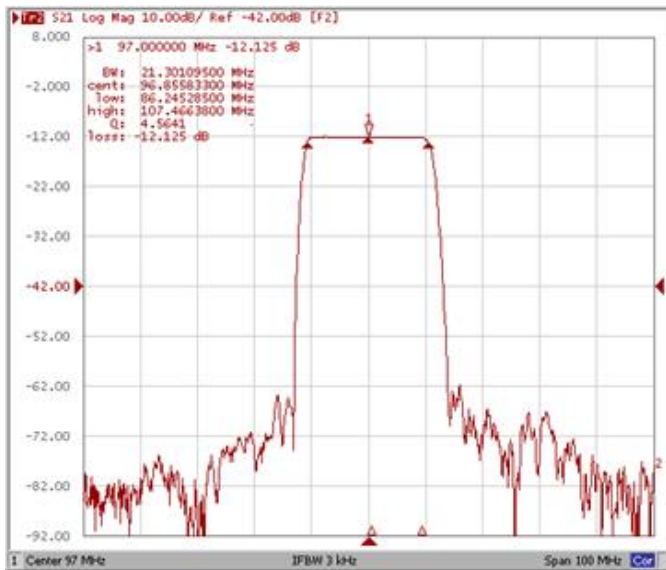


Test Fixture & Values	
Input	L1 = 82 nH, C1 = 27 pF
Output	L2 = 68 nH
Source/Load Impedance	50 Ω

