

- 52.50 MHz IF SAW Filter / 13.96 MHz Bandwidth
- Revision 0: 21 Jan. 2013

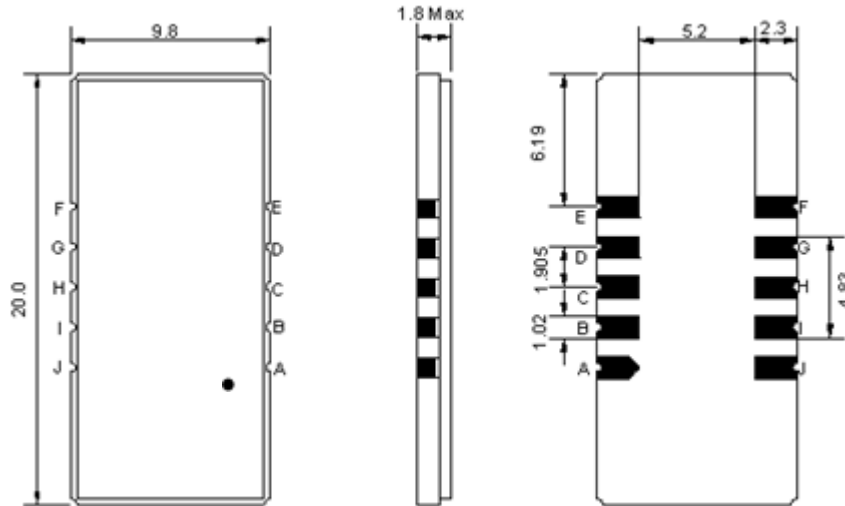
### Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation 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	SC0			
Length x Width	mm <sup>2</sup>	-	20.0 x 9.8	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	52.5	-
Insertion Loss at Fo	dB	-	23.5	25.0
Group Delay Variation at Fo ± 6.82 MHz	nsec	-	40	80
Absolute Delay at Fo	usec	-	2.40	-
Passband Ripple Variation at Fo ± 6.82 MHz	dB	-	0.55	1.00
Bandwidth at -1dB	MHz	13.85	13.96	-
Bandwidth at -3dB	MHz	-	14.24	-
Bandwidth at -45dB	MHz	-	15.45	15.60
Ultimate Rejection	dB	45	50	-
Temperature Coefficient	ppm/°C	-	-72	-

**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.

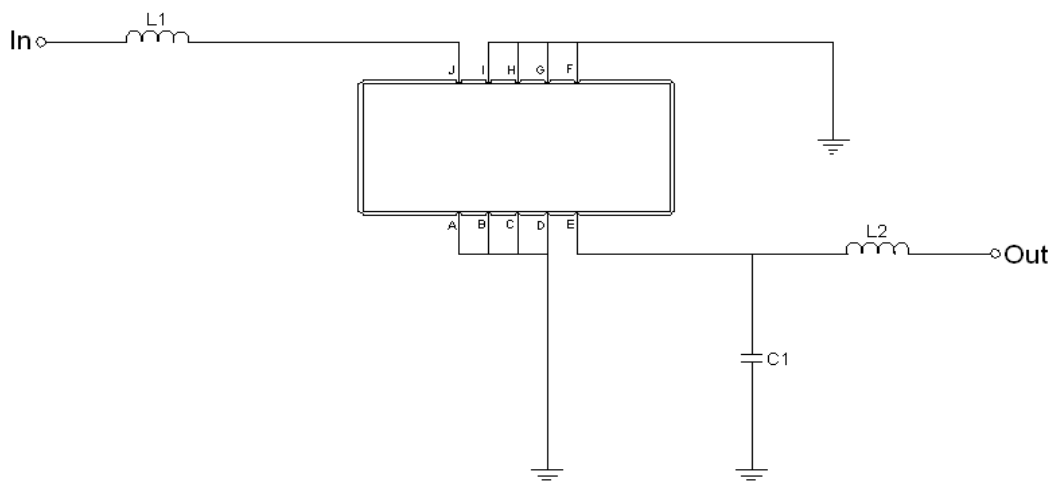
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TF-005202:** 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	Ground
J	Input
E	Output

## Testing Environment



Test Fixture & Values	
Input	L1 = 220nH
Output	L2 = 220nH, C1=15pF
Source/Load Impedance	50 Ω

