

- 147.0 MHz IF SAW Filter / 9.5 MHz Bandwidth
- Revision 0: 02 Jan. 2008

Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	0	-	80
Storage Temperature Range	°C	-40	-	55
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	146.8	147.0	147.2
Insertion Loss at Fo	dB	-	8.2	11.0
Amplitude Ripple Variation at Fo ± 4.75 MHz	dB _{p-p}	-	0.6	1.0
Group Delay Variation at Fo ± 4.75 MHz	nsec	-	60	100
Absolute Delay at Fo	µsec	-	0.91	-
Temperature Coefficient	ppm/°C	-	-89	-
Bandwidth at -1.0 dB	MHz	9.6	10.5	-
Bandwidth at -3.0 dB	MHz	10.6	11.4	-
Bandwidth at -35.0 dB	MHz	-	15.2	16.0
Relative Attenuation:				
Lower Sidelobe	dB	45	50	-
Upper Sidelobe	dB	45	50	-

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.

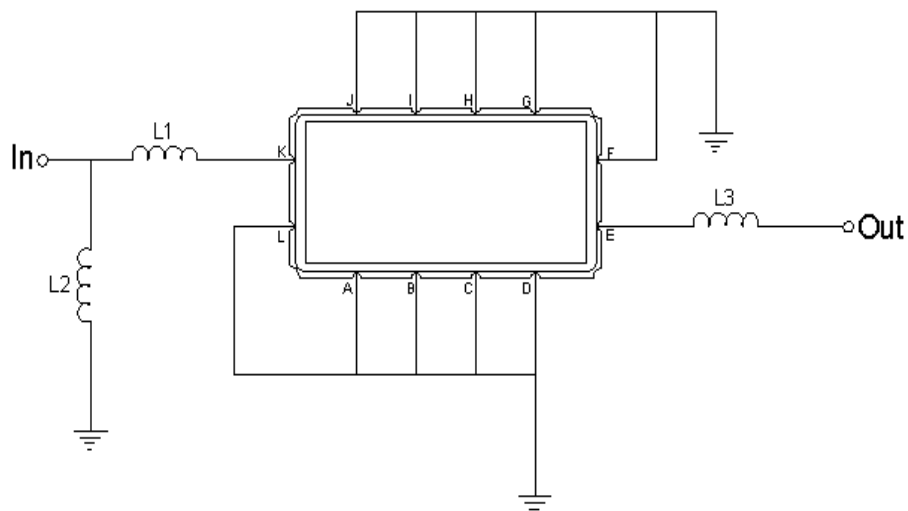
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL14710B:** 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

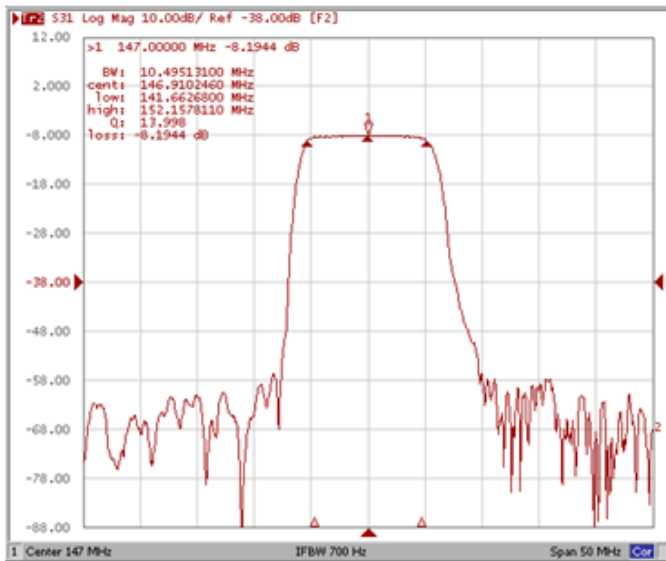


Test Fixture & Values	
Input	L1=8.2 nH , L2=47 nH
Output	L3=22 nH
Source/Load Impedance	50 Ω

