

- 170.00 MHz IF SAW Filter / 53.50 MHz Bandwidth
- Revision 0: 05 Jun. 2012

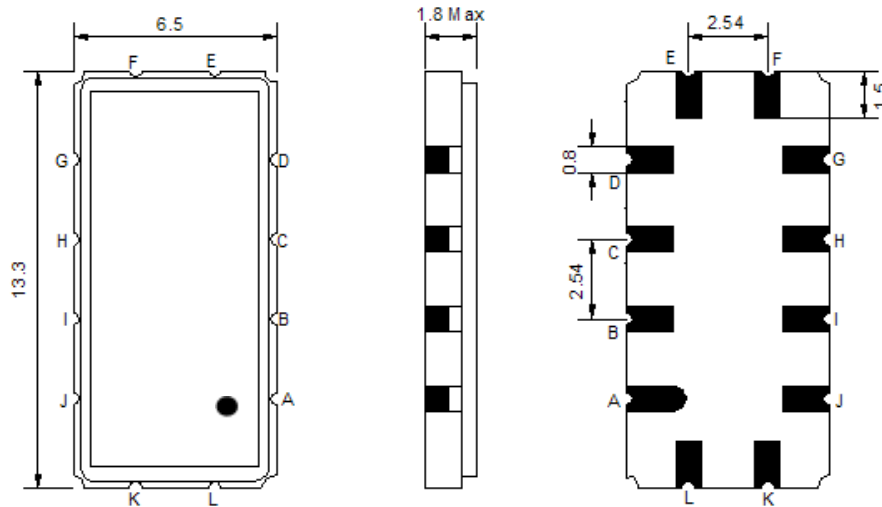
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-40	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	5
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	-	170.00	-
Insertion Loss at Fo	dB	-	18.00	21.00
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within (Fo ±25.00 MHz)	dB _{p-p}		0.40	1.0
Group Delay Variation (Fo ±25.00 MHz)	nsec	-	10	40
Absolute Delay at Fo	µsec	-	0.61	0.70
Bandwidth at -1.0 dB	MHz	53.00	53.50	-
Bandwidth at -40.0 dB	MHz	-	62.70	63.30
Ultimate Rejection Level	dB	40	45	-

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.

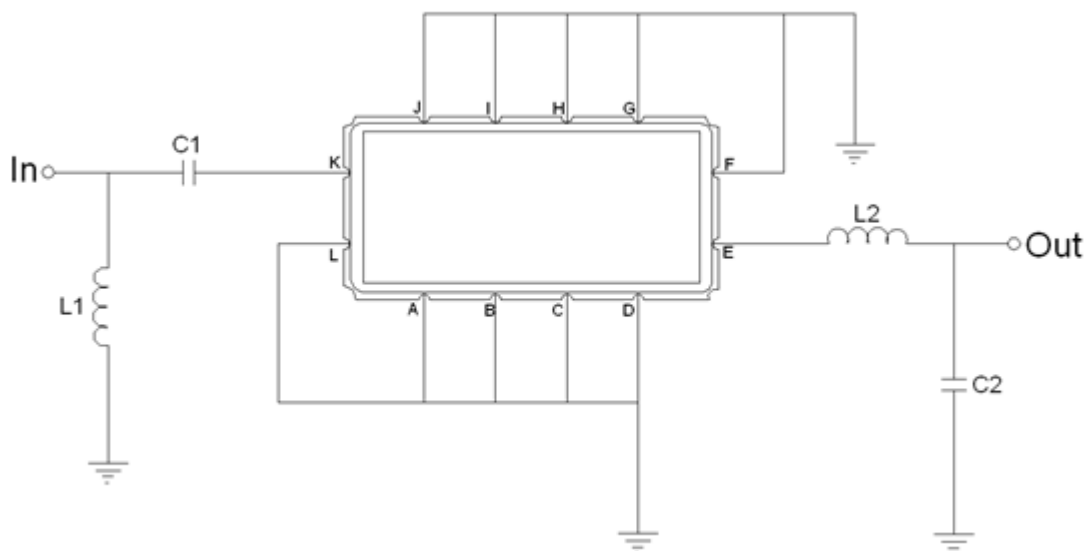
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL17053A:** 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

