

- 70.00 MHz IF SAW Filter / 42.2MHz Bandwidth
- Revision 0: 15 Dec. 2008

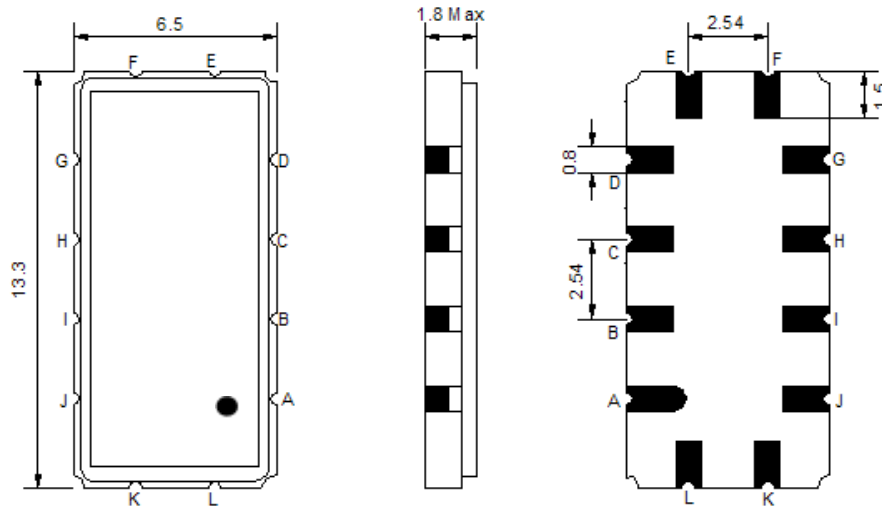
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-30	-	80
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	-	70.0	-
Insertion Loss at Fo	dB	-	21.9	23.0
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within fo ±20.0 MHz	dB <sub>p-p</sub>	-	0.66	1.00
Group Delay Variation within fo ±20.0 MHz	nsec	-	10	30
Absolute Delay at Fo	µsec	-	0.95	-
Bandwidth at -1.0 dB	MHz	40.00	42.20	-
Bandwidth at -3.0 dB	MHz	43.00	43.85	-
Bandwidth at -40.0 dB	MHz	-	50.00	50.80
Relative Attenuation:				
0MHz ~ 45.35MHz	dB	40	45	-
97.05MHz ~ 120MHz	dB	30	35	-

**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.

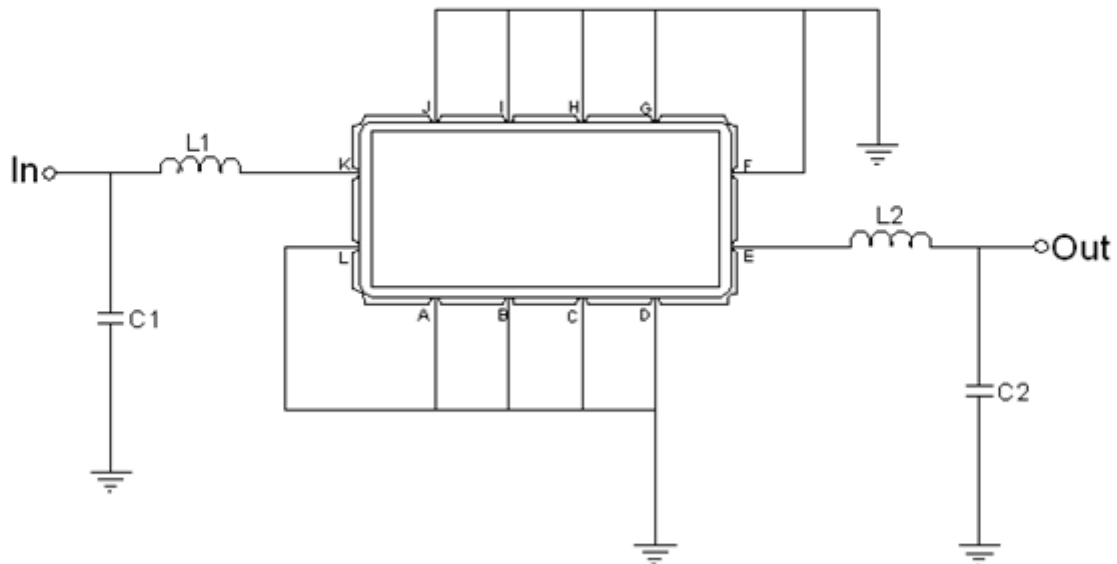
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL07042A:** 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

