

- 87.50 MHz IF SAW Filter / 31.90 MHz Bandwidth
- Revision 0: 22 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	-	87.50	-
Insertion Loss at Fo	dB	-	15.00	17.00
Group Delay Variation (Fo±15.00MHz)	nsec	-	20	50
Absolute Delay at Fo	usec	-	0.91	1.00
Passband Ripple (Fo±15.00MHz)	dB	-	0.35	0.80
Bandwidth at -1dB	MHz	31.60	31.90	-
Bandwidth at -3dB	MHz	-	32.85	-
Bandwidth at -40dB	MHz	-	36.85	37.25
Ultimate Rejection	dB	40	47	-
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.

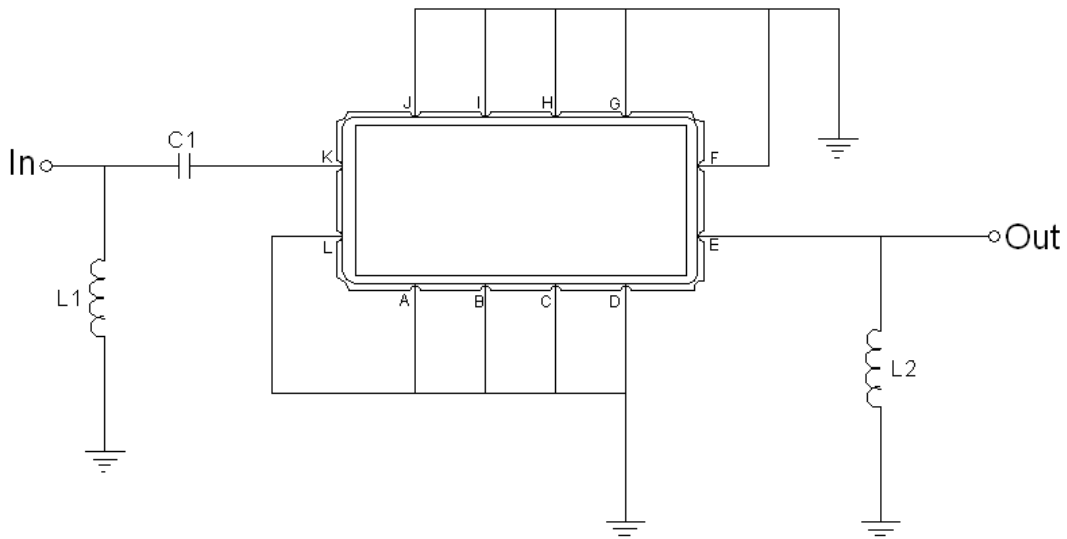
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL08731A:** 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



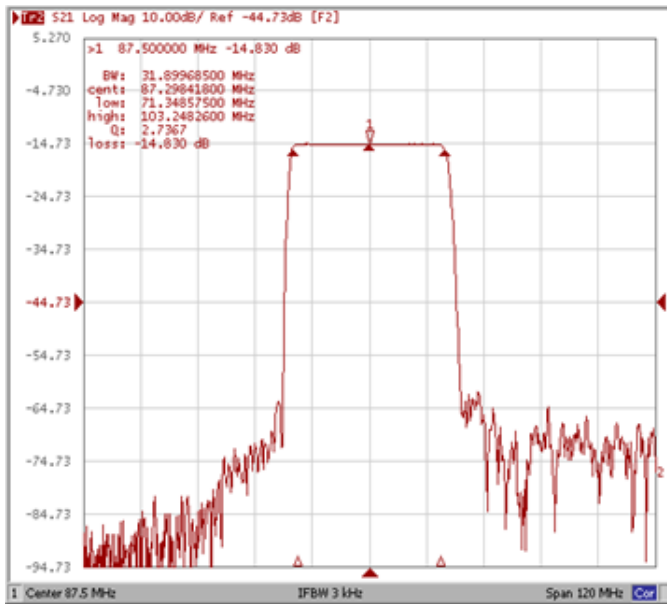
Test Fixture & Values	
Input	L1 = 68 nH, C1 = 220 pF
Output	L2 = 82 nH
Source/Load Impedance	50 Ω

