

- 55.0 MHz IF SAW Filter / 9.90 MHz Bandwidth
- Revision 0: 09. Feb. 2009

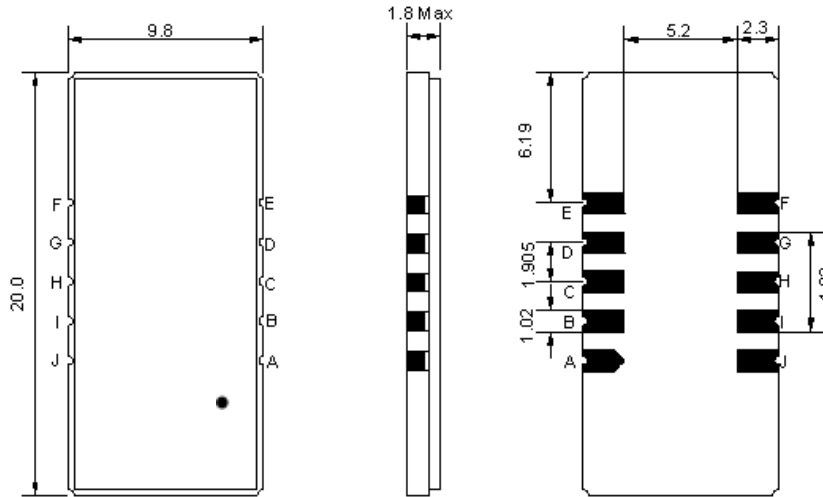
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-30	-	80
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	D1			
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	54.9	55.0	55.1
Insertion Loss at Fo	dB	-	21.0	23.0
Group Delay Variation (Fo±4.52MHz)	ns	-	45	70
Absolute Delay	us	-	2.35	-
Passband Ripple (Fo±4.52MHz)	dB	-	0.5	1.0
Bandwidth at -1dB	MHz	9.40	9.90	-
Bandwidth at -3dB	MHz	-	10.30	-
Bandwidth at -20dB	MHz	-	11.37	11.76
Bandwidth at -40dB	MHz	-	11.85	-
Ultimate Rejection	dB	50	52	-
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.

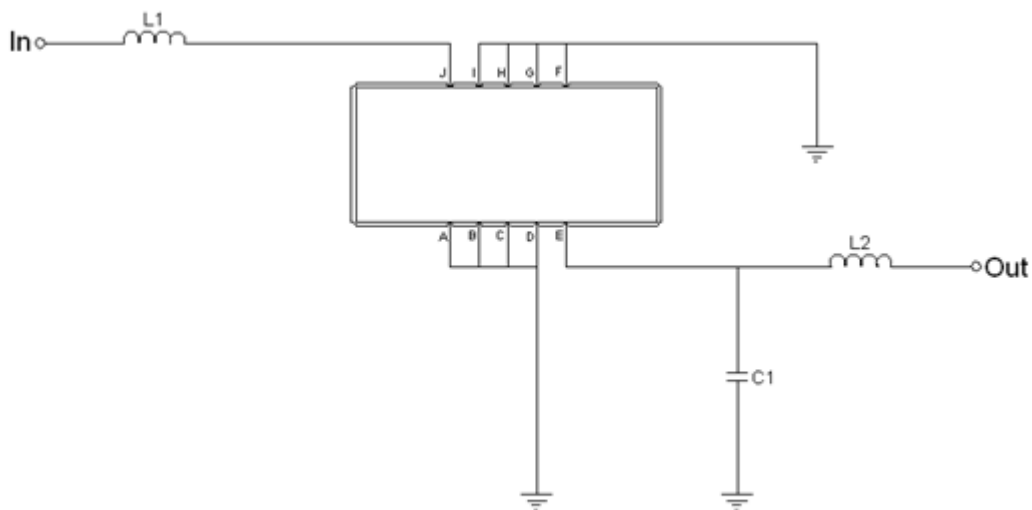
## Package Dimensions



- ② **TRANSKO:** Brand
- ② **TA05509B:** 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