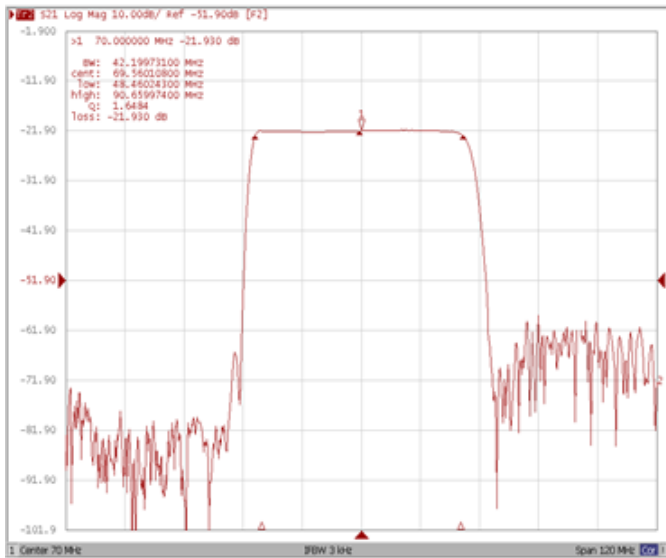


Test Fixture & Values	
<b>Input</b>	L1=150nH , C1=22pF
<b>Output</b>	L2=100nH , C2=24pF
<b>Source/Load Impedance</b>	50 Ω

