

- 120.0 MHz IF SAW Filter / 9.30 MHz Bandwidth
- Revision 0: 04 Apr. 2012

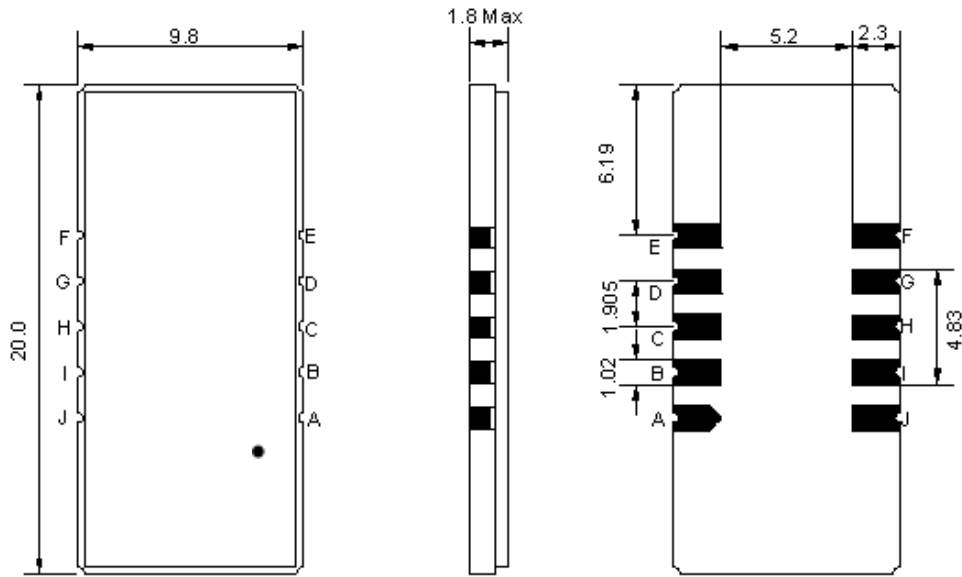
## Electrical Characteristics

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	-	120.00	-
Insertion Loss at Fo	dB	-	26.00	28.00
Amplitude Ripple (Fo ±4.50 MHz)	dB <sub>p-p</sub>	-	0.65	1.2
Group Delay Variation (Fo ±4.50 MHz)	nsec	-	100	200
Absolute Delay at Fo	μsec	-	2.46	-
Bandwidth at -1.0 dB	MHz	9.20	9.30	-
Bandwidth at -3.0 dB	MHz	-	9.50	-
Bandwidth at -35.0 dB	MHz	-	10.30	10.40
Relative Attenuation: (Out of Band Gain)				
Fc ± 5.2MHz	dB	25	38	-
Fc ± 6.0MHz	dB	40	45	-
Fc ± 10.0MHz	dB	40	45	-
Fc ± 15.0MHz	dB	40	45	-
Temperature coefficient	ppm/°C	-	-18	-

**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.

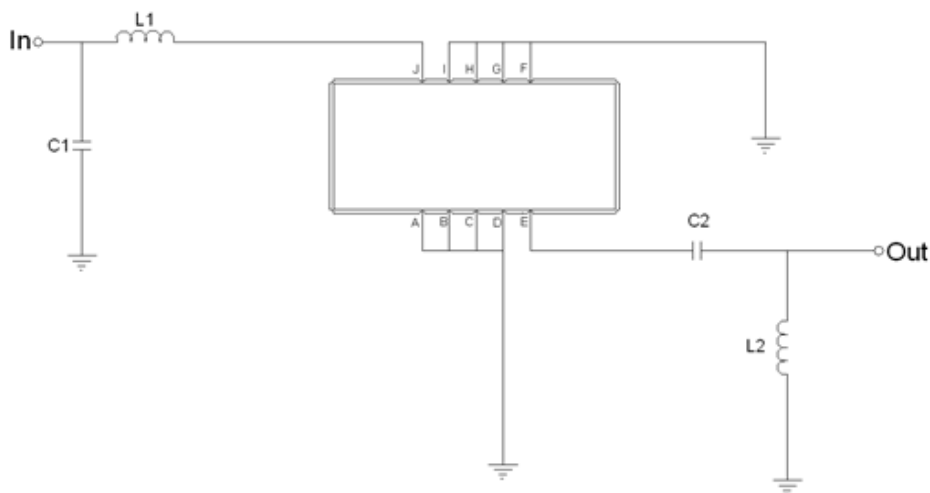
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TA12009C:** 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



