

- 50.0 MHz IF SAW Filter / 19.47 MHz Bandwidth
- Revision 0: 21. Jan. 2010

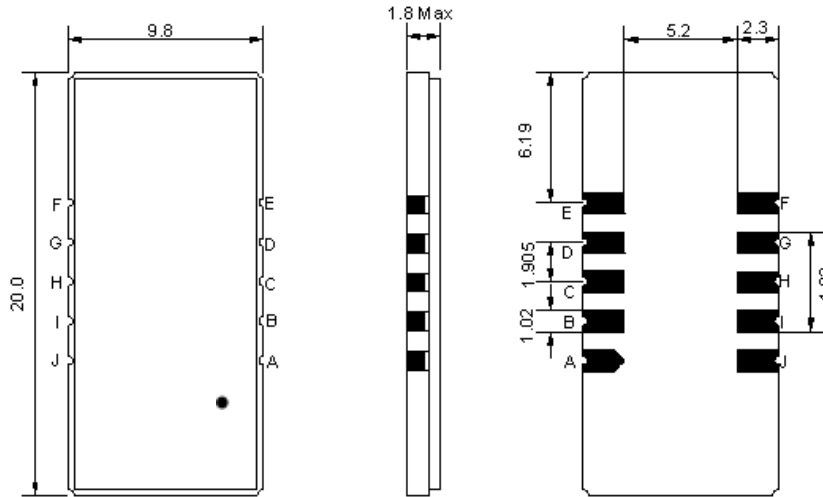
## Electrical Characteristics

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	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	-	50.00	-
Insertion Loss at Fo	dB	-	27.7	29.5
Group Delay Variation (Fo±9.32MHz)	nsec	-	26	60
Absolute Delay at Fo	usec	-	1.95	-
Passband Ripple Variation (Fo±9.32MHz)	dB	-	0.58	1.00
Bandwidth at -1dB	MHz	19.30	19.47	-
Bandwidth at -3dB	MHz	-	19.99	-
Bandwidth at -20dB	MHz	-	21.34	-
Bandwidth at -40dB	MHz	-	21.94	22.10
Ultimate Rejection	dB	45	48	-
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.

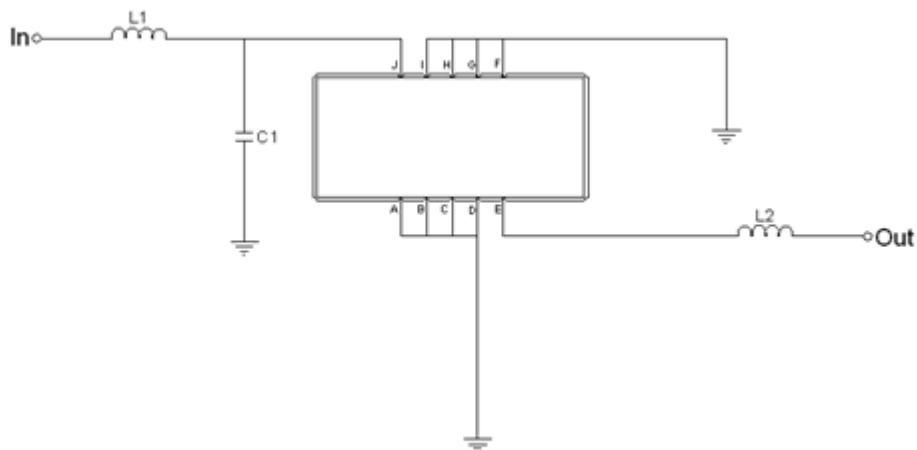
## Package Dimensions



- ② TRANSKO: Brand
- ② TA05019A: 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



