

- 147.75 MHz IF SAW Filter / 2.50 MHz Bandwidth
- Revision 0: 16 Nov. 2011

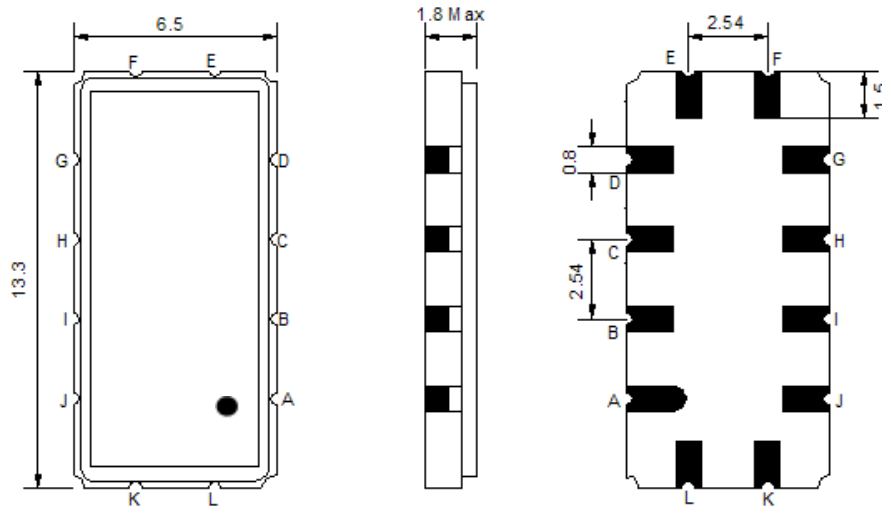
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-30	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	20
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	147.55	147.75	147.95
Insertion Loss at Fo	dB	-	8.60	11.00
Group Delay Variation at Fo ± 1.0 MHz	nsec	-	76	150
Absolute Delay at Fo	usec	-	1.17	1.35
Passband Ripple Variation at Fo ± 1.0 MHz	dB	-	0.55	1.00
Bandwidth at -1dB	MHz	2.30	2.50	-
Bandwidth at -3dB	MHz	2.90	3.10	-
Bandwidth at -40dB	MHz	-	5.30	5.50
Bandwidth at -45dB	MHz	-	5.45	5.65
Ultimate Rejection	dB	45	52	-
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.

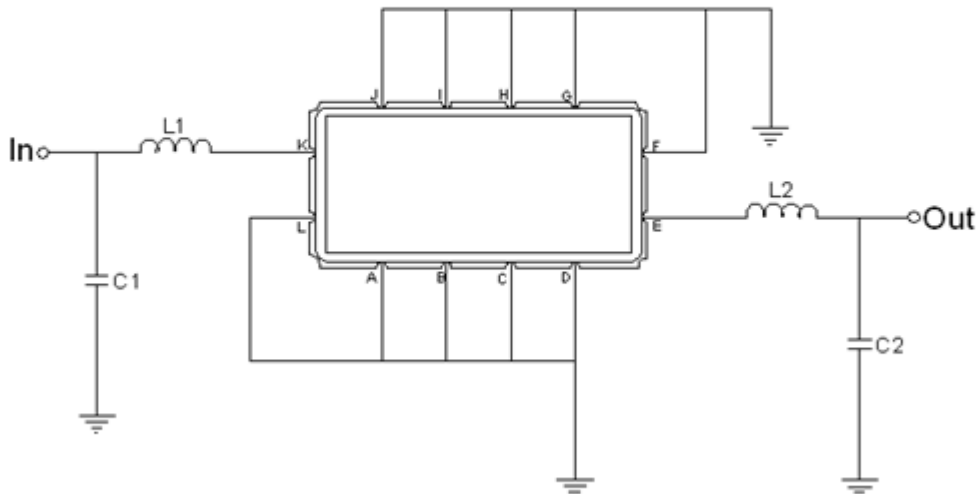
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL14702A:** 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

