

- 70.1 MHz IF SAW Filter / 19.82 MHz Bandwidth
- Revision 1: 16 Jun. 2011

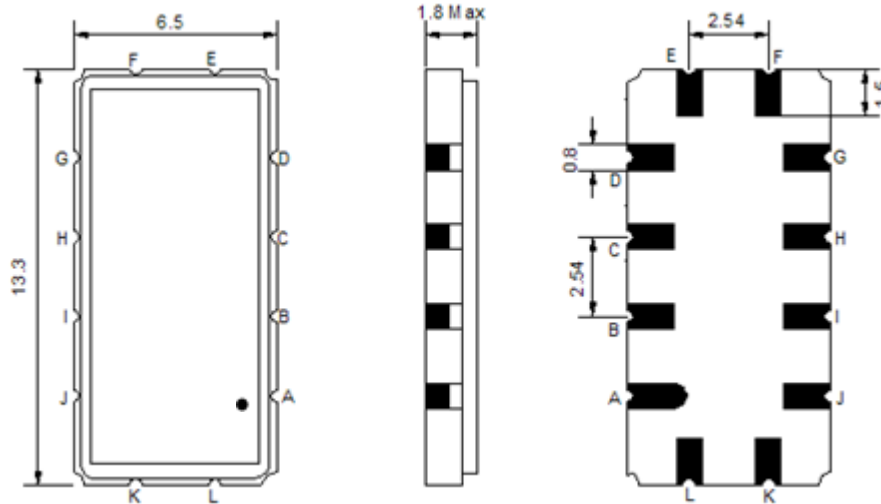
## Electrical Characteristics

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	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	70.00	70.10	70.20
Insertion Loss at Fo	dB	-	27.0	29.0
Temperature Coefficient	ppm/°C	-	-72	-
Amplitude Ripple within fo ±9.65 MHz	dB <sub>p-p</sub>	-	0.6	1.0
Group Delay Variation within fo ±9.65 MHz	nsec	-	30	80
Absolute Delay at Fo	μsec	-	1.69	-
Bandwidth at -1.0 dB	MHz	19.70	19.83	-
Bandwidth at -3.0 dB	MHz	-	20.36	-
Bandwidth at -40.0 dB	MHz	-	22.38	22.50
Relative Attenuation:				
Fo ±14.42 MHz	dB	-	50	
Lower Sidelobe	dB	45	48	-
Upper Sidelobe	dB	45	48	-

**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.

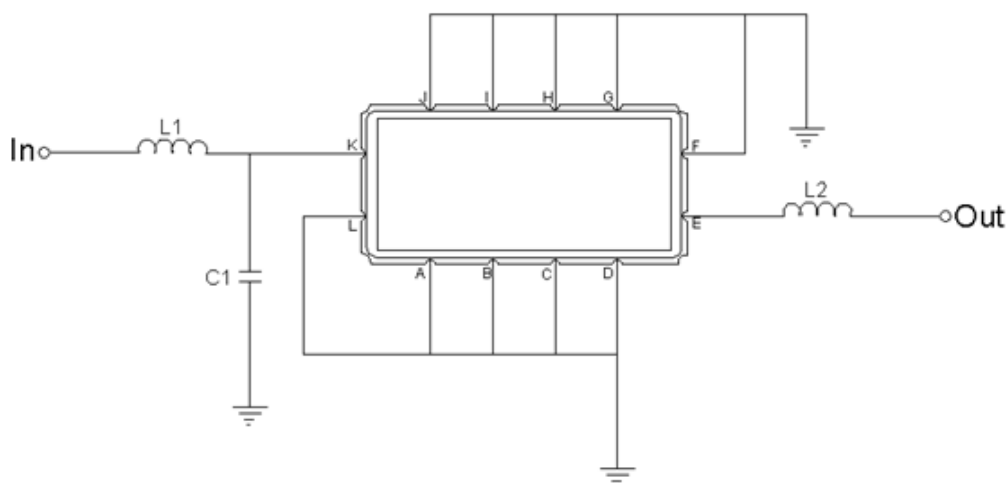
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TA07019C:** 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