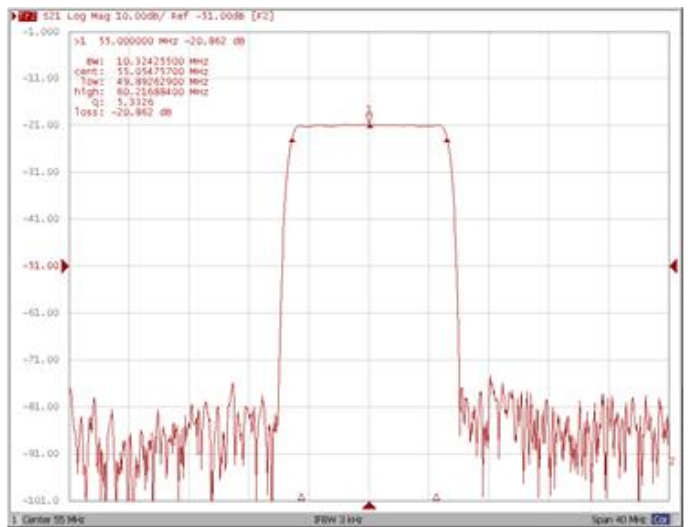
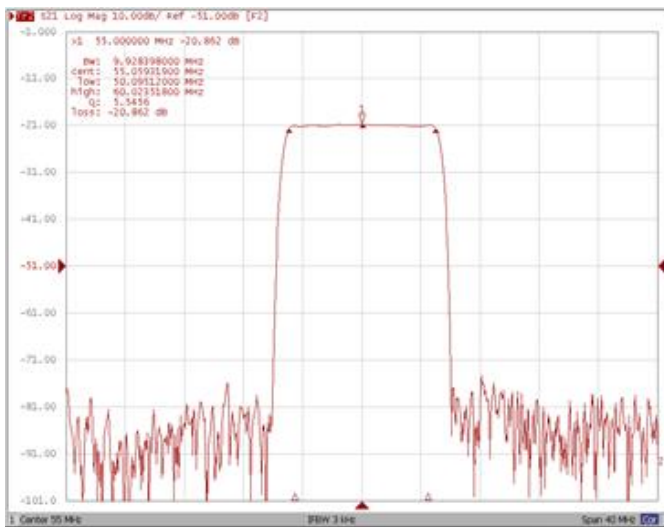
Test Fixture & Values	
Input	L1=150nH
Output	L2=120nH, C2=22pF
Source/Load Impedance	50 Ω

## Frequency Characteristics

### Frequency Response

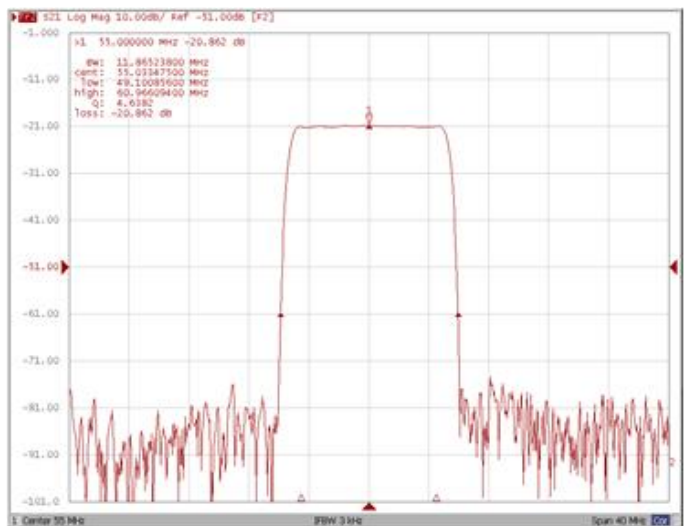
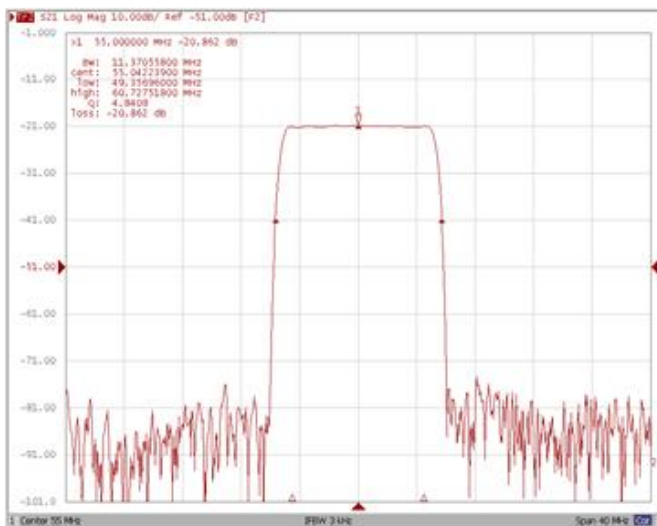
**Bandwidth at -1.0 dB**

