Transko

TL15320AS1

RoHS Compliant

- **153.60 MHz IF SAW Filter / 23.5 MHz Bandwidth**
- **Revision 0: 06 May 2008**

Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	**UNIT**	**MINIMUM**	**TYPICAL**	**MAXIMUM**
Operation Temperature Range	°C	-40	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size			S1	
Length x Width	mm^2	-	7.0 x 5.0	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	**UNIT**	**MINIMUM**	**TYPICAL**	**MAXIMUM**
Center Frequency (Fo)	MHz	153.4	153.6	153.8
Insertion Loss at Fo	dB	-	9.0	11.0
Amplitude Ripple Variation at Fo ± 10.0 MHz	dB_{p-p}	-	0.65	1.0
Group Delay Variation at Fo ± 10.0 MHz	nsec	-	70	100
Phase Linearity at Fo ± 10.0 MHz	rms	-	3.0	5.0
Absolute Delay at Fo	µsec	-	0.65	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at –1.0 dB	MHz	20.0	23.5	-
Bandwidth at –3.0 dB	MHz	-	24.9	-
Bandwidth at –40.0 dB	MHz	-	31.7	33.0
VSWR	-	-	-	2.0 : 1
Relative Attenuation:				
1.0MHz ~ 80.0MHz	dB	50	70	-
80.0MHz ~ 105.0MHz	dB	56	63	-
200.0MHz ~ 230.0MHz	dB	56	63	-
230.0MHz ~ 1000.0MHz	dB	40	70	-

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.

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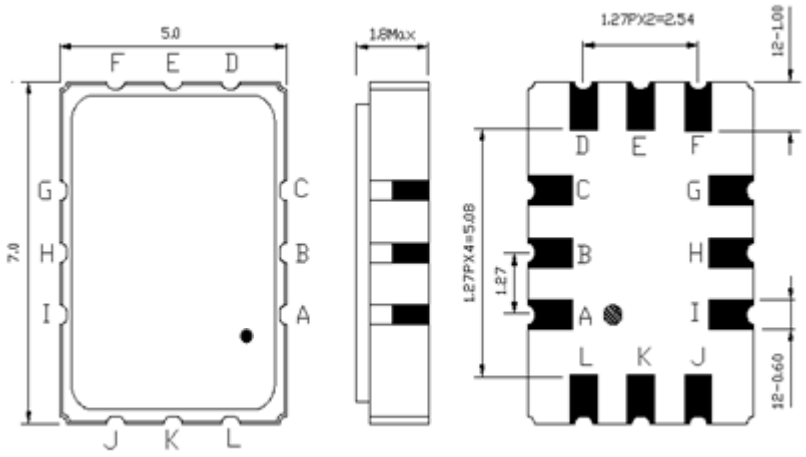
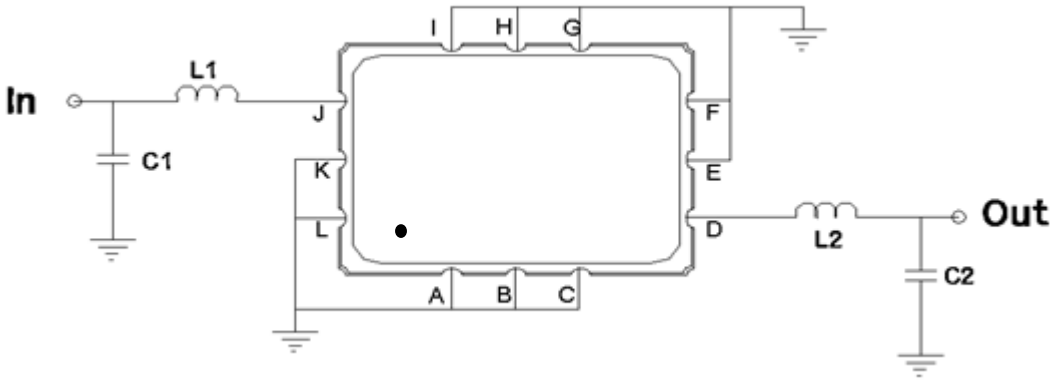
Package Dimensions



① **TRANSKO: Brand**
② **TL15320A: 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, I, K, L	Ground
J	Input
D	Output