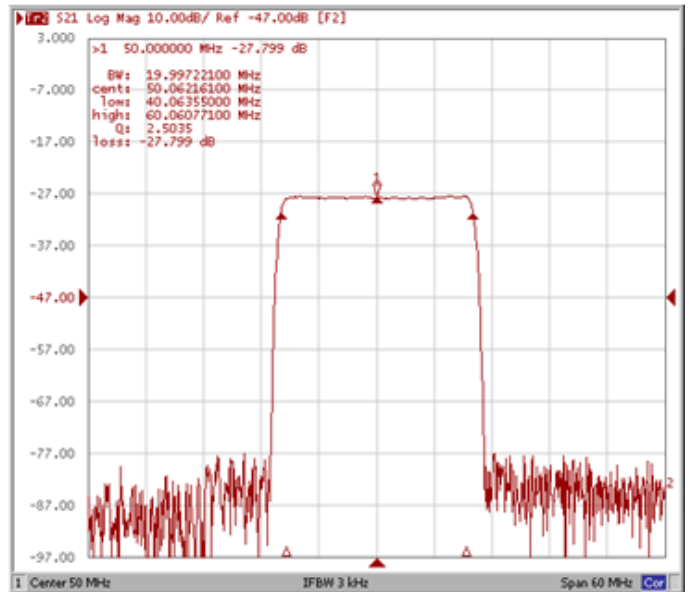
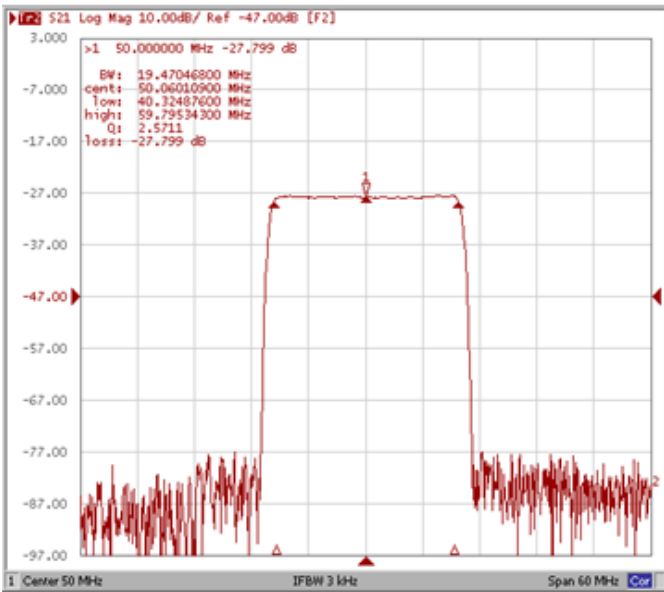
Test Fixture & Values	
Input	L1 = 390 nH, C1= 7.5pF
Output	L2 = 220 nH
Source/Load Impedance	50 Ω

## Frequency Characteristics

### Frequency Response

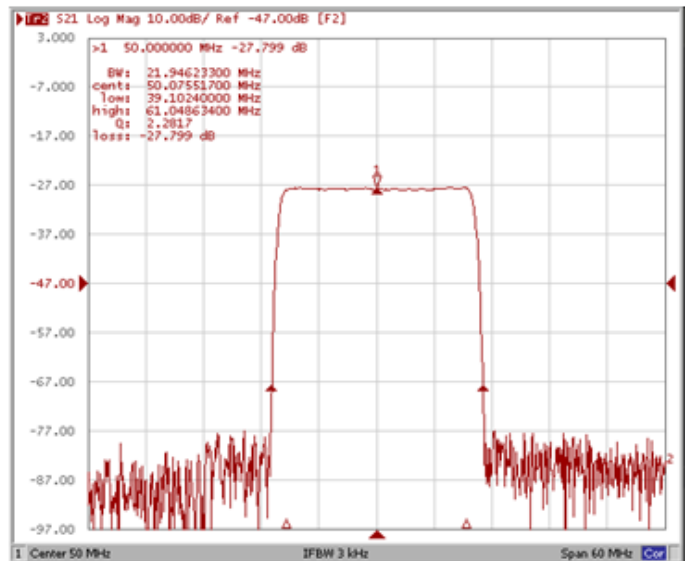
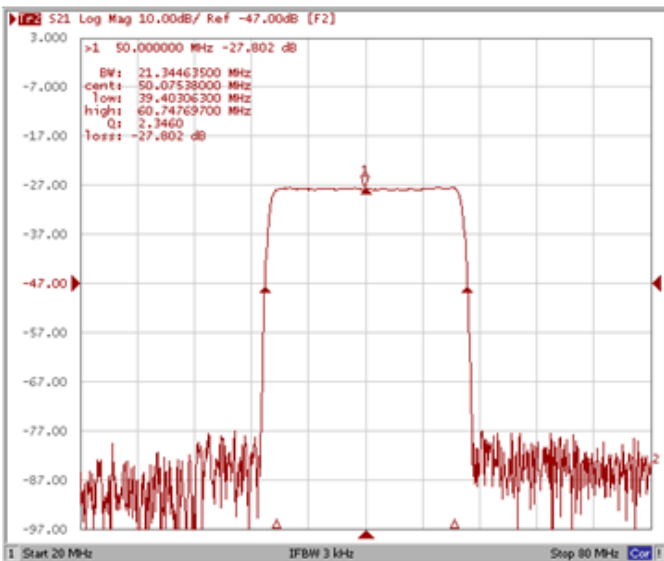
**Bandwidth at -1.0 dB**

