

- 50.0 MHz IF SAW Filter / 20.04 MHz Bandwidth
- Revision 0: 29 Oct. 2009

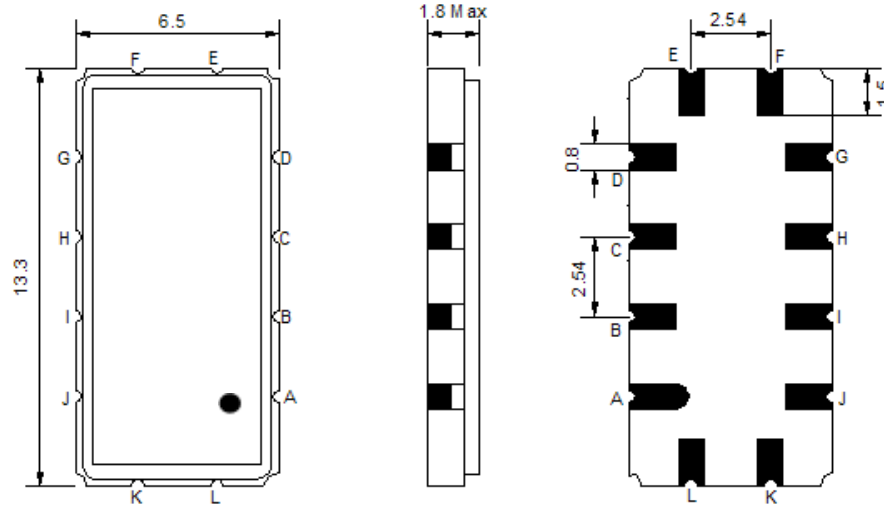
## Electrical Characteristics

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) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	V			
Length x Width	mm <sup>2</sup>	-	13.3 x 6.5	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	50.0	-
Insertion Loss at Fo	dB	-	15.5	18.0
Group Delay Variation at Fo ± 9.22 MHz	nsec	-	26	50
Absolute Delay at Fo	usec	-	1.0	1.2
Passband Ripple Variation at Fo ± 9.22 MHz	dB	-	0.4	0.9
Bandwidth at -1dB	MHz	19.70	20.04	-
Bandwidth at -3dB	MHz	-	21.08	-
Bandwidth at -40dB	MHz	-	25.22	26.60
Ultimate Rejection	dB	-	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.

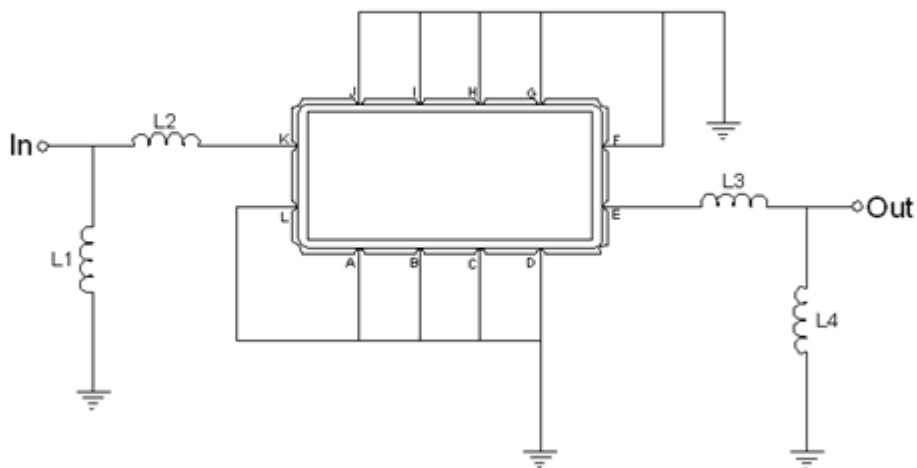
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL05020A:** 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

