

- 315.0 MHz IF SAW Filter / 33.38 MHz Bandwidth
- Revision 0: 19 Nov. 2009

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) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	V			
Length x Width	mm ²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	315.0	-
Insertion Loss at Fo	dB	-	14.9	16.5
Group Delay Variation at Fo ± 15.0 MHz	nsec	-	28.0	60
Absolute Delay at Fo	usec	-	0.59	
Passband Ripple Variation at Fo ± 15.0 MHz	dB	-	0.45	1.0
Bandwidth at -1dB	MHz	33.60	33.88	-
Bandwidth at -20dB	MHz	-	39.29	-
Bandwidth at -40dB	MHz	-	41.37	41.50
Ultimate Rejection	dB	40	43	-
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.

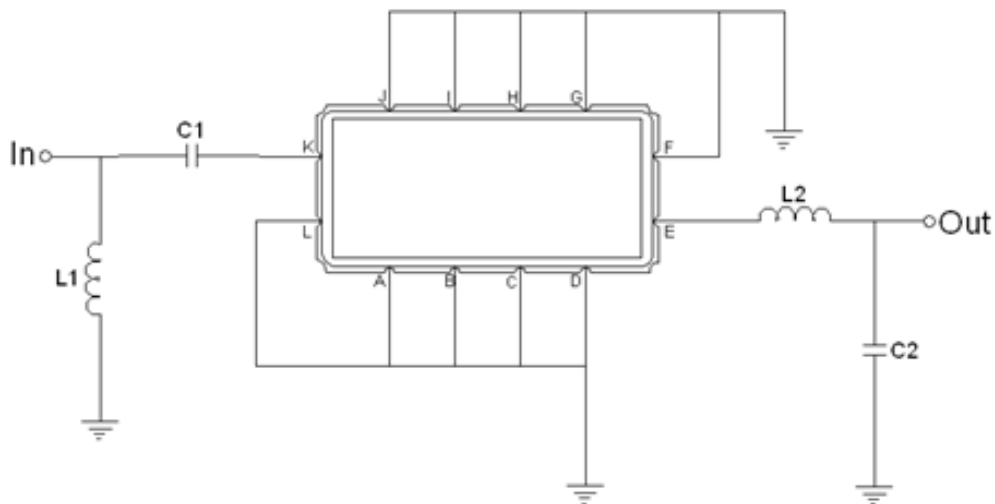
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL31534A:** 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

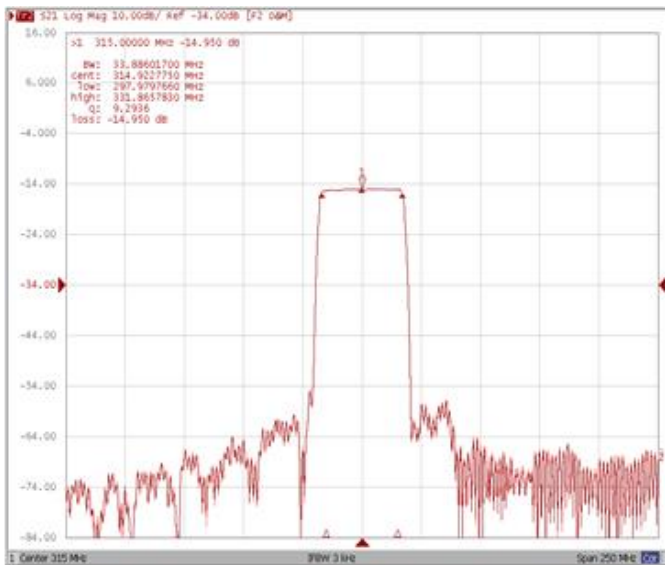


Test Fixture & Values	
Input	L1 = 39 nH, C1 = 13 pF
Output	L2 = 12 nH, C2 = 22 pF
Source/Load Impedance	50 Ω

