

- 125.00 MHz IF SAW Filter / 14.05 MHz Bandwidth
- Revision 0: May 2013

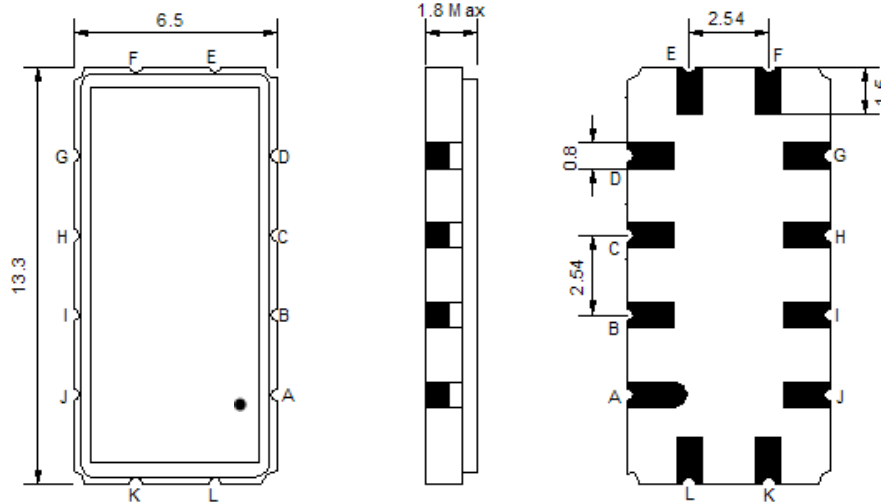
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation Temperature Range	°C	-	25	-
Storage Temperature Range	°C	-45	-	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	S90			
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	-	125.00	-
Insertion Loss at Fo	dB	-	12.50	15.00
Group Delay Variation at Fo ± 5.0 MHz	nsec	-	42	100
Absolute Delay at Fo	usec	-	0.92	1.20
Passband Ripple Variation at Fo ± 5.0 MHz	dB <sub>p-p</sub>	-	0.45	1.0
Bandwidth at -1dB	MHz	13.60	14.05	-
Bandwidth at -3dB	MHz	-	14.90	-
Bandwidth at -40dB	MHz	-	18.35	18.80
Ultimate Rejection	dB	40	43	-
Relative Attenuation				
Fo - 11.0 MHz	dB	40	50	-
Fo + 11.0 MHz	dB	40	50	-
Temperature Coefficient	ppm/°C	-	-86	-

**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.

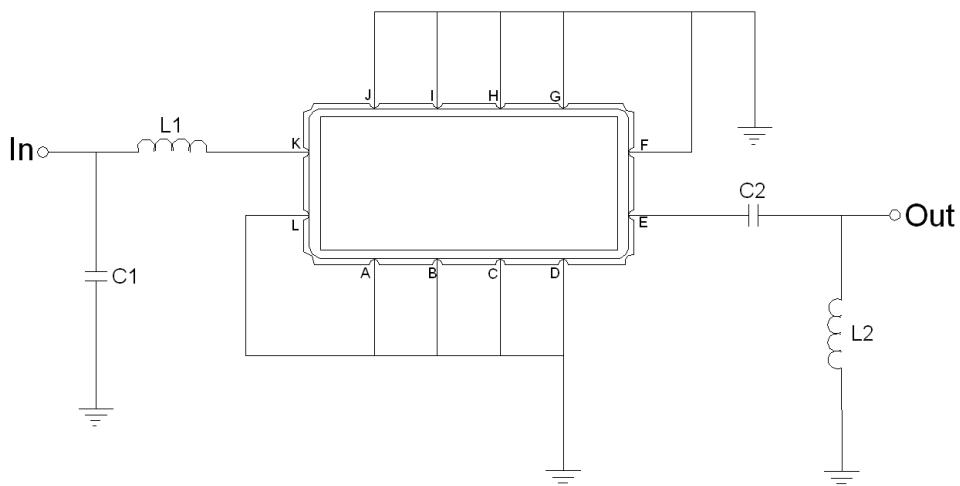
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TF-012501:** 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	
<b>Input</b>	L1 = 33nH, C1= 51pF
<b>Output</b>	L2 = 27nH, C2= 82pF
<b>Source/Load Impedance</b>	50 Ω