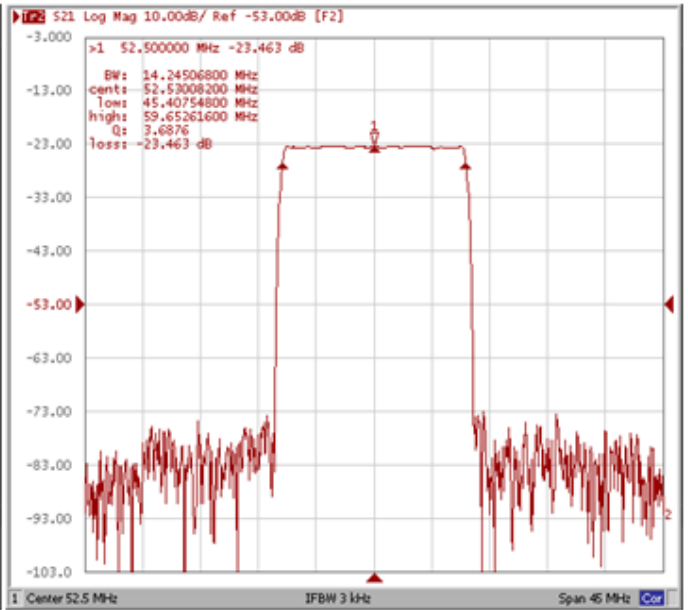
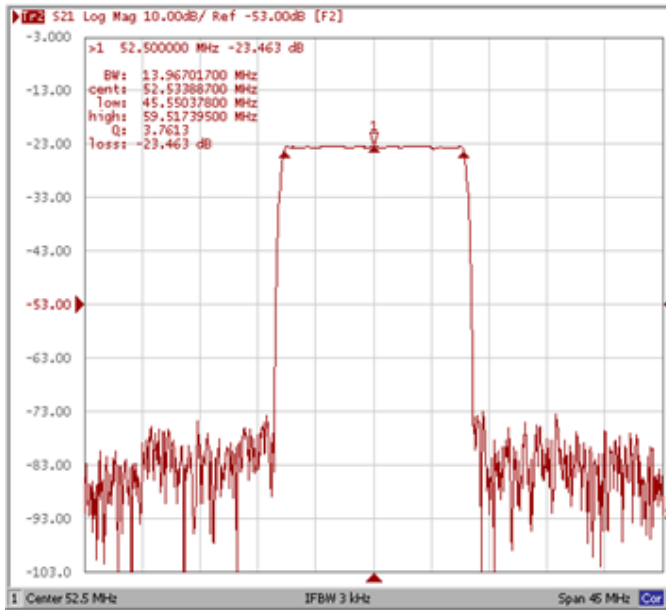
## Frequency Characteristics

### Frequency Response

Operating Temperature: +25°C

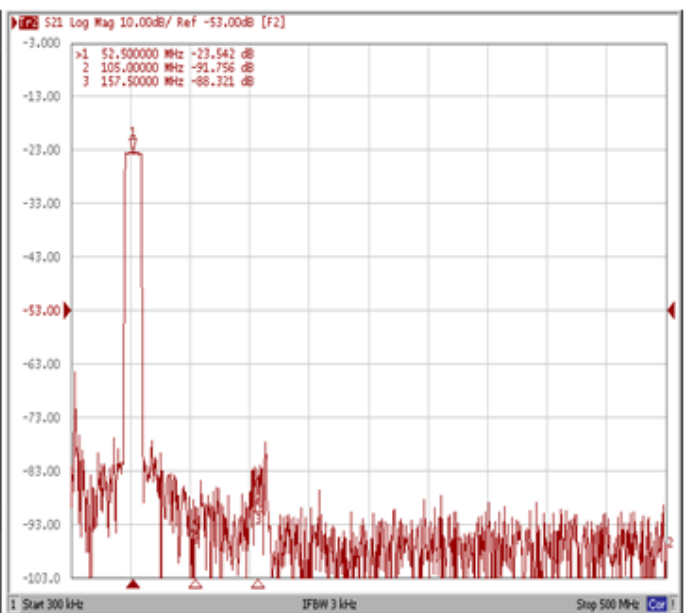
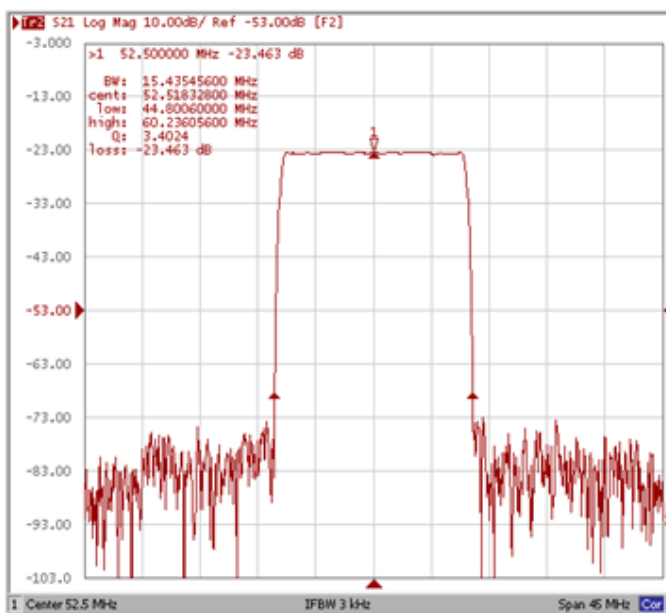
#### Bandwidth at -1.0 dB