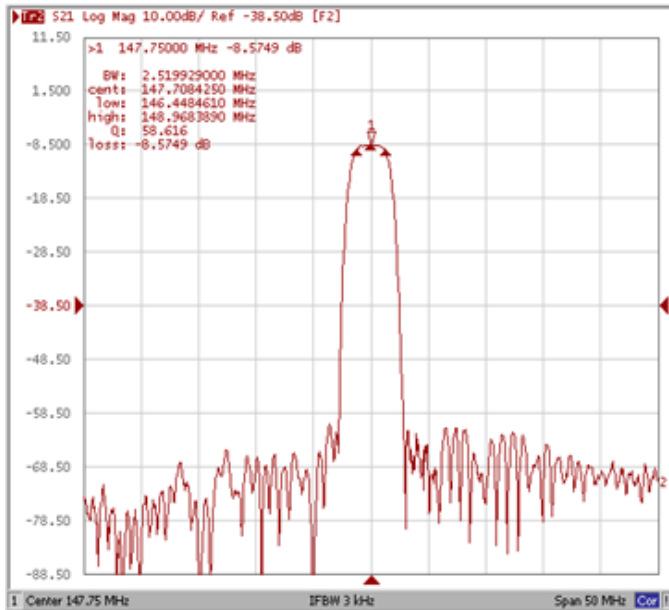


Test Fixture & Values	
Input	L1 = 15nH, C1=68pF
Output	L2 = 12nH, C2=75pF
Source/Load Impedance	50 Ω

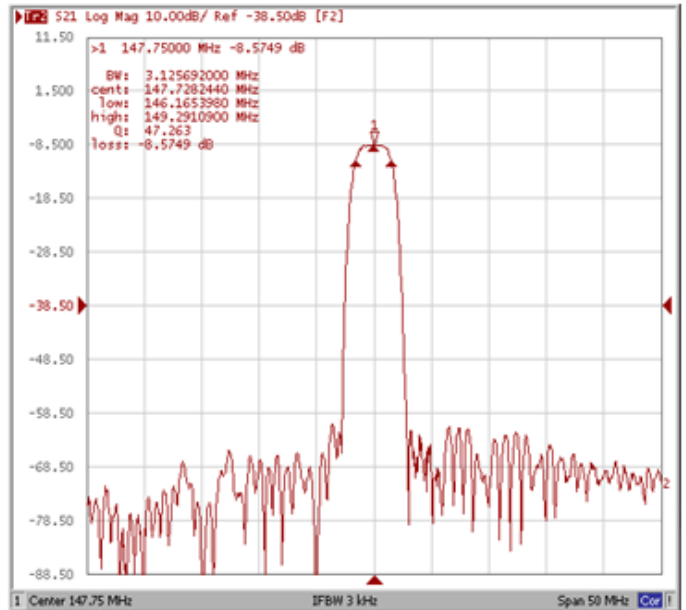
Frequency Characteristics

Frequency Response

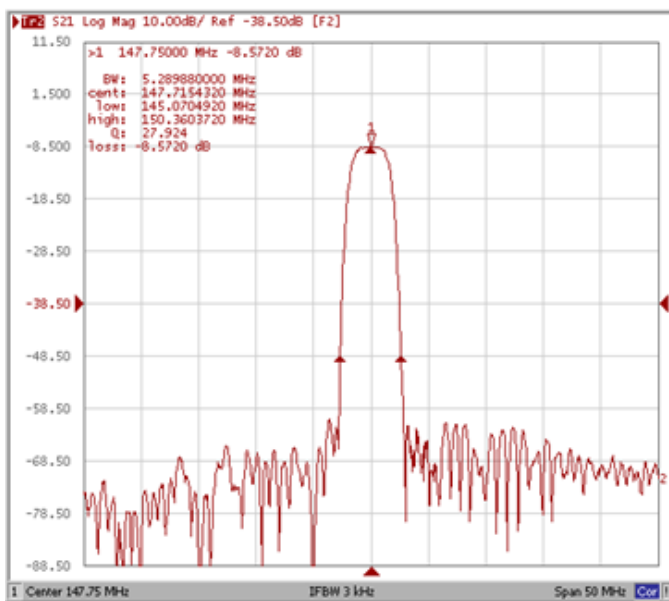
Bandwidth at -1.0 dB



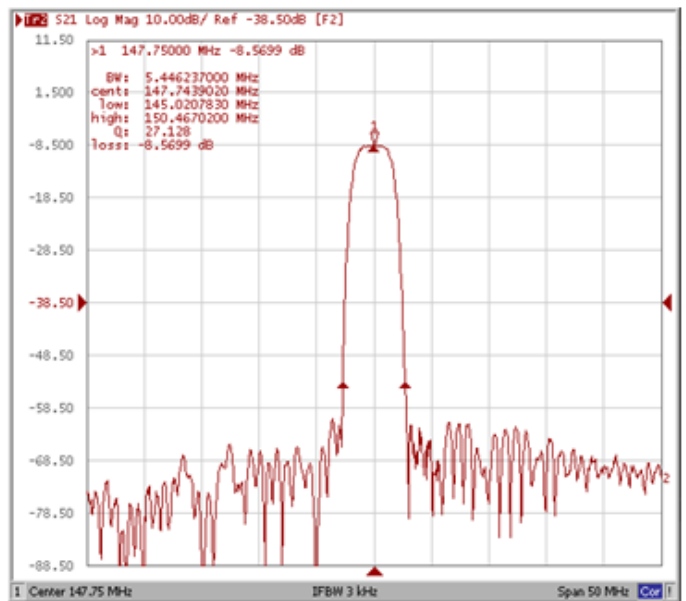
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

