

- 143.00 MHz IF SAW Filter / 12.05 MHz Bandwidth
- Revision 0: 22 Aug. 2011

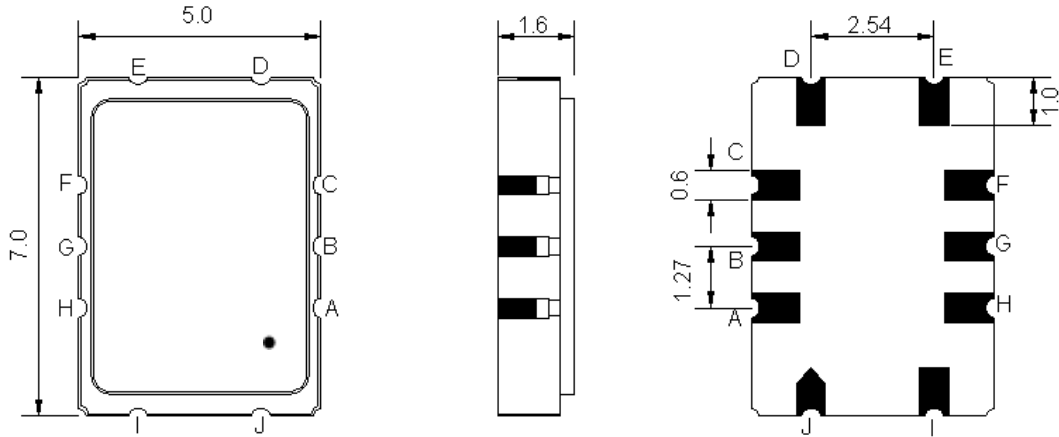
Electrical Characteristics

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	S			
Length x Width	mm ²	-	7.0 x 5.0	-
Height	mm	-	-	1.6

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	143.00	-
Insertion Loss at Fo	dB	-	16.00	18.00
Group Delay Variation (Fo±4.42MHz)	nsec	-	30	100
Absolute Delay at Fo	usec	-	0.80	0.90
Passband Ripple Variation(Fo±4.42MHz)	dB	-	0.30	1.00
Bandwidth at -1dB	MHz	11.80	12.05	-
Bandwidth at -3dB	MHz	-	12.95	-
Bandwidth at -40dB	MHz	-	16.74	16.90
Out Band Rejection (Fo±5.0MHz)	dB	20	48	-
Temperature Coefficient	ppm/°C	-	-20	-

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.

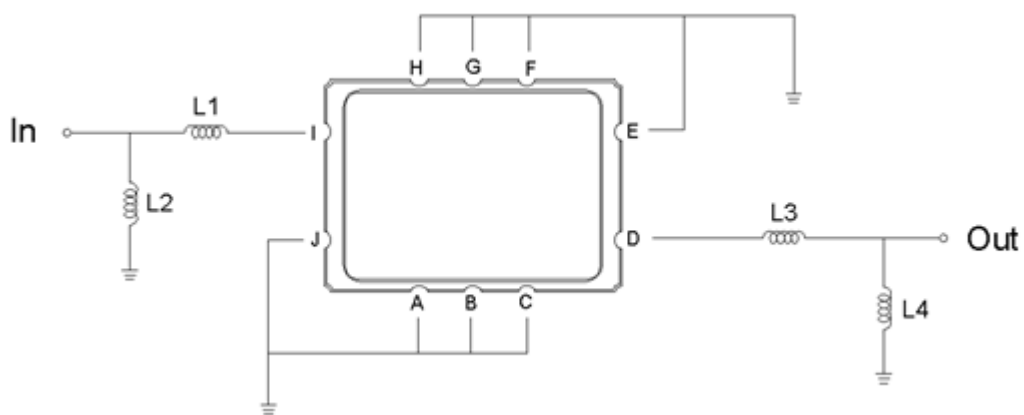
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL14311A:** 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, J	Ground
I	Input
D	Output

Testing Environment



Test Fixture & Values	
Input	L1 = 18 nH, L2 = 33 nH
Output	L3 = 39 nH, L4 = 39 nH
Source/Load Impedance	50 Ω