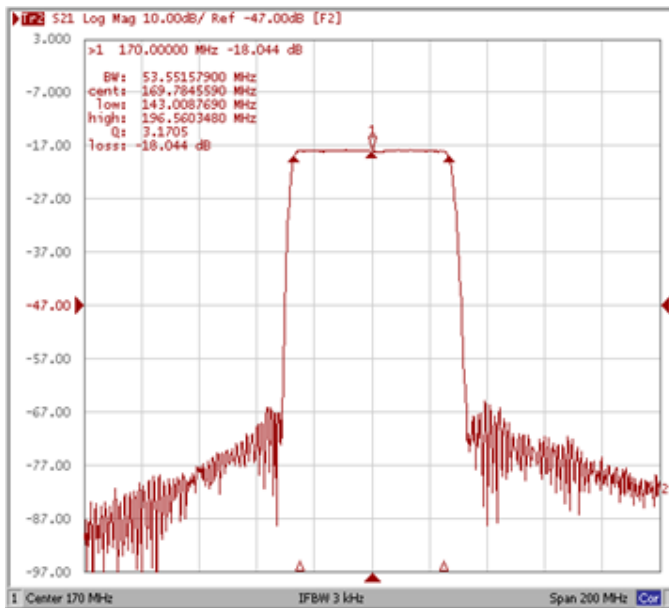


Test Fixture & Values	
Input	L1=27nH Q>45, C1=68pF
Output	L2=22nH Q>45, C2=27pF
Source/Load Impedance	50 Ω