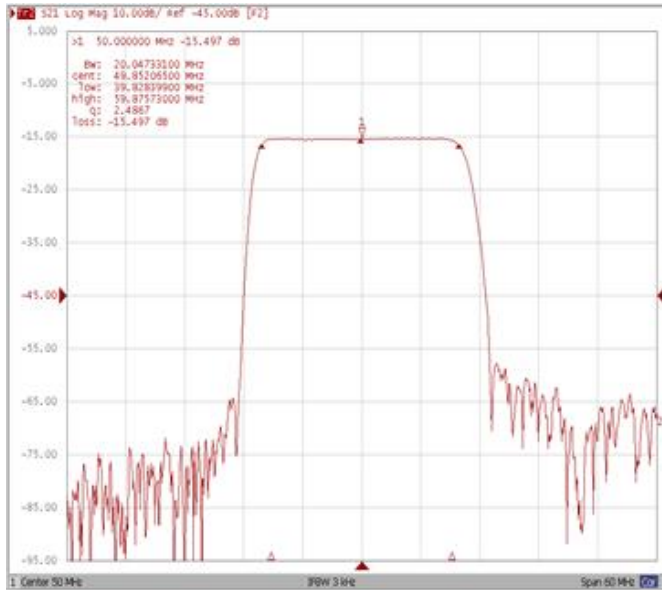


Test Fixture & Values	
<b>Input</b>	L1 = 560nH, L2 = 220nH
<b>Output</b>	L3 = 180nH, L4 = 560nH
<b>Source/Load Impedance</b>	50 $\Omega$