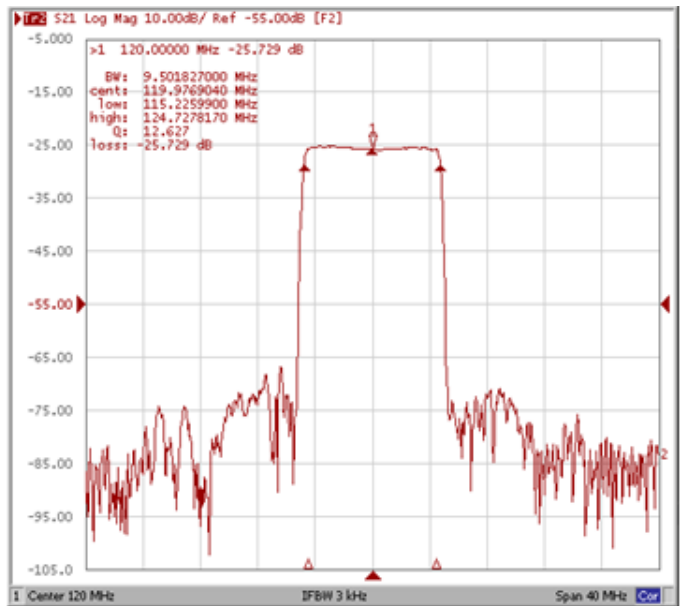
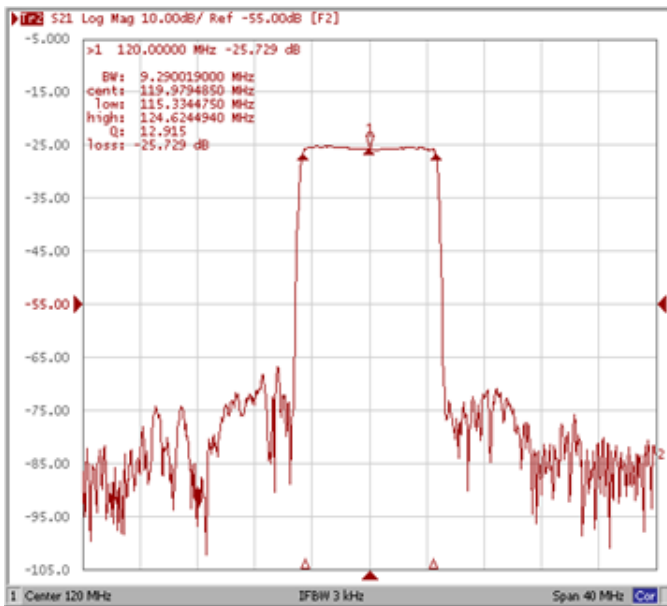
Test Fixture & Values	
<b>Input</b>	L1=56 nH, C1=27 pF
<b>Output</b>	L2=47 nH, C2=100 pF
<b>Source/Load Impedance</b>	50 $\Omega$

## Frequency Characteristics

### Frequency Response

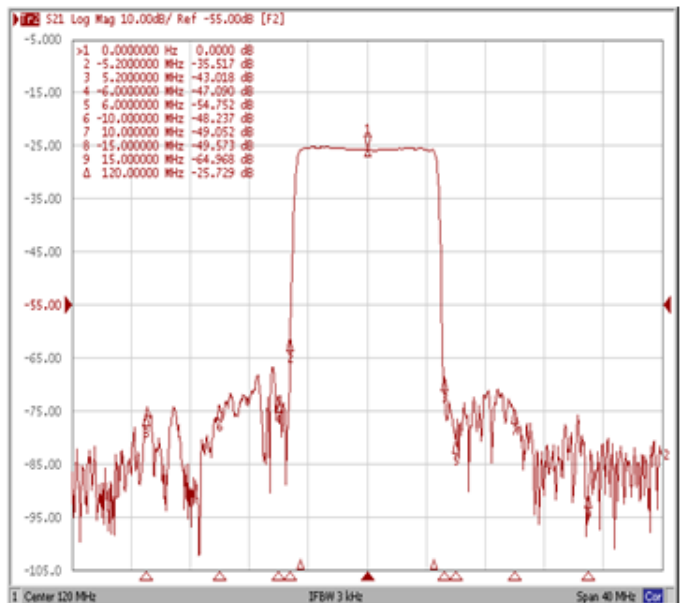
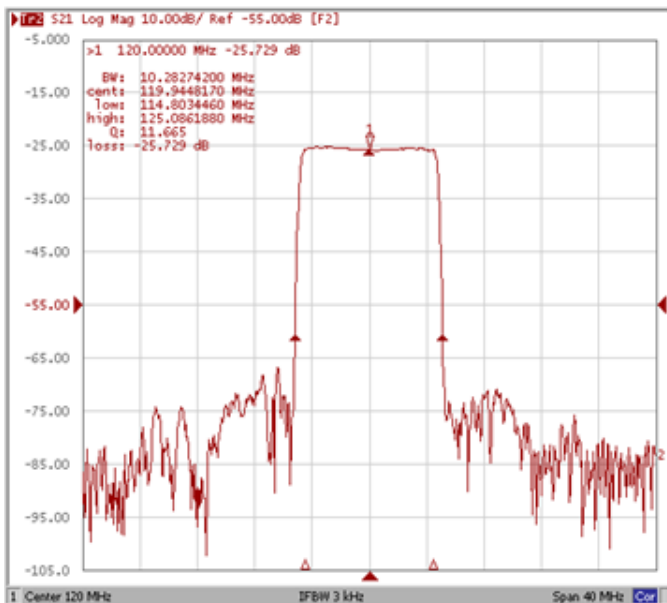
**Bandwidth at -1.0 dB**