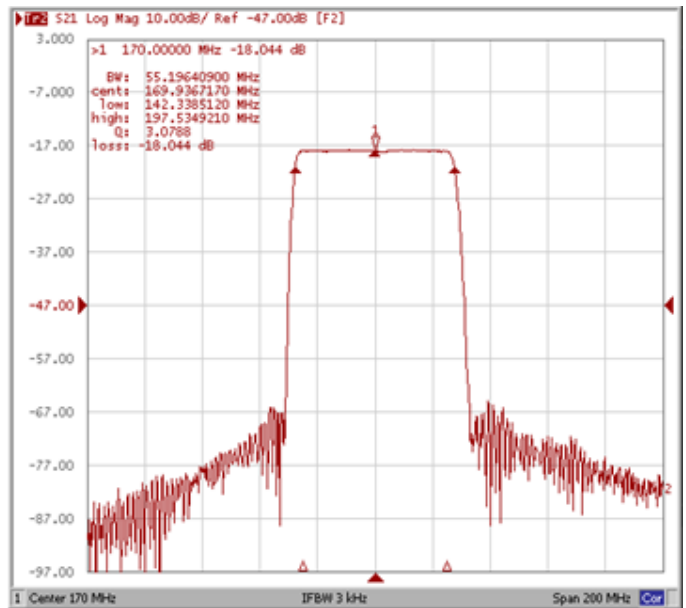
Frequency Characteristics

Frequency Response

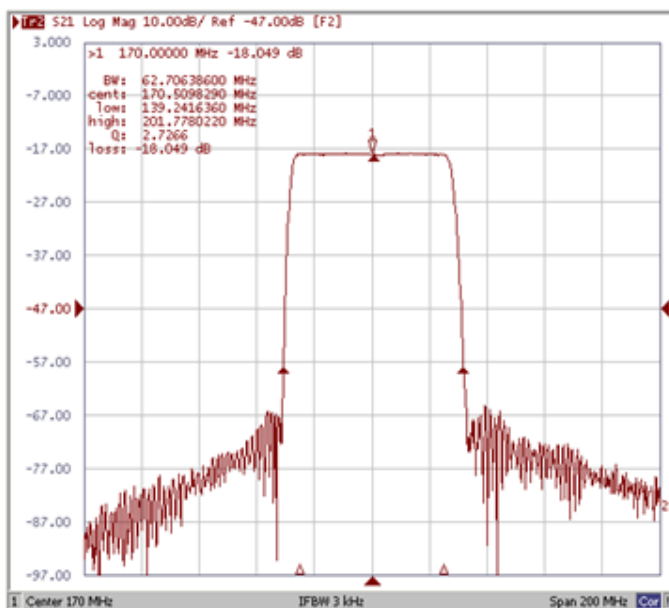
Bandwidth at -1.0 dB



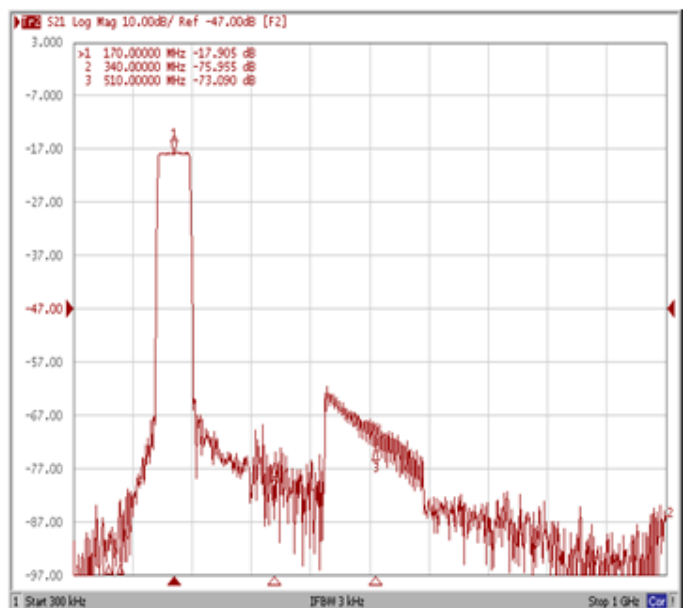
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



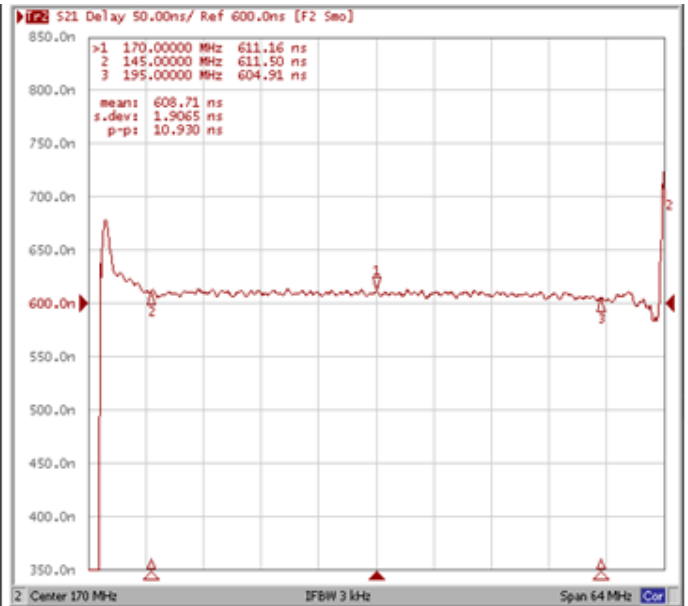
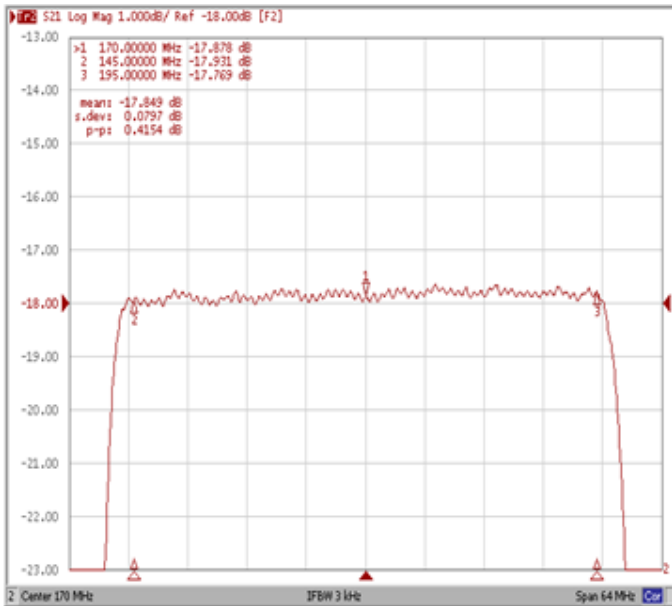
Wide-Band



Frequency Response

Ripple Variation Fo±25.00MHz

Group Delay Variation Fo±25.00MHz



Smith Chart

SWR