#### Bandwidth at -3.0 dB



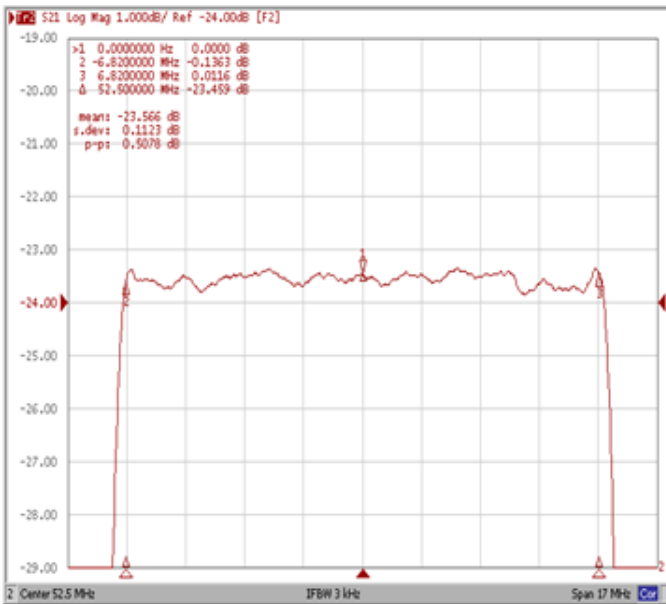
#### Bandwidth at -45.0 dB

#### Wide-Band

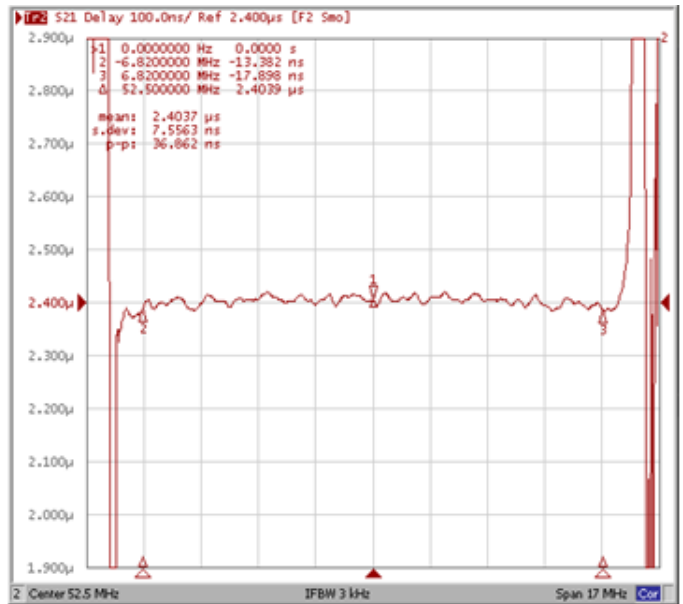


## Frequency Response

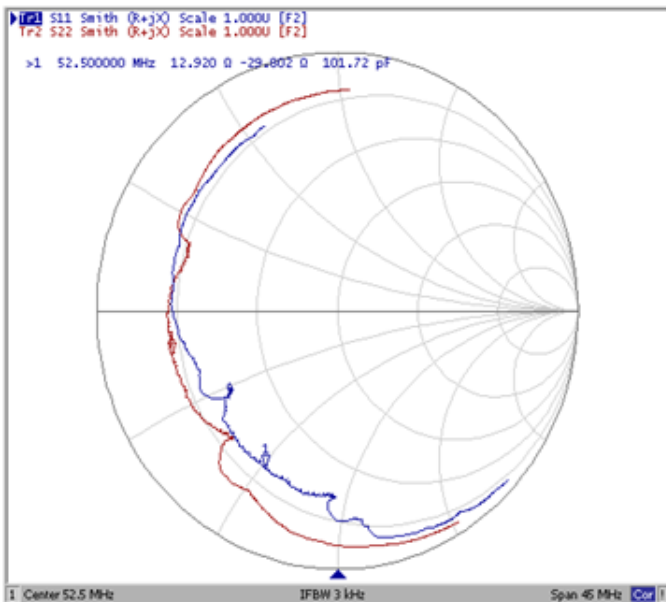
**Ripple Variation Fo±6.82MHz**



**Group Delay Variation Fo±6.82MHz**



**Smith Chart**



**VSWR**