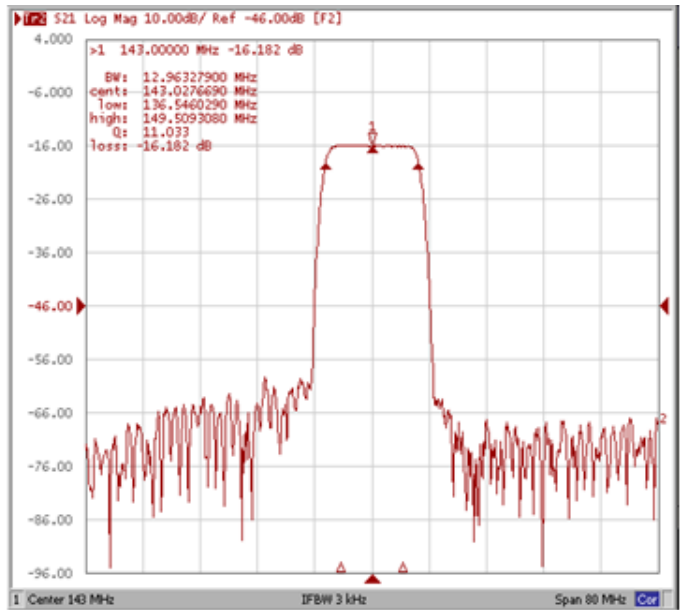
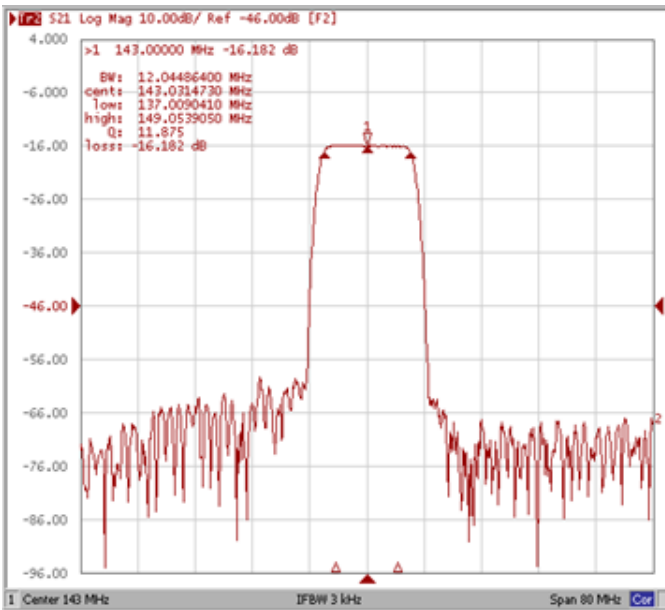
Frequency Characteristics

Frequency Response

Room Temp.: 25°C

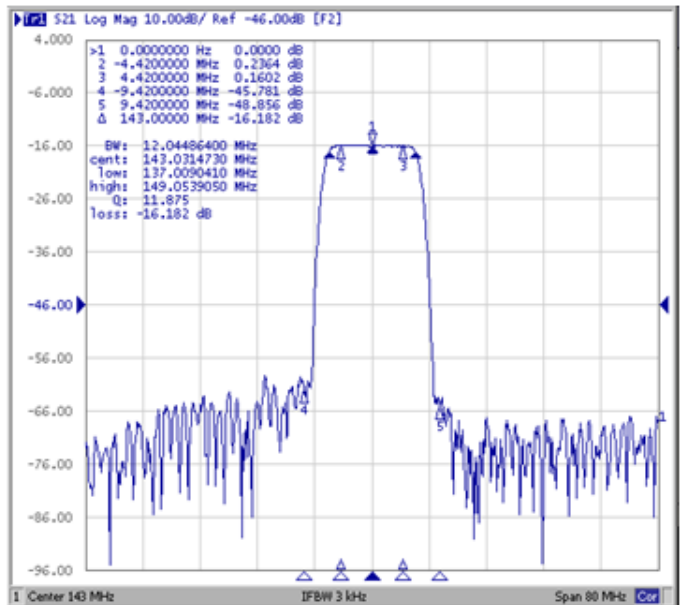
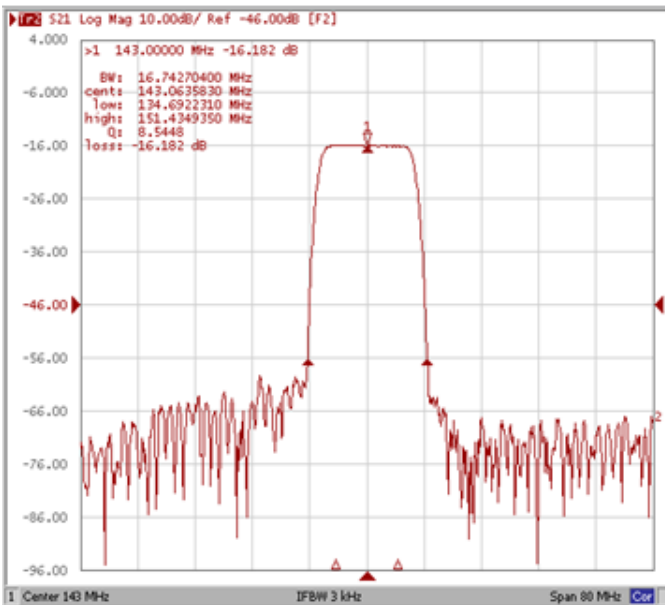
Bandwidth at -1.0 dB

