

- 109.5 MHz IF SAW Filter / 20.3 MHz Bandwidth
- Revision 0: 03 Apr. 2008

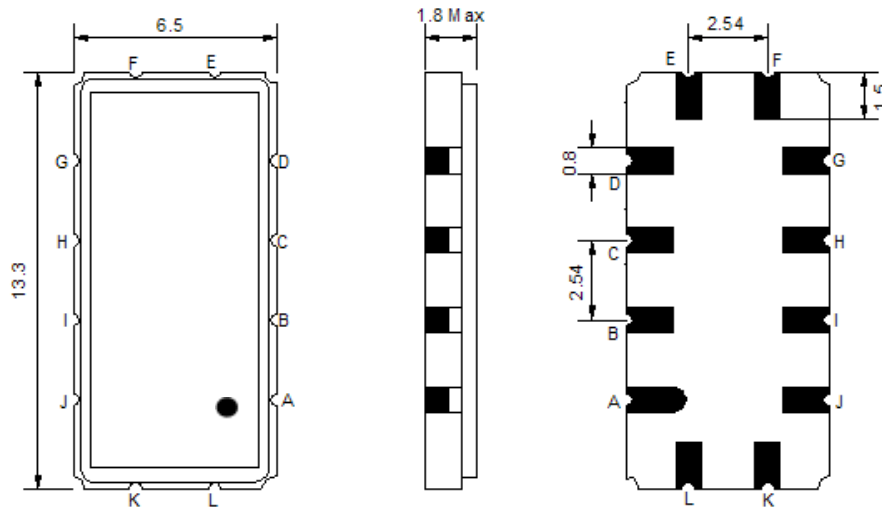
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	0	-	70
Storage Temperature Range	°C	-30	-	80
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	-	109.5	-
Insertion Loss at Fo	dB	-	13.5	15.0
Group Delay Variation (Fo±9.22MHz)	ns	-	35	80
Absolute Delay	us	-	1.16	-
Passband Ripple (Fo±9.22MHz)	dB	-	0.45	1.0
Bandwidth at -1dB	MHz	18.44	20.3	-
Bandwidth at -10dB	MHz	-	21.9	22.3
Bandwidth at -20dB	MHz	-	22.6	23.0
Bandwidth at -30dB	MHz	-	23.3	23.6
Bandwidth at -40dB	MHz	-	24.0	-
Ultimate Rejection	dB	40	45	-
Temperature Coefficient of Frequency	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.

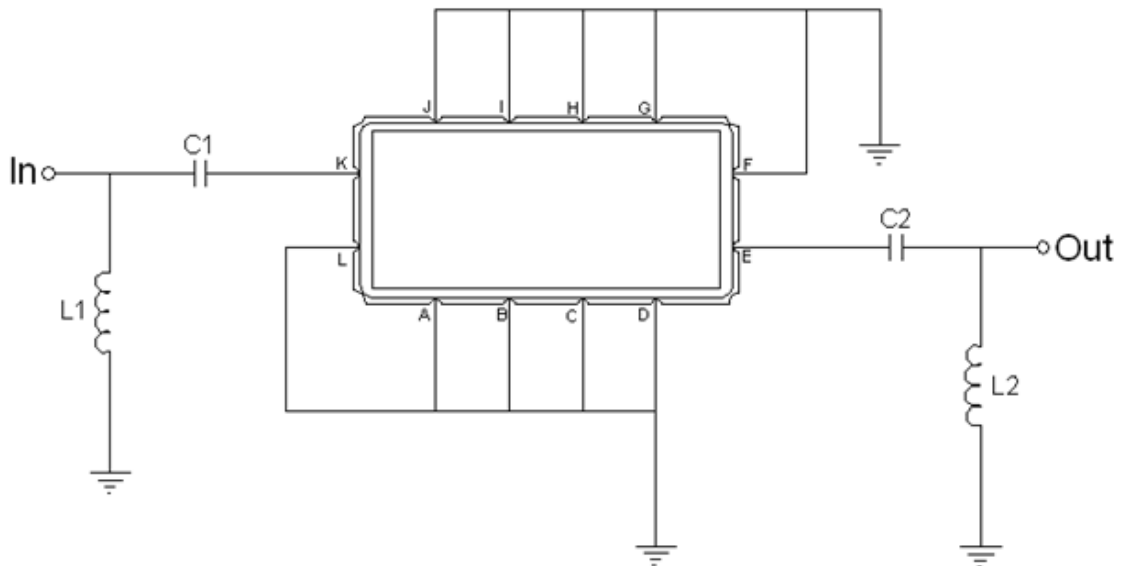
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL10920A:** 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

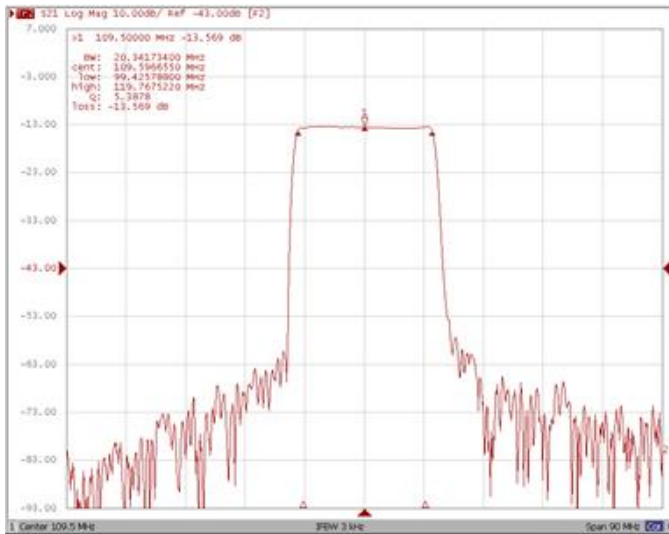


Test Fixture & Values	
Input	L1=33 nH, C1=120 pF
Output	L2=33 nH, C1=110 pF
Source/Load Impedance	50 Ω

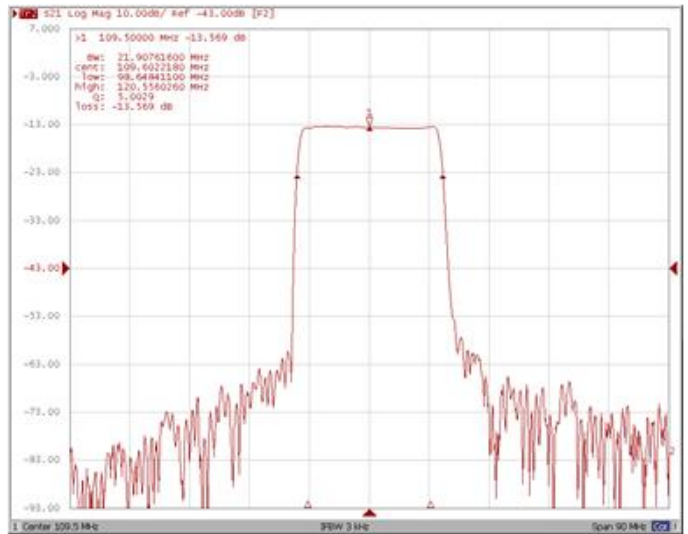
Frequency Characteristics

Frequency Response

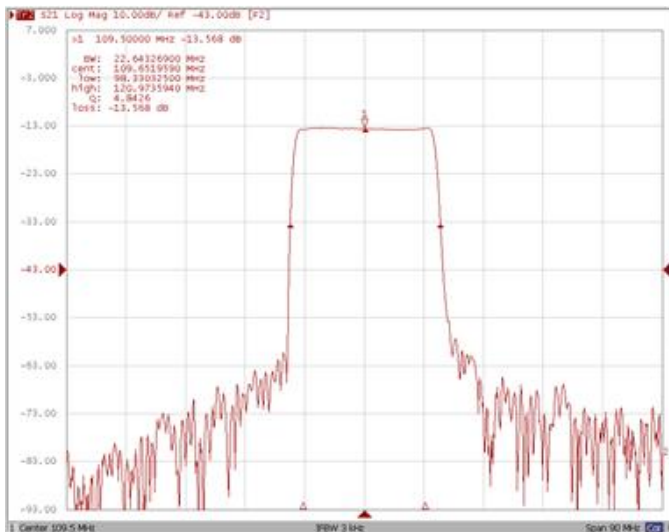
Bandwidth at -1.0 dB



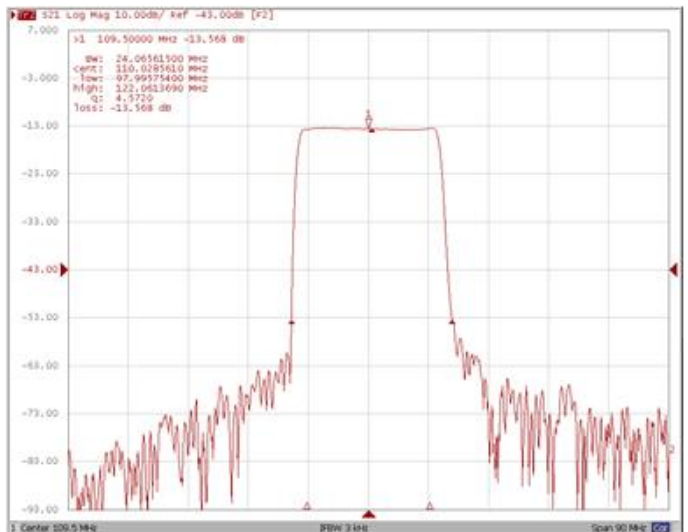
Bandwidth at -10.0 dB



Bandwidth at -20.0 dB

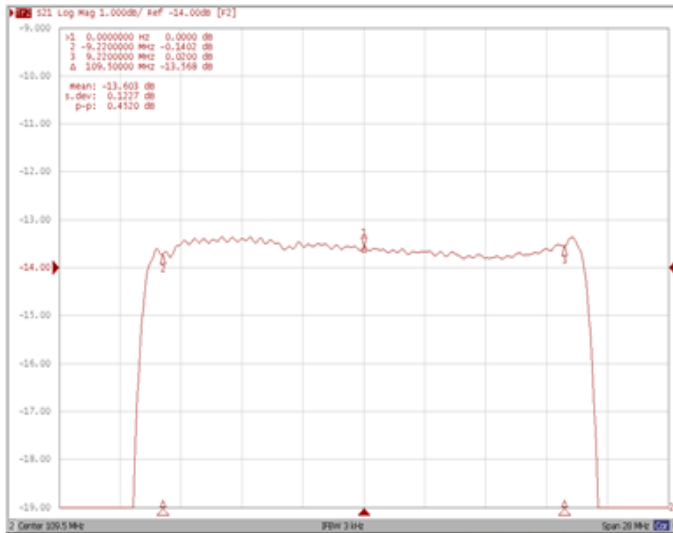


Bandwidth at -40.0 dB

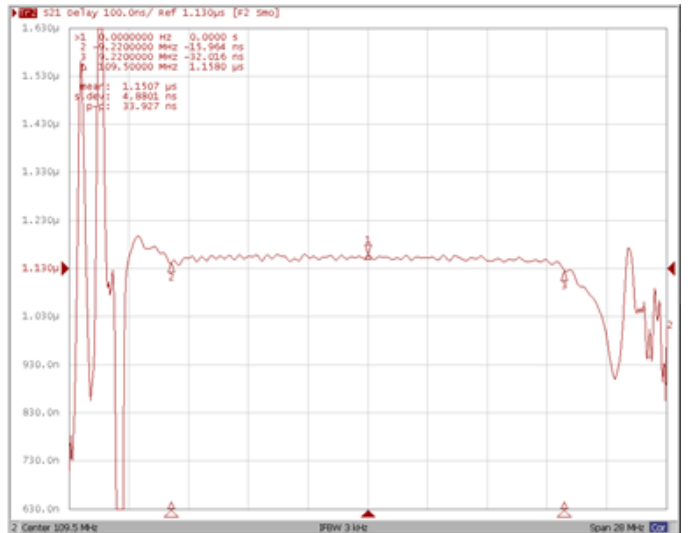


Frequency Response

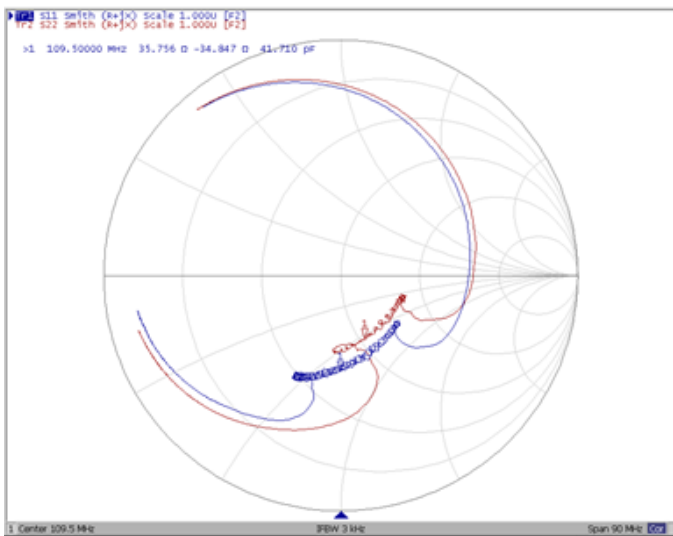
Ripple Variation Fo±9.22MHz



Group Delay Variation Fo±9.22MHz



Smith Chart



VSWR