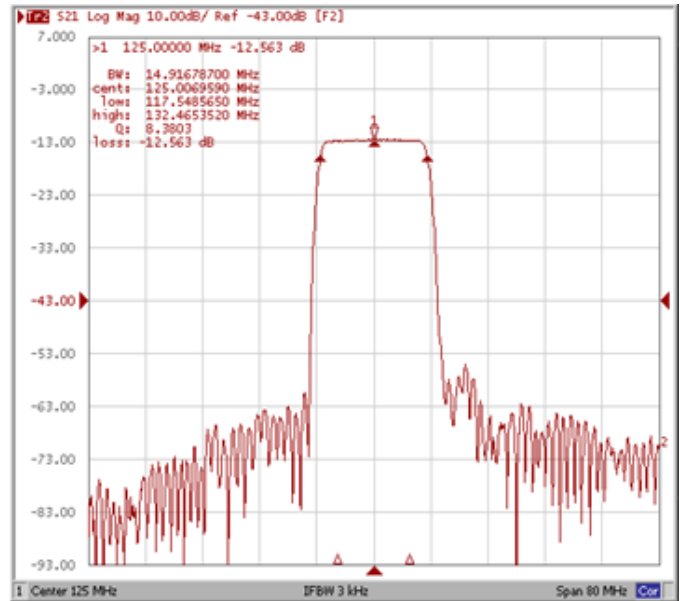
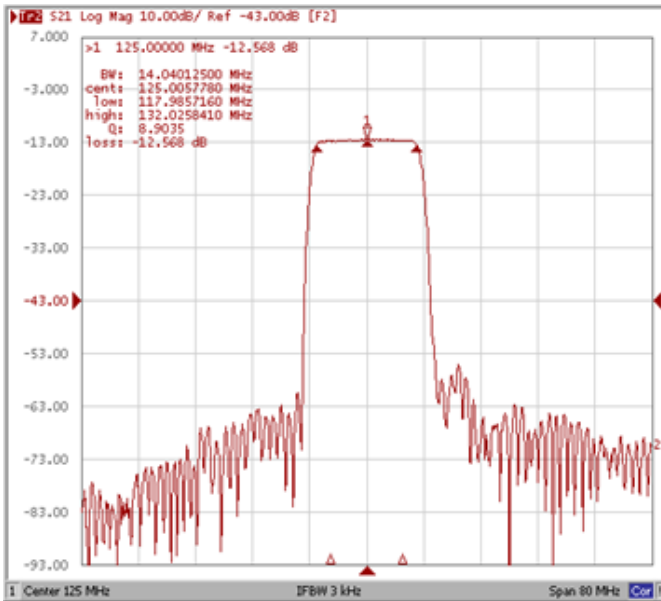
## Frequency Characteristics

### Frequency Response

Operating Temperature: +25°C

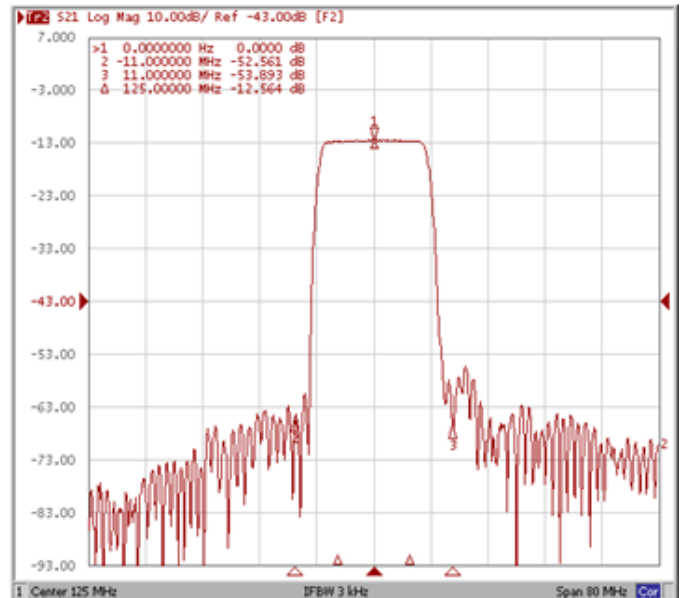
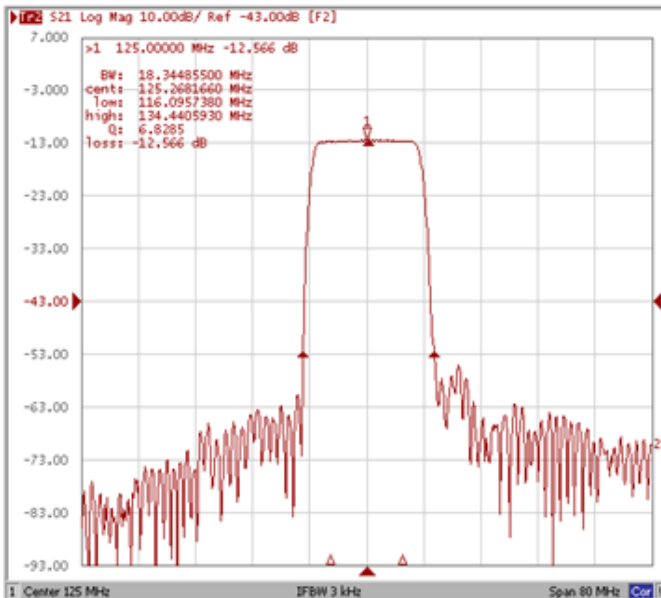
#### Bandwidth at -1.0 dB

#### Bandwidth at -3.0 dB