Bandwidth at -3.0 dB



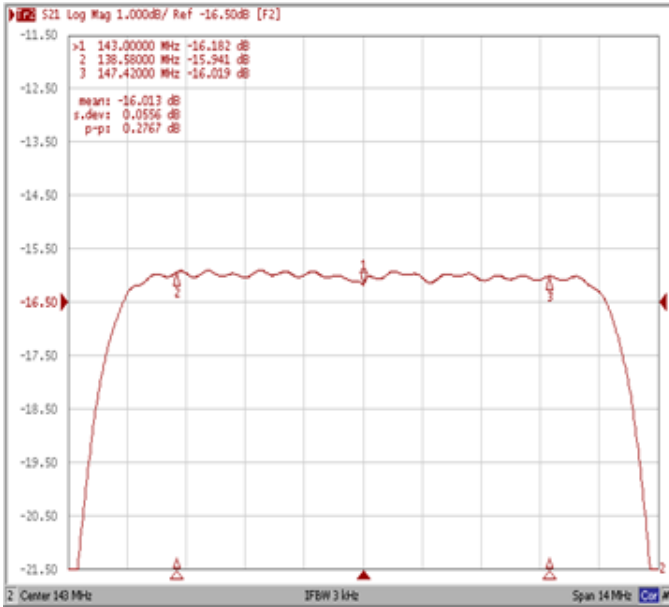
Bandwidth at -40.0 dB

Out Band Rejection Fo±5.0MHz

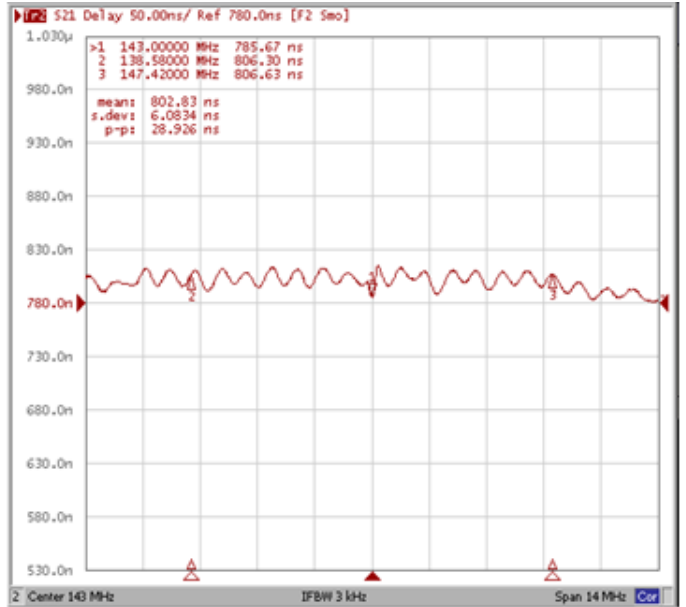


Frequency Response

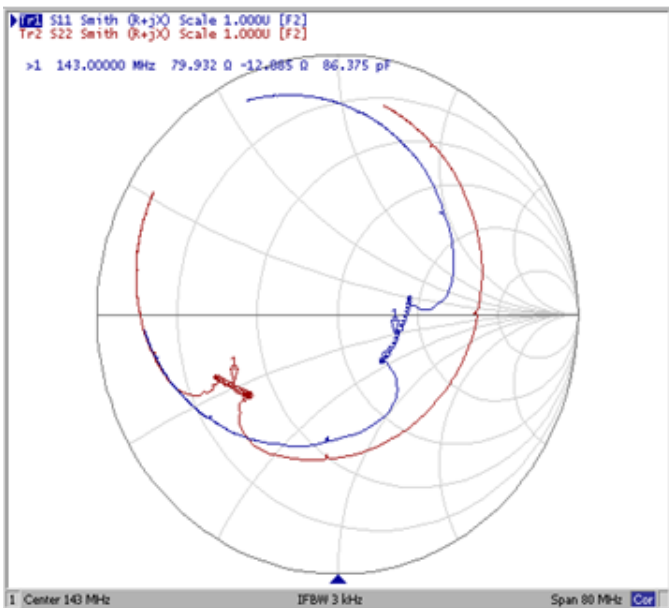
Ripple Variation Fo±4.42MHz



Group Delay Variation Fo±4.42MHz



Smith Chart



VSWR