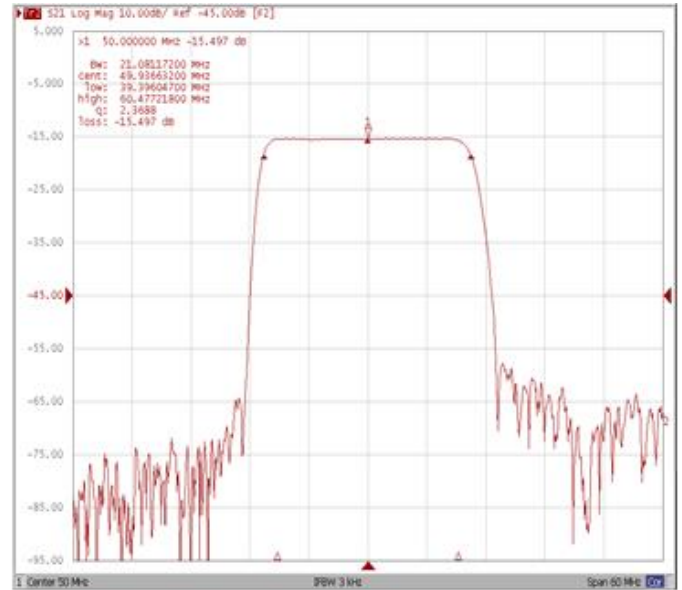
## Frequency Characteristics

### Frequency Response

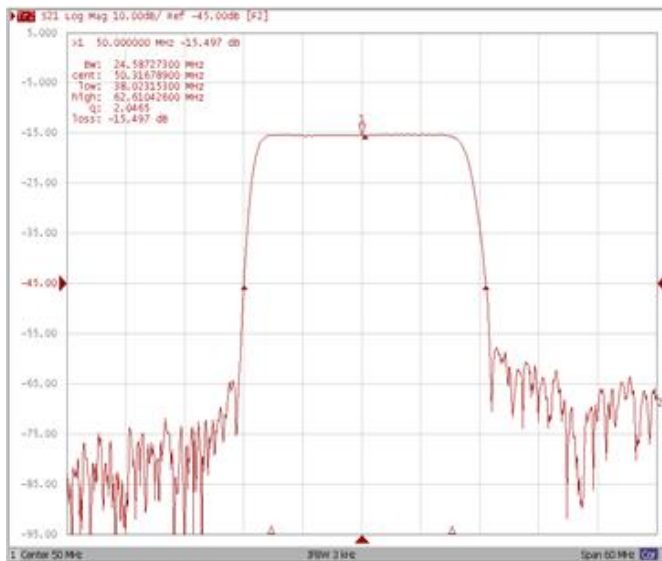
**Bandwidth at -1.0 dB**



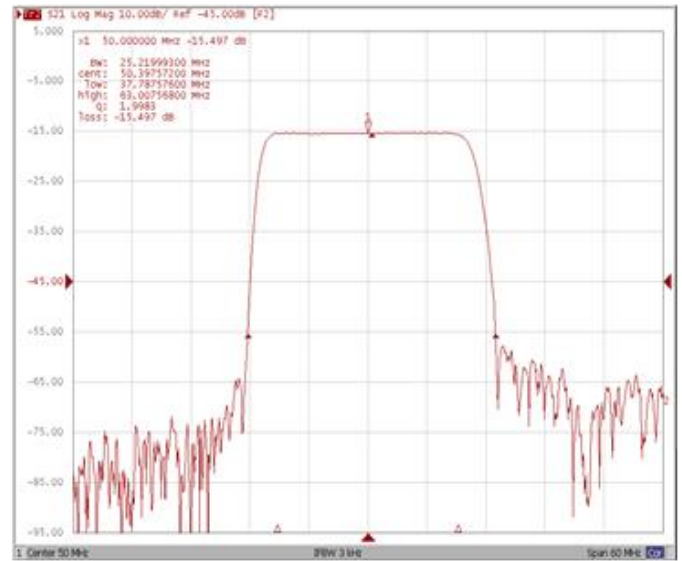
**Bandwidth at -3.0 dB**



**Bandwidth at -30.0 dB**



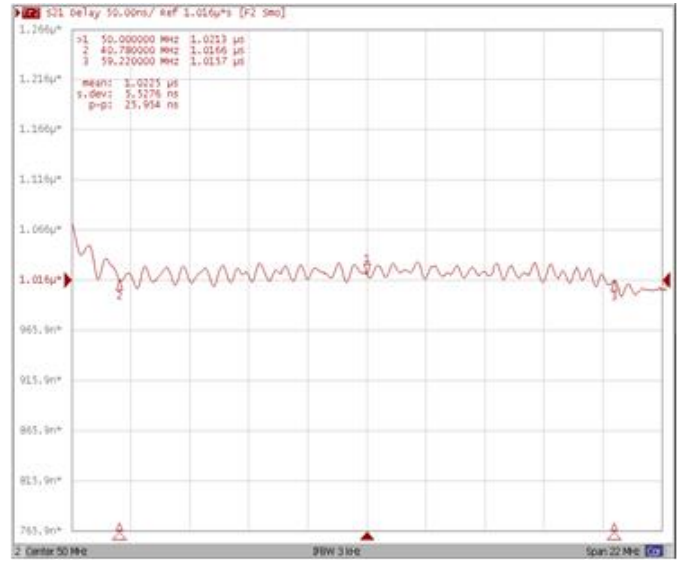
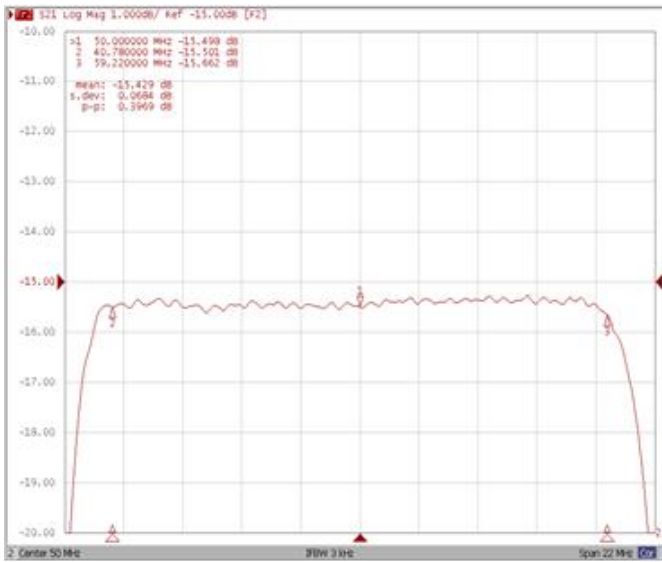
**Bandwidth at -40.0 dB**



**Frequency Response**

**Ripple Variation Fo±9.22MHz**

**Group Delay Variation Fo±9.22MHz**



**Smith Chart**

**VSWR**