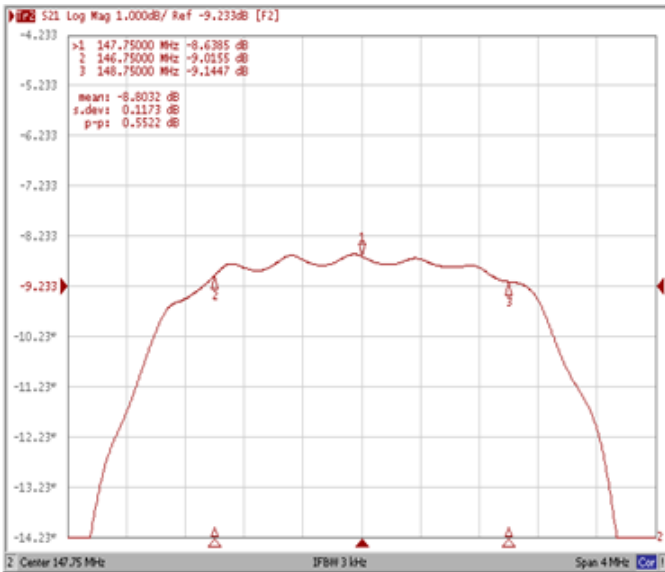


Bandwidth at -45.0 dB

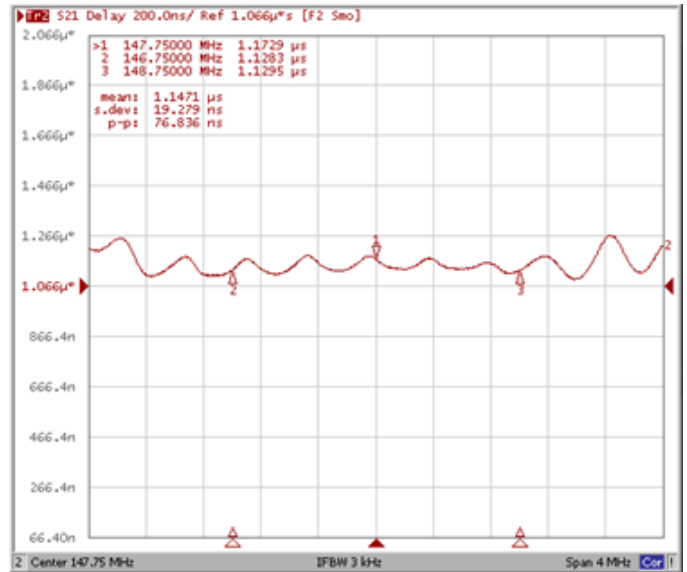


Frequency Response

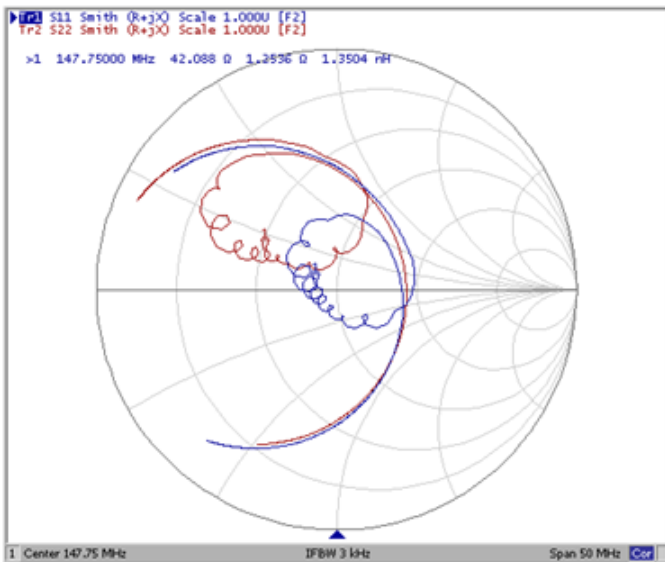
Ripple Variation Fo±1.0MHz



Group Delay Variation Fo±1.0MHz



Smith Chart



VSWR