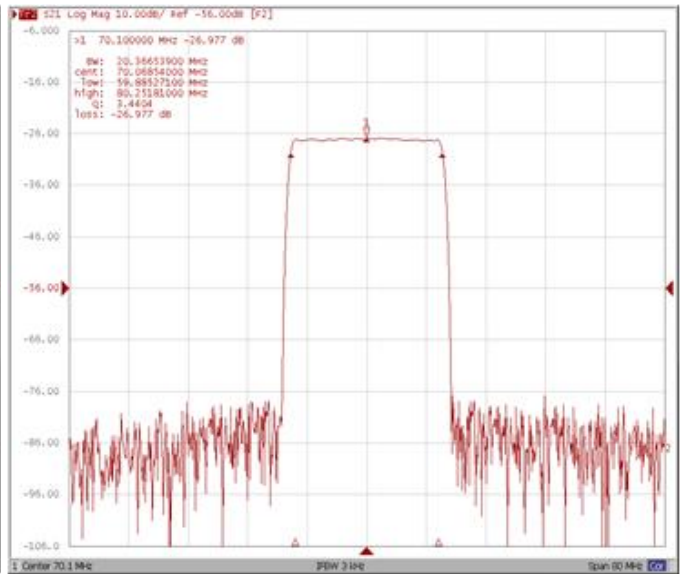
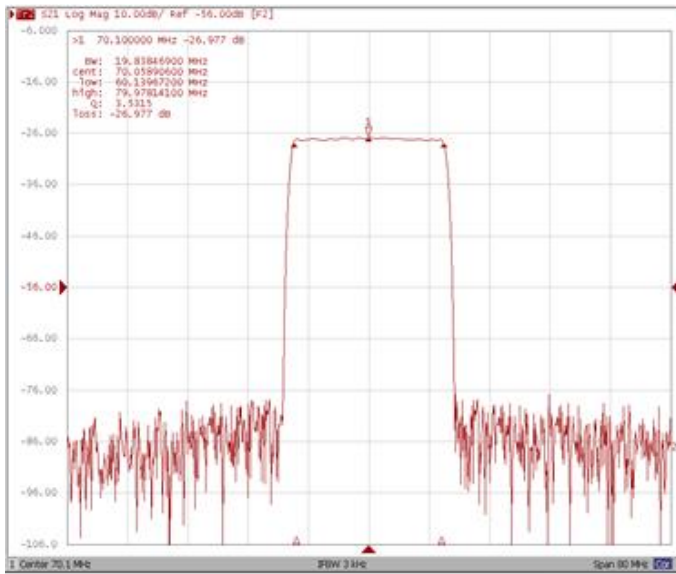
Test Fixture & Values	
Input	L1 = 180nH, C1=11pF
Output	L2 = 120nH
Source/Load Impedance	50 Ω