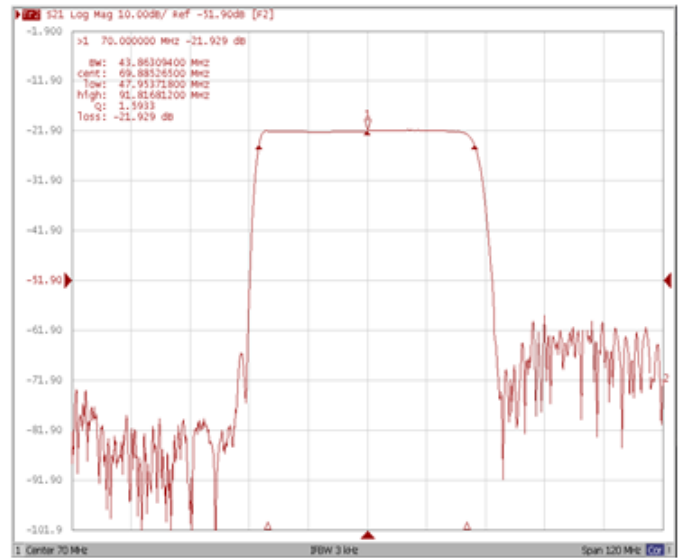
## Frequency Characteristics

### Frequency Response

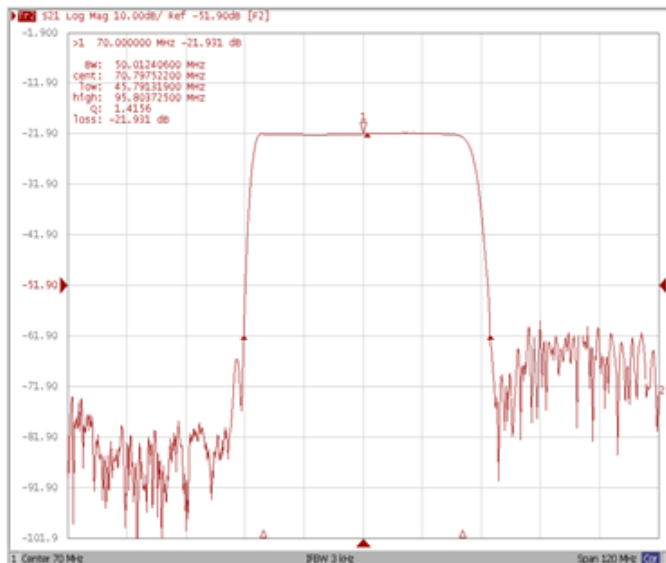
**Bandwidth at -1.0 dB**



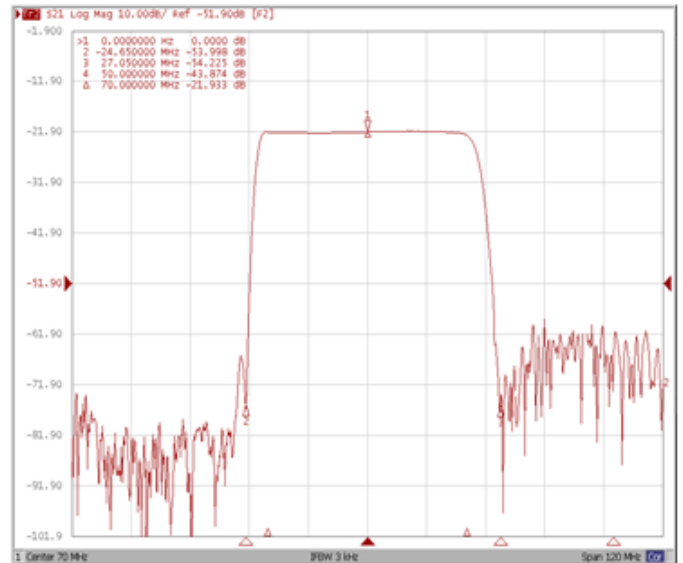
**Bandwidth at -3.0 dB**



**Bandwidth at -40.0 dB**

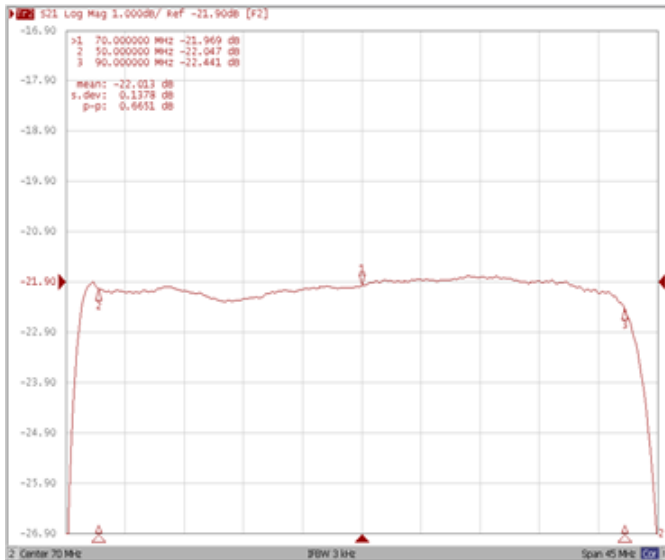


**Relative Attenuation**

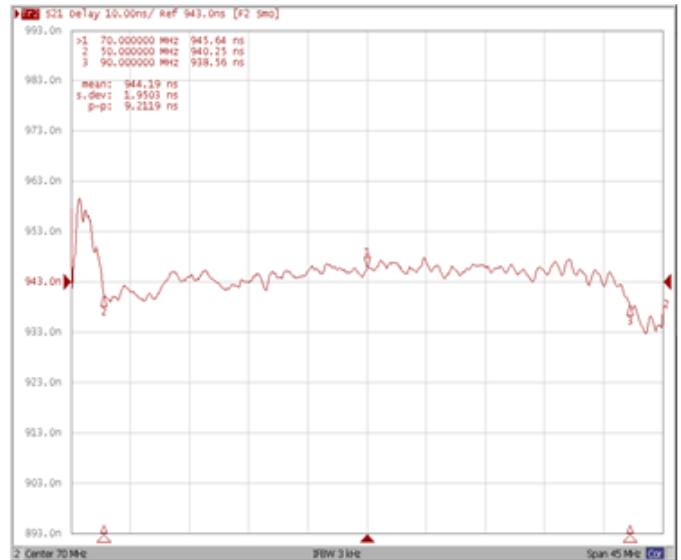


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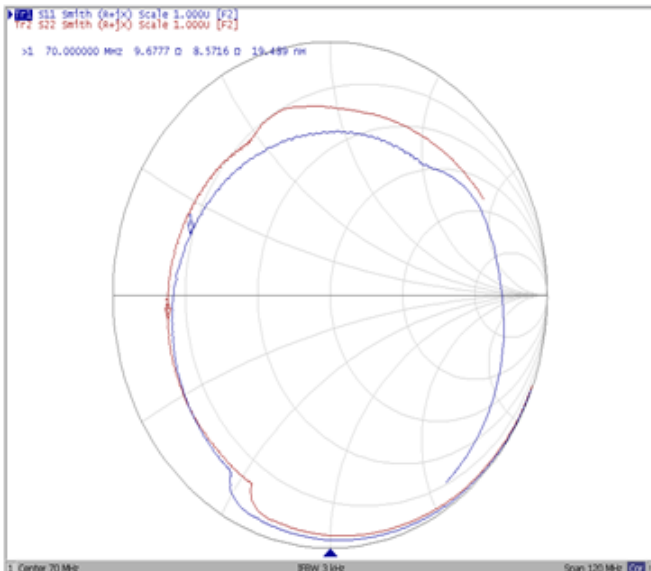
**Ripple Variation Fo±20.0MHz**



**Group Delay Variation Fo±20.0MHz**



**Smith Chart**



**VSWR**