**Bandwidth at -3.0 dB**



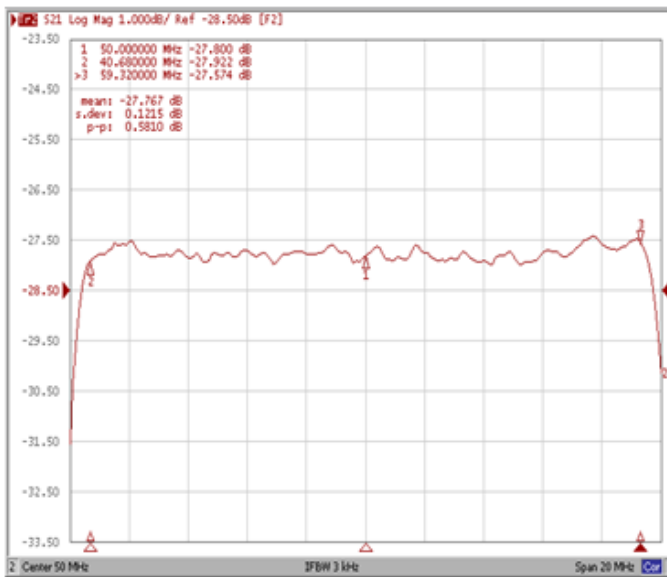
**Bandwidth at -20.0 dB**

**Bandwidth at -40.0 dB**

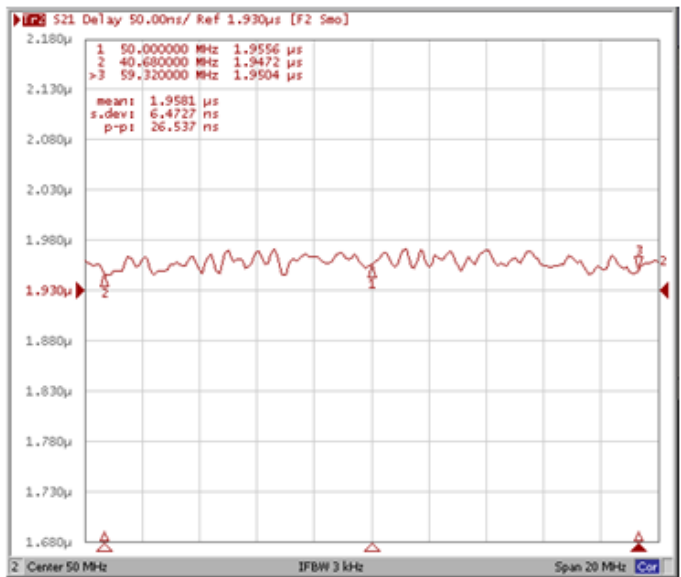


## Frequency Response

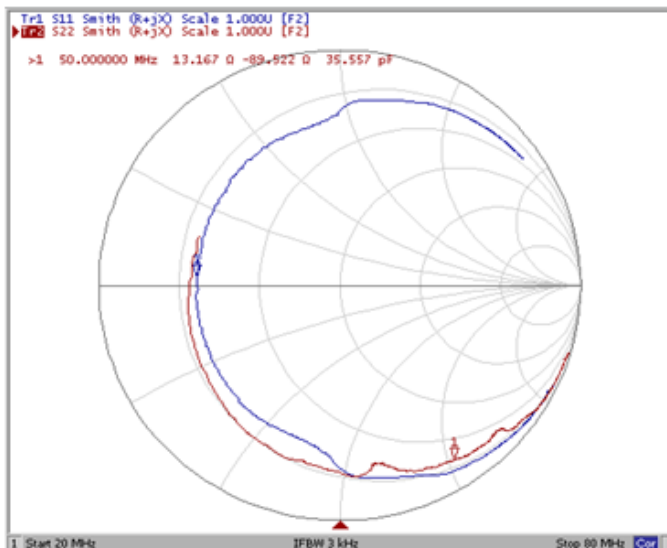
**Ripple Variation Fo±9.32MHz**



**Group Delay Variation Fo±9.32MHz**



**Smith Chart**



**VSWR**