## Frequency Characteristics

### Frequency Response

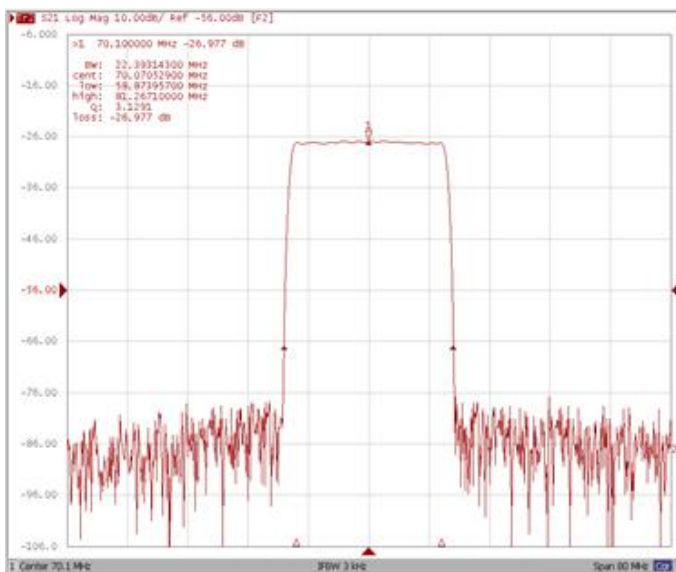
**Bandwidth at -1.0 dB**

**Bandwidth at -3.0 dB**



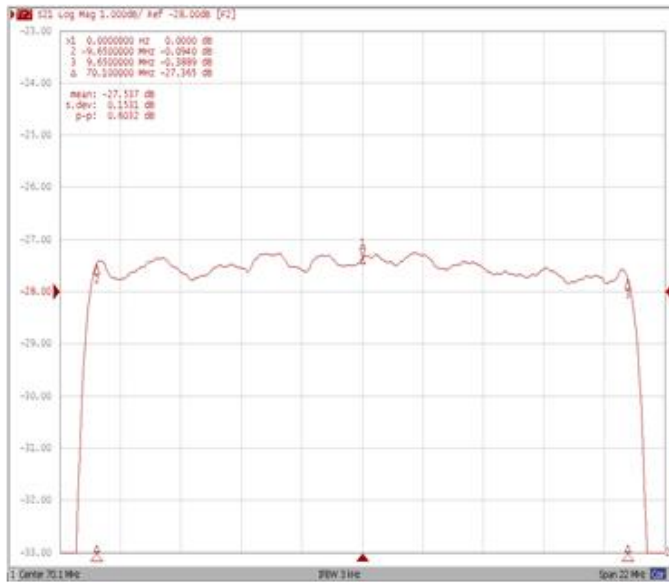
**Bandwidth at -40.0 dB**

**Attenuation Fo±14.42MHz**

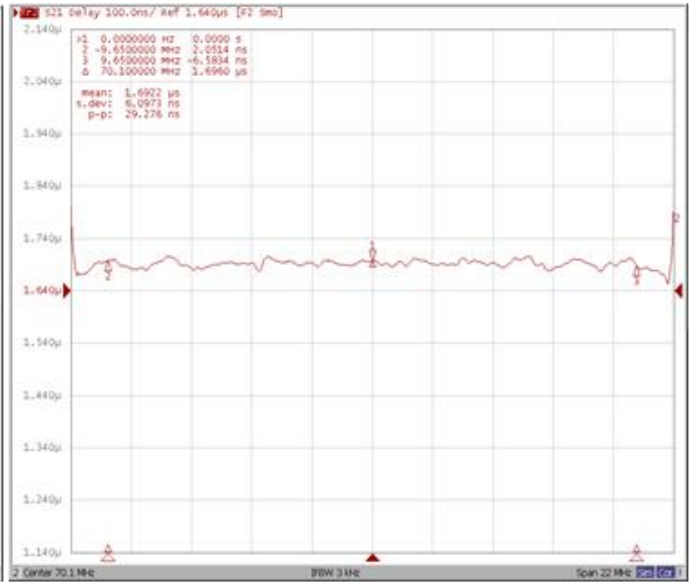


**Frequency Response**

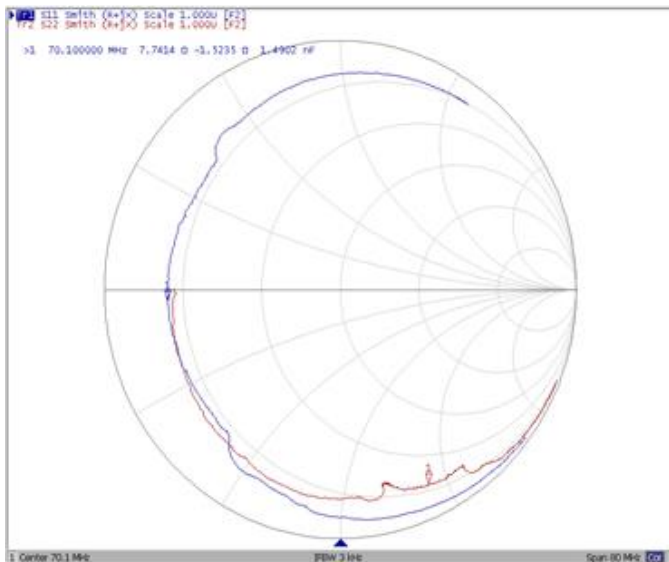
**Ripple Variation Fo±9.65MHz**



**Group Delay Variation Fo±9.65MHz**



**Smith Chart**



**SWR**