Testing Environment

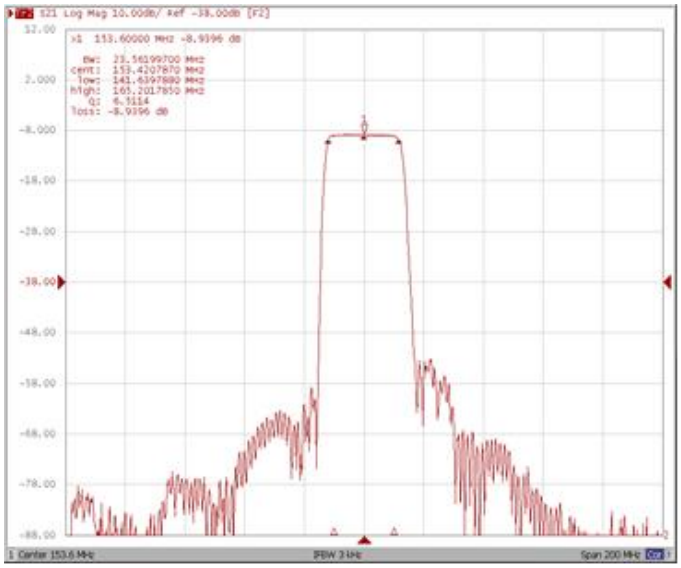


Test Fixture & Values	
Input	L1=39 nH , C1=36 pF
Output	L2=47 nH , C2=33 pF
Source/Load Impedance	50 Ω