## Frequency Characteristics

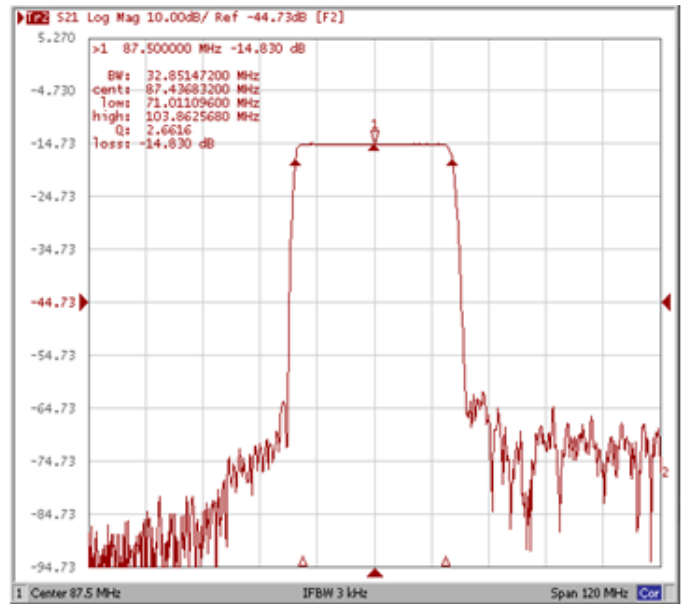
### Frequency Response

Operating Temperature : +25 °C

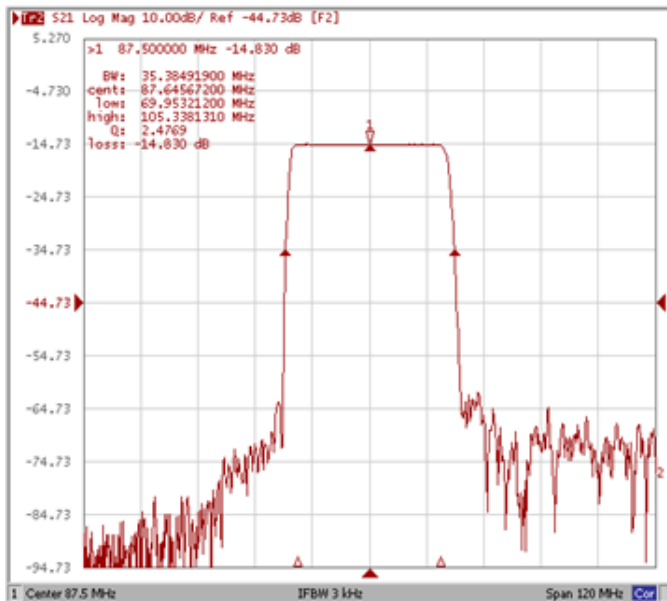
#### Bandwidth at -1.0 dB



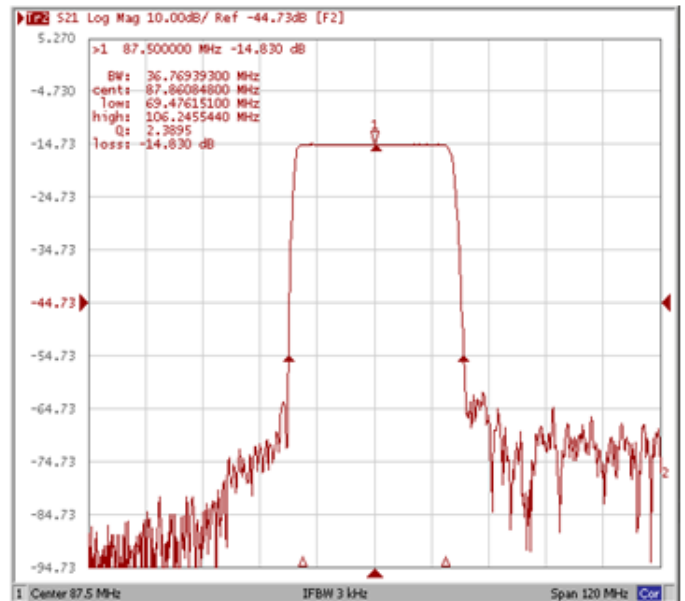
#### Bandwidth at -3.0 dB



#### Bandwidth at -20.0 