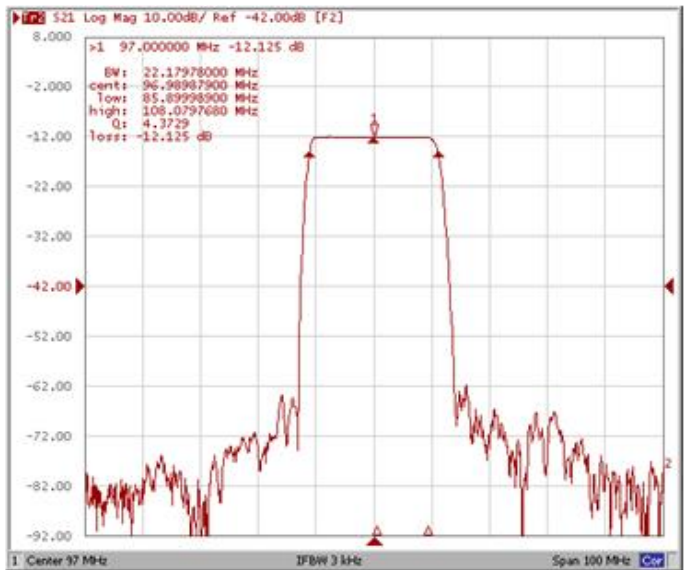
## Frequency Characteristics

### Frequency Response

**Bandwidth at -1.0 dB**



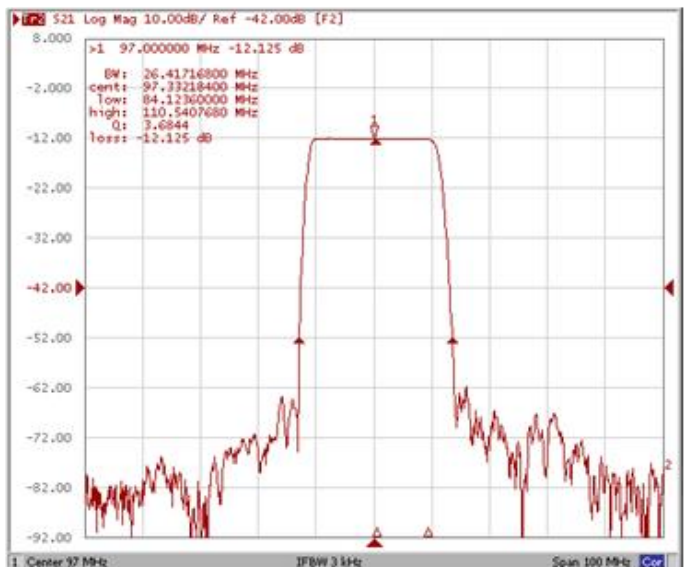
**Bandwidth at -3.0 dB**



**Bandwidth at -20.0 dB**

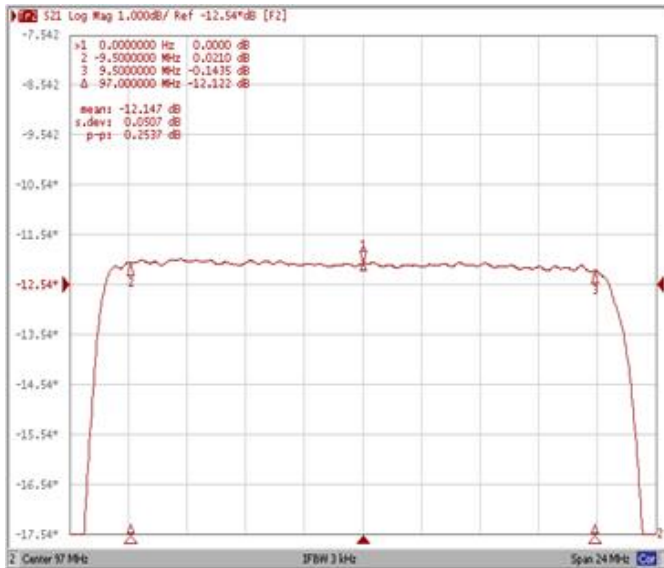


**Bandwidth at -40.0 dB**

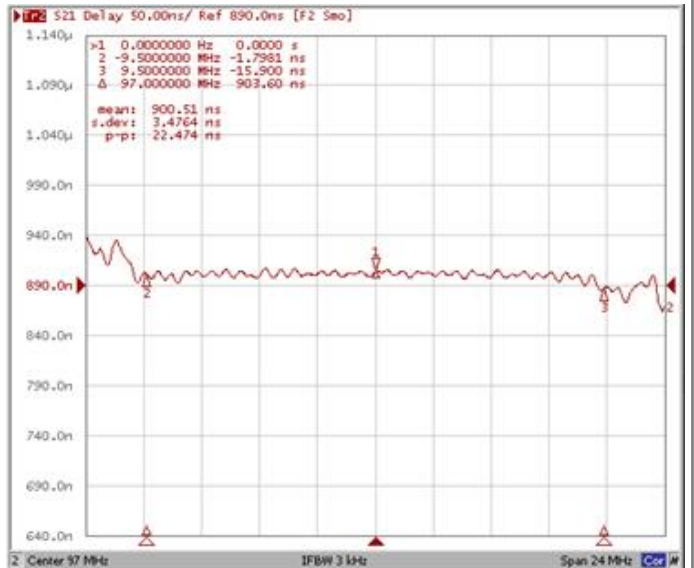


## Frequency Response

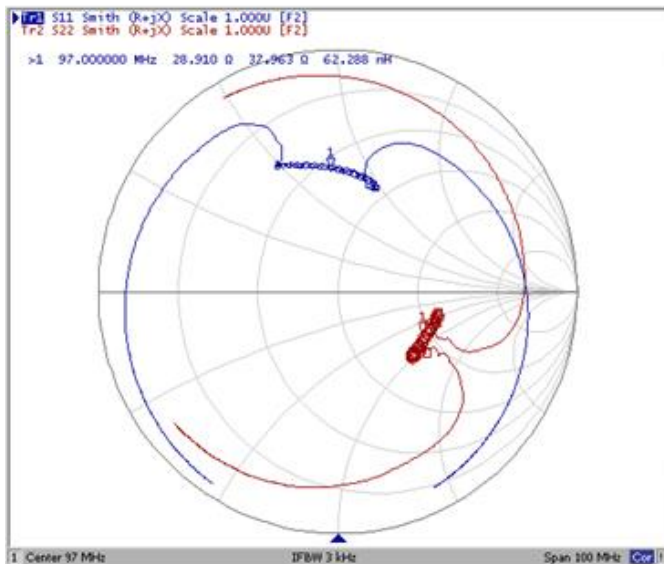
**Ripple Variation Fo ±9.50MHz**



**Group Delay Variation Fo ±9.50MHz**



**Smith Chart**



**VSWR**