**Bandwidth at -3.0 dB**



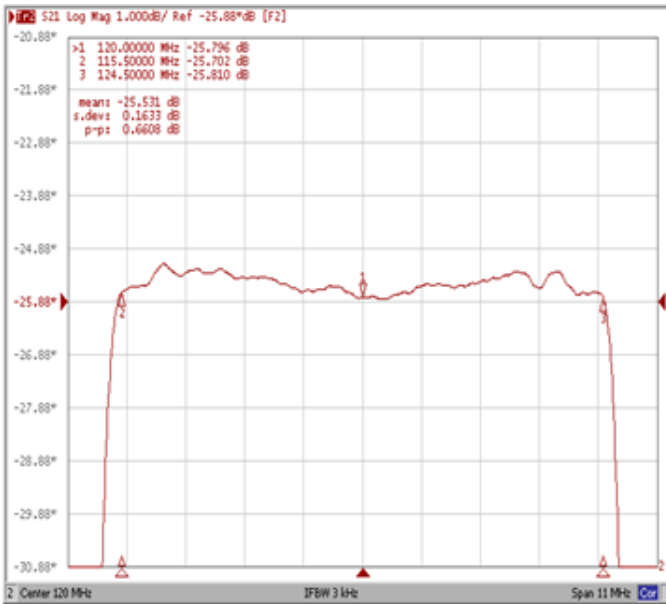
**Bandwidth at -35.0 dB**

**Out of Band Gain**

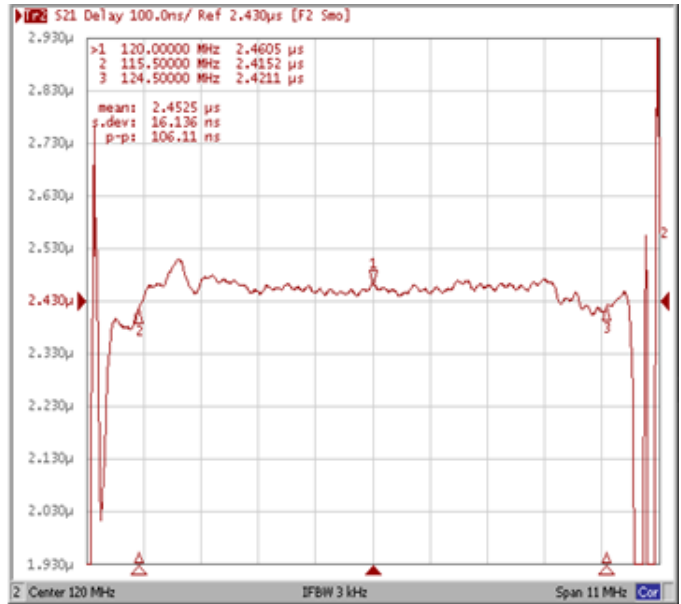


## Frequency Response

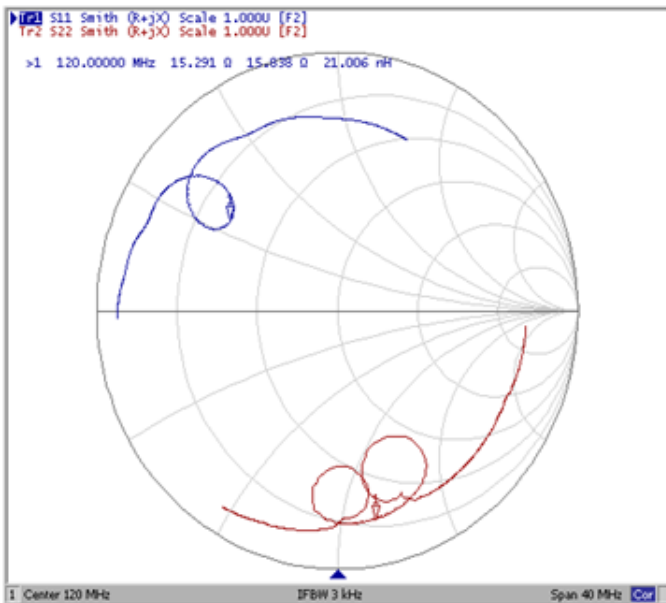
**Ripple Variation Fo±4.5MHz**



**Group Delay Variation Fo±4.5MHz**



**Smith Chart**



**VSWR**