dB

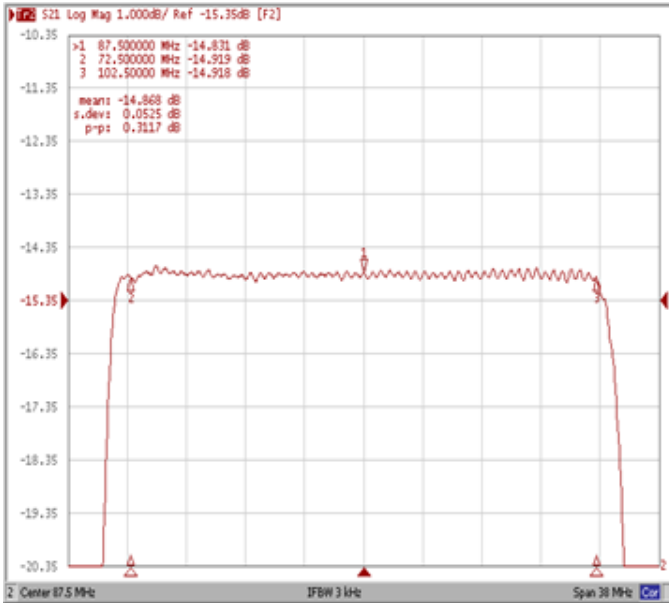


#### Bandwidth at -40.0 dB

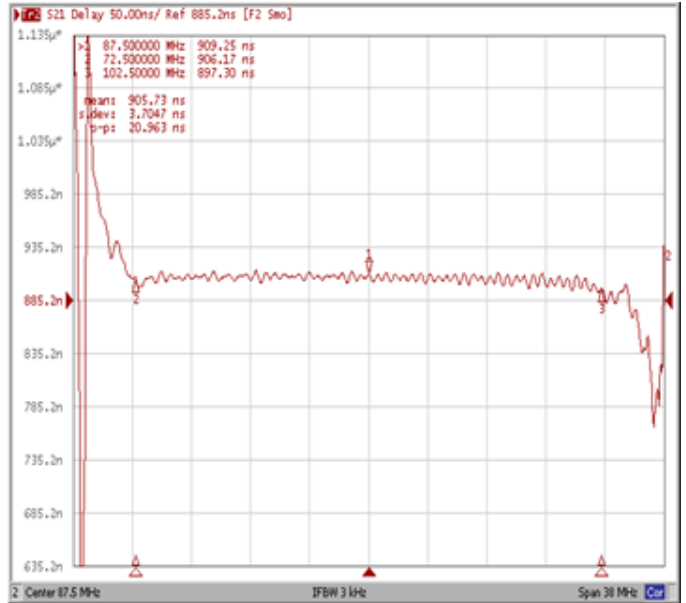


## Frequency Response

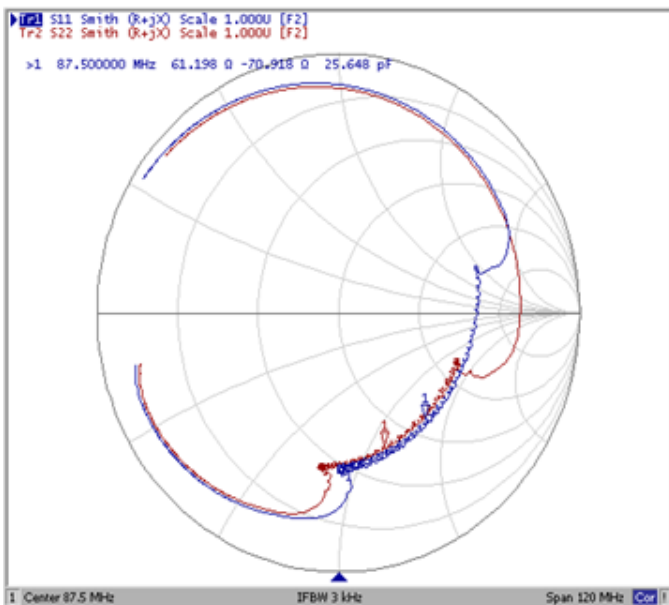
**Ripple Variation Fo ±15.00MHz**



**Group Delay Variation Fo ±15.00MHz**



**Smith Chart**



**VSWR**