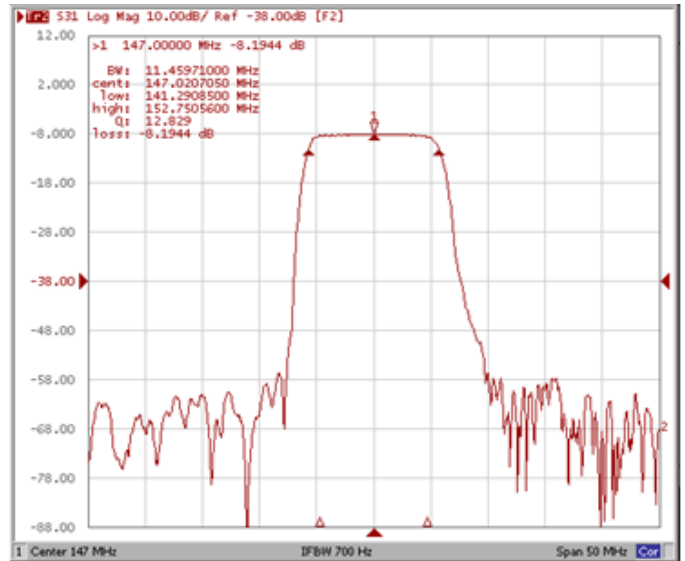
Frequency Characteristics

Frequency Response

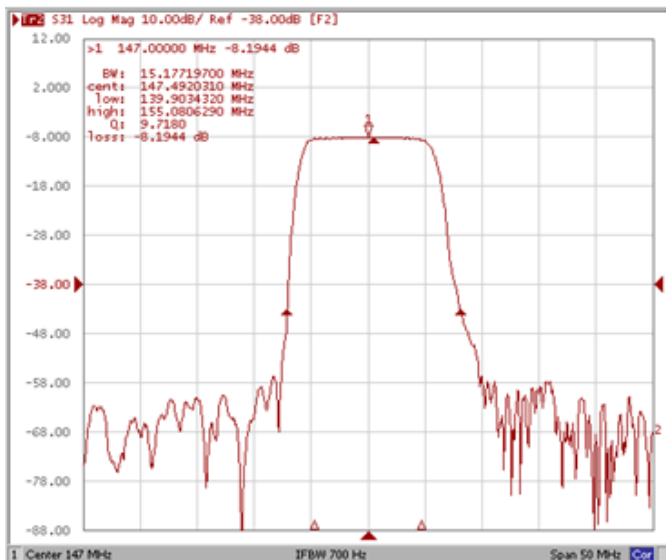
Bandwidth at -1.0 dB



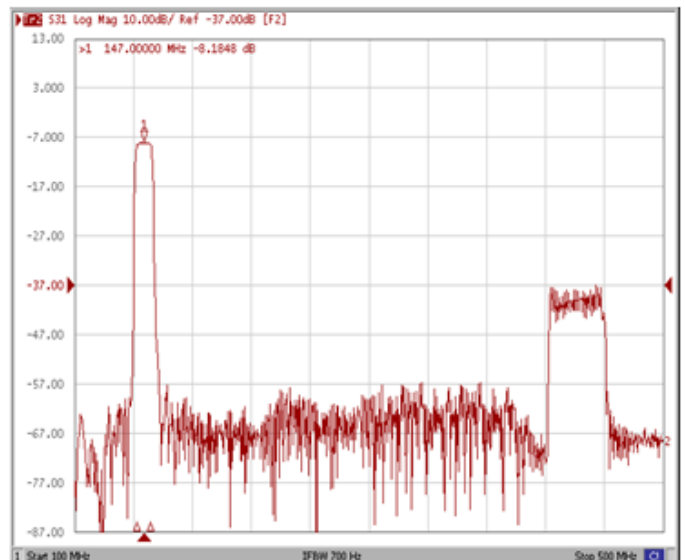
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



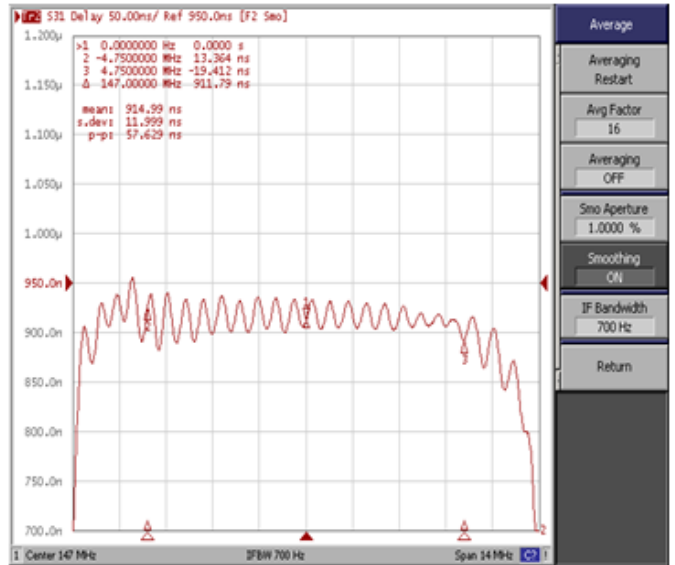
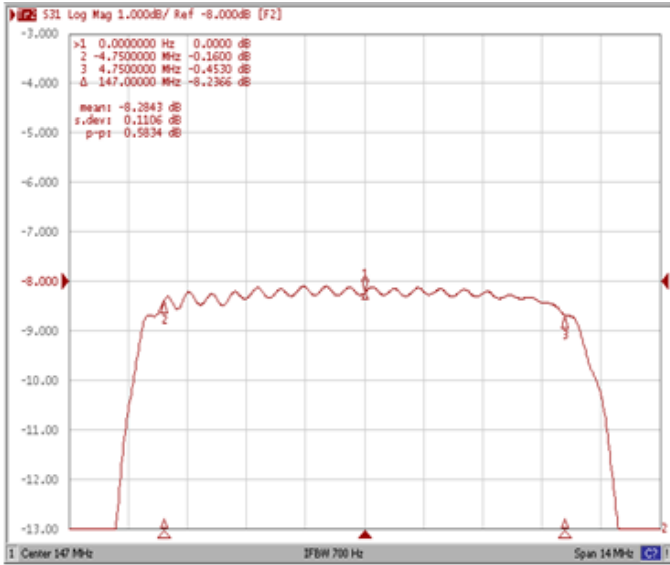
Attenuation Fo±20.0MHz



Frequency Response

Ripple Variation Fo±4.75MHz

Group Delay Variation Fo±4.75MHz



Smith Chart

SWR