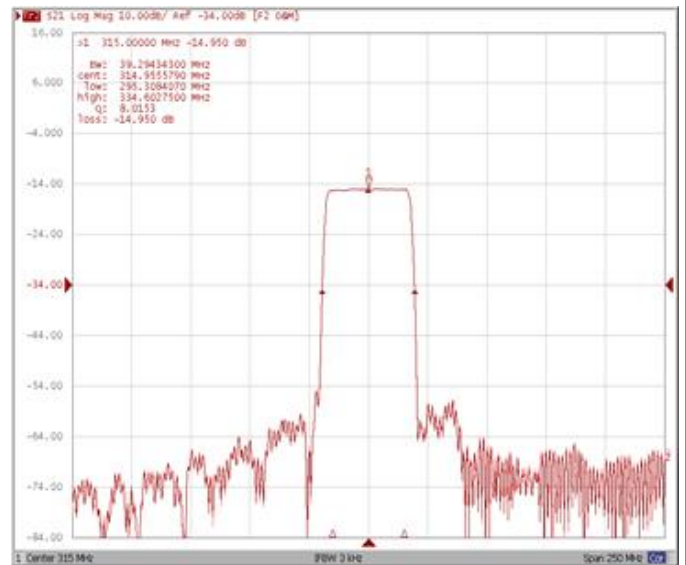
Frequency Characteristics

Frequency Response

Bandwidth at -1.0 dB



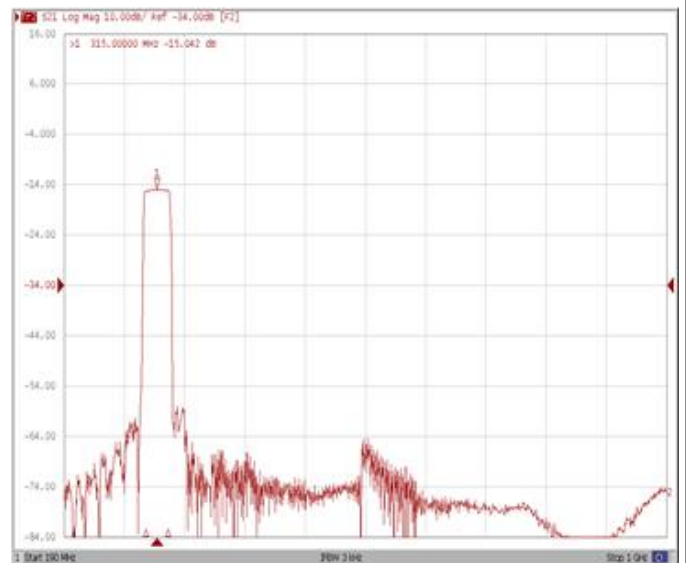
Bandwidth at -20.0 dB



Bandwidth at -40.0 dB

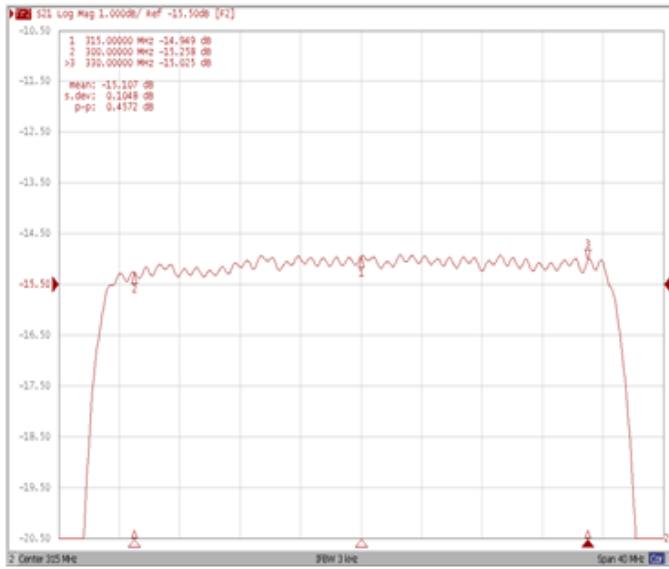


Wide Band

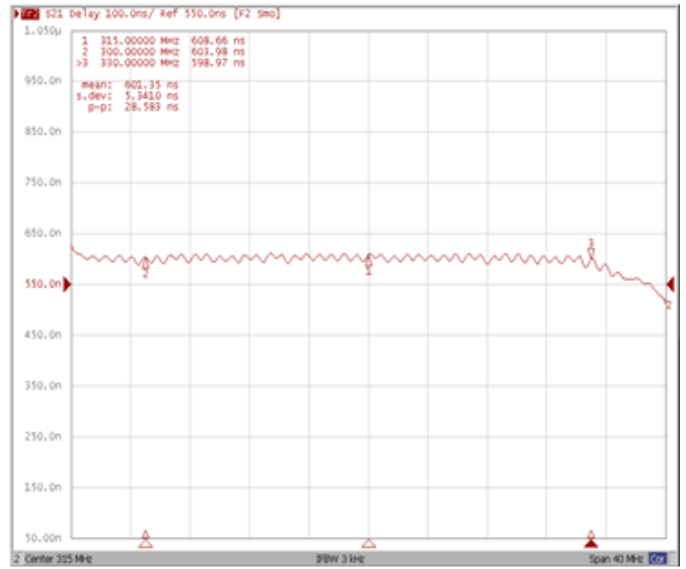


Frequency Response

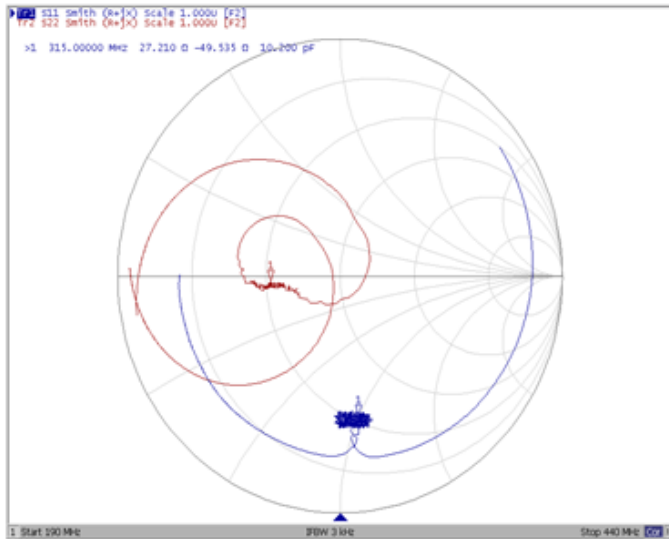
Ripple Variation Fo±15.0MHz



Group Delay Variation Fo±15.0MHz



Smith Chart



VSWR