**Bandwidth at -3.0 dB**



**Bandwidth at -20.0 dB**

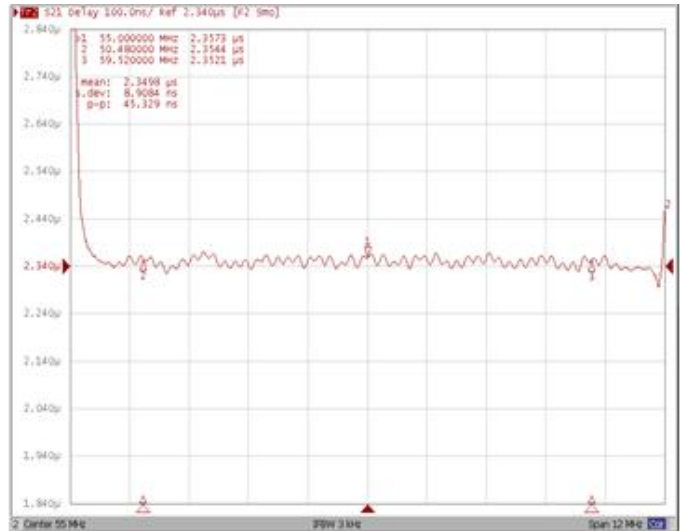
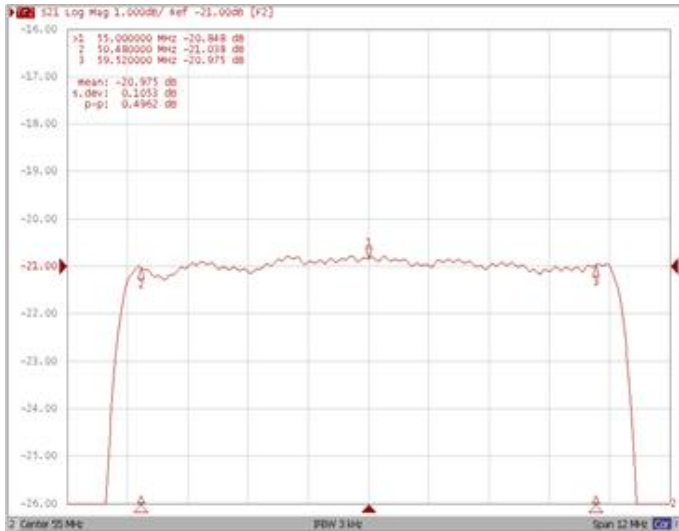
**Bandwidth at -40.0 dB**



**Frequency Response**

**Ripple Variation Fo±4.52MHz**

**Group Delay Variation Fo±4.52MHz**



**Smith Chart**

**VSWR**