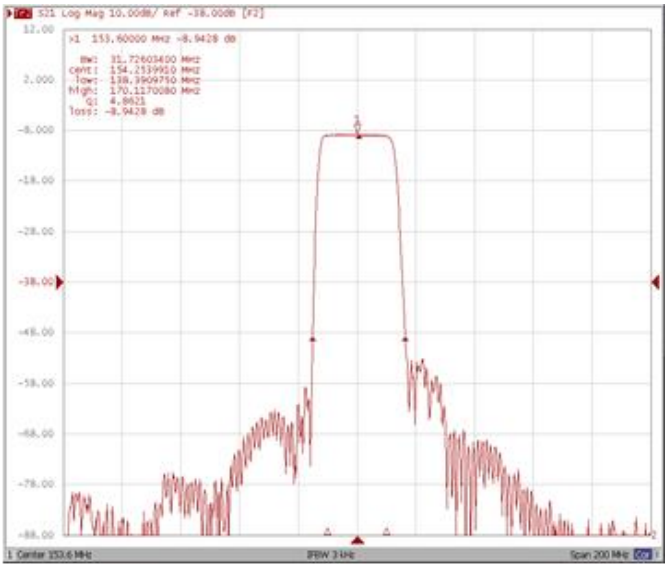
Frequency Characteristics

Frequency Response

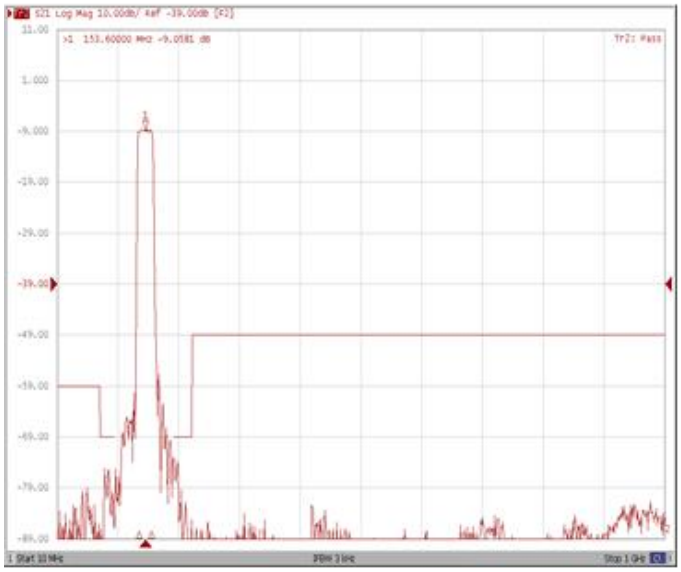
Bandwidth at –1.0 dB



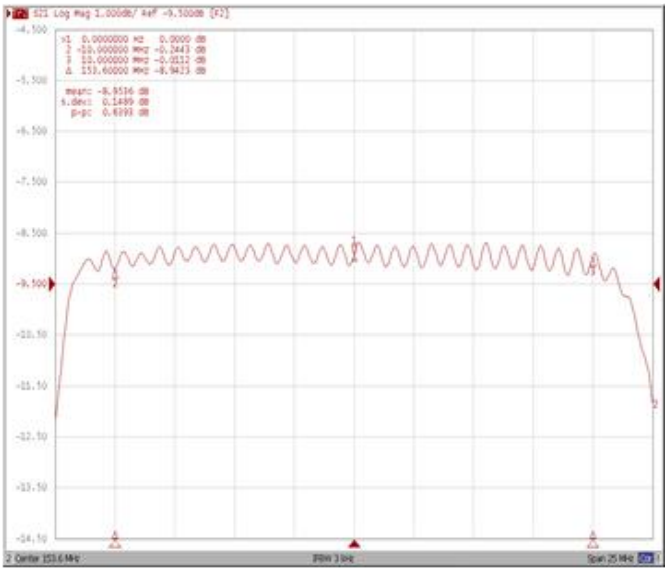
Bandwidth at –40.0 dB



Wide-Band



Ripple Variation Fo±10.0MHz



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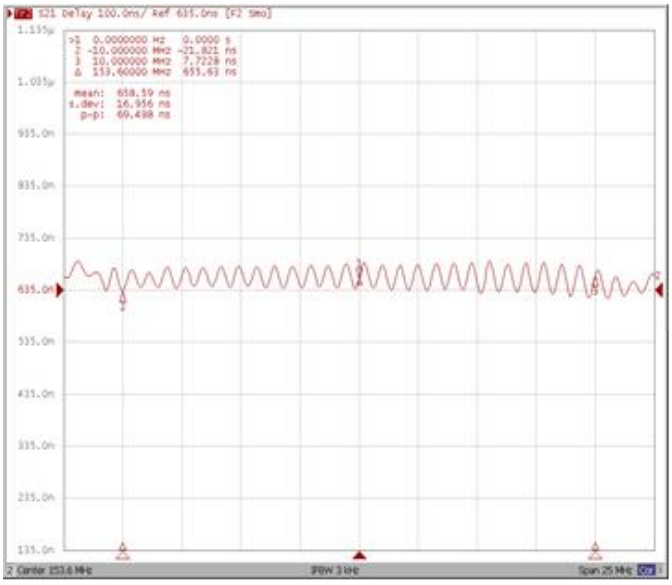
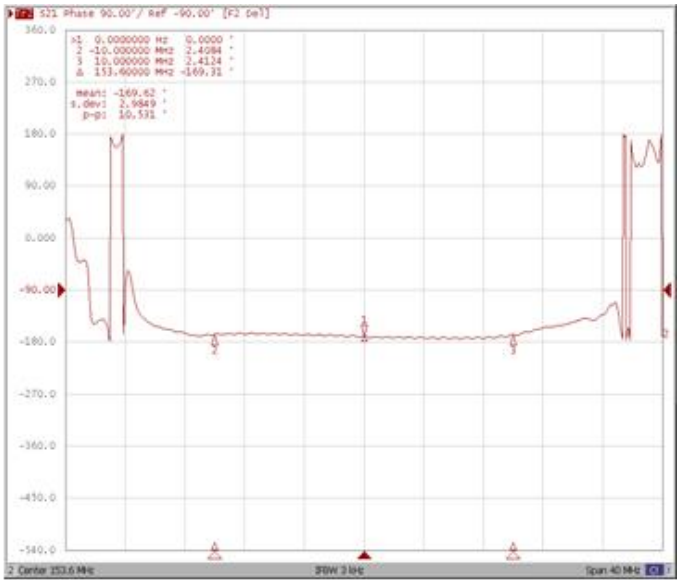
Frequency Response

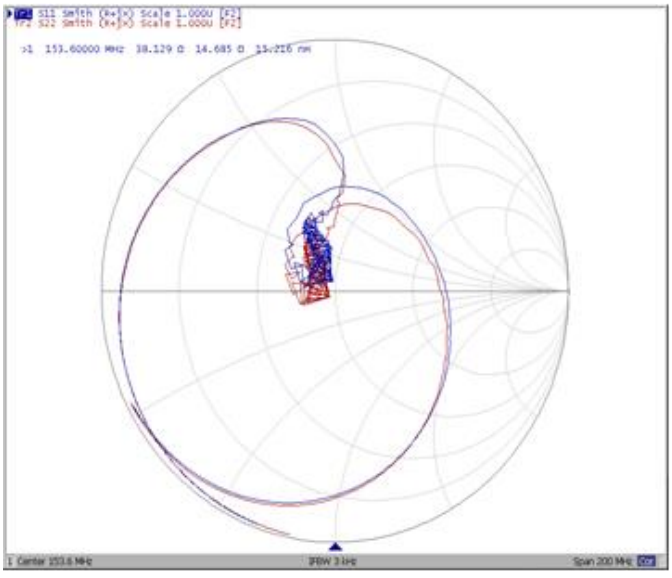
Group Delay Variation Fo±10.0MHz



Phase Linearity Fo±10.0MHz



Smith Chart



SWR

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