

- 70.00 MHz IF SAW Filter / 12.40 MHz Bandwidth
- Revision 0: 15 Feb. 2012

Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-	25	-
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	-	70.00	-
Insertion Loss at Fo	dB	-	9.60	10.5
Group Delay Variation at Fo ± 5.00 MHz	nsec	-	65	120
Absolute Delay at Fo	usec	-	0.92	-
Passband Ripple Variation at Fo ± 5.00 MHz	dB	-	0.50	1.00
Bandwidth at -1dB	MHz	12.00	12.40	-
Bandwidth at -3dB	MHz	-	13.20	-
Bandwidth at -40dB	MHz	-	16.60	17.00
Ultimate Rejection	dB	40	45	-
Relative Attenuation:				
Fo ±8.70MHz	dB	40	42	-
Temperature Coefficient	ppm/°C	-	-86	-

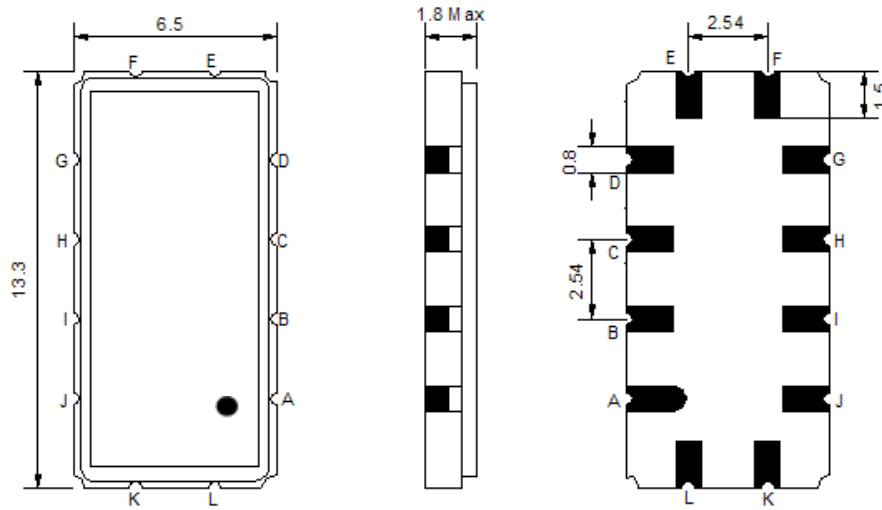
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-40	-	55
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	-	70.00	-
Insertion Loss at Fo	dB	-	9.90	10.5
Group Delay Variation at Fo ± 5.00 MHz	nsec	-	75	120
Absolute Delay at Fo	usec	-	0.92	-
Passband Ripple Variation at Fo ± 5.00 MHz	dB	-	0.60	-
Bandwidth at -1dB	MHz	12.00	12.40	-
Bandwidth at -3dB	MHz	-	13.20	-
Bandwidth at -40dB	MHz	-	16.60	17.00
Ultimate Rejection	dB	40	45	-
Relative Attenuation:				
Fo ±8.70MHz	dB	-	31	-
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.

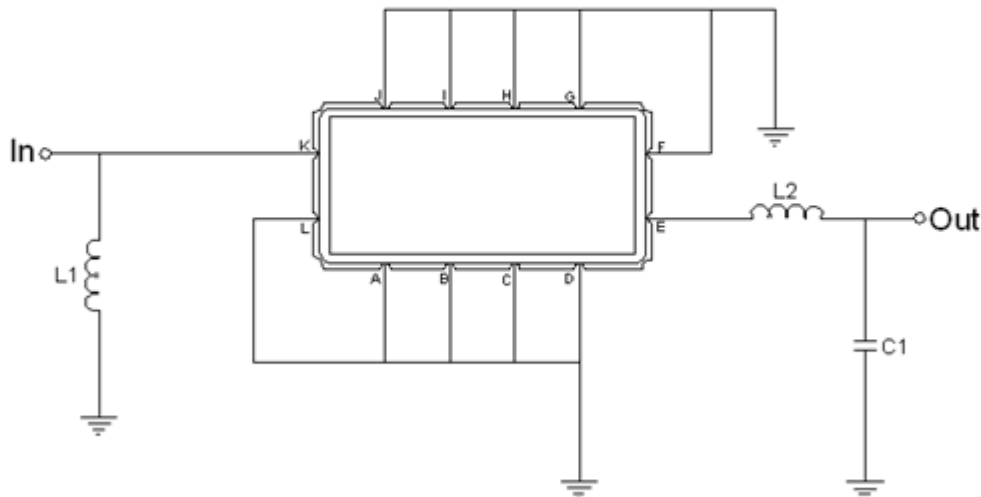
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL07012A:** 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



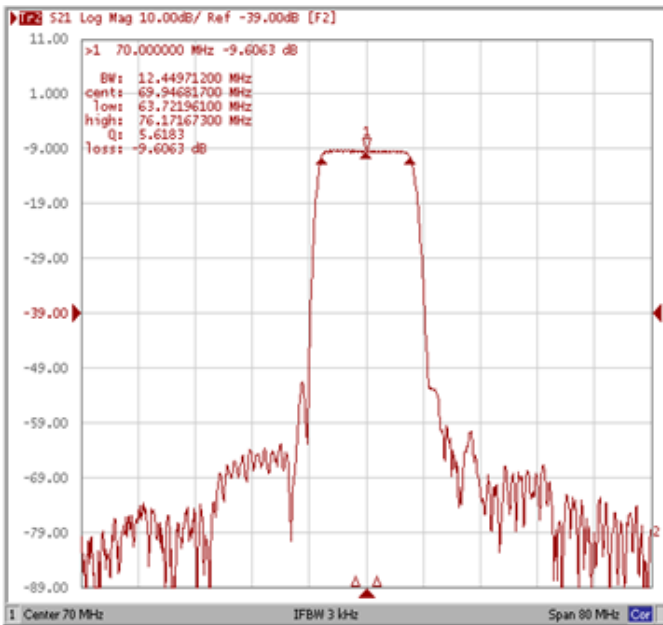
Test Fixture & Values	
Input	L1 = 100nH Q >40
Output	L2 = 120nH Q >40, C1=39pF
Source/Load Impedance	50 Ω

Frequency Characteristics

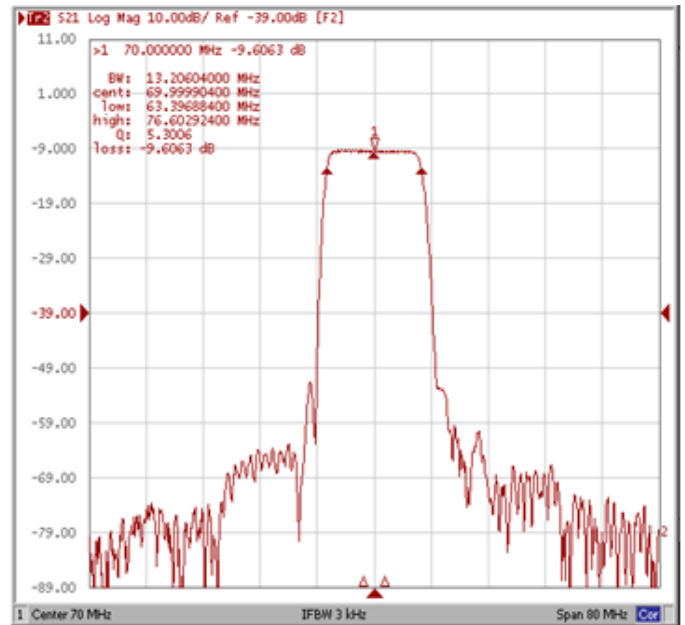
Frequency Response

Operating Temperature : +25 °C

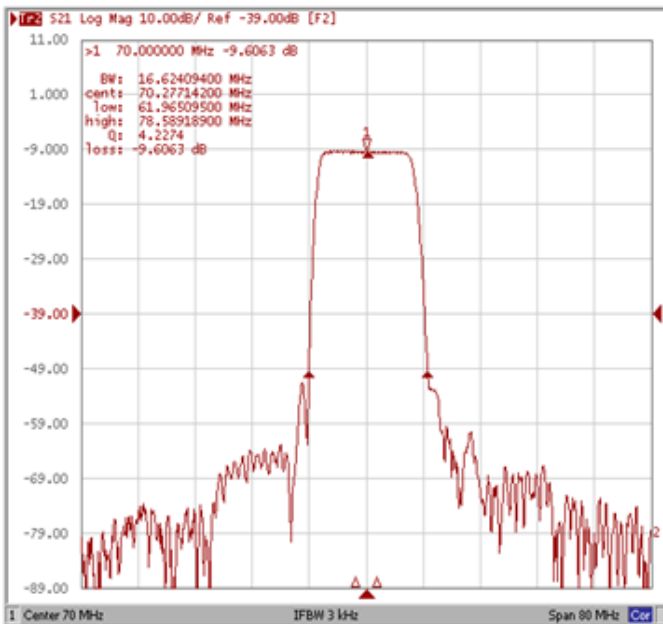
Bandwidth at -1.0 dB



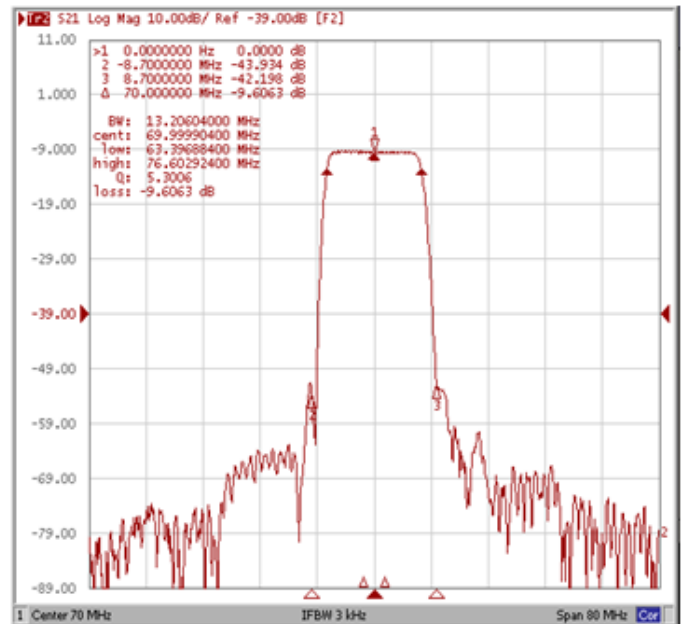
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



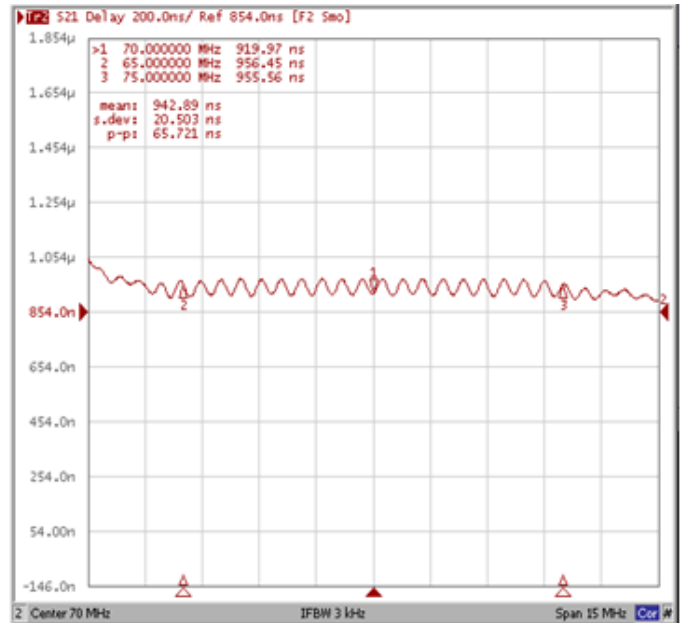
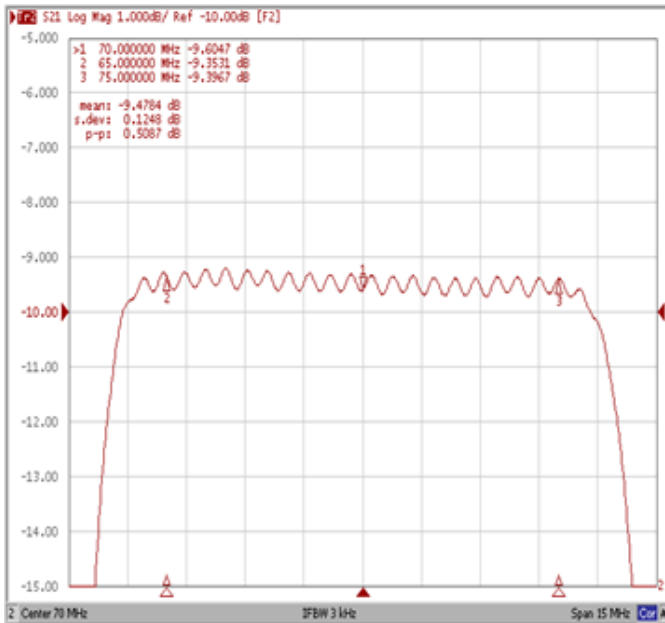
Relative Attenuation Fo±8.70MHz



Frequency Response

Ripple Variation Fo±5.00MHz

Group Delay Variation Fo±5.00MHz



Smith Chart

VSWR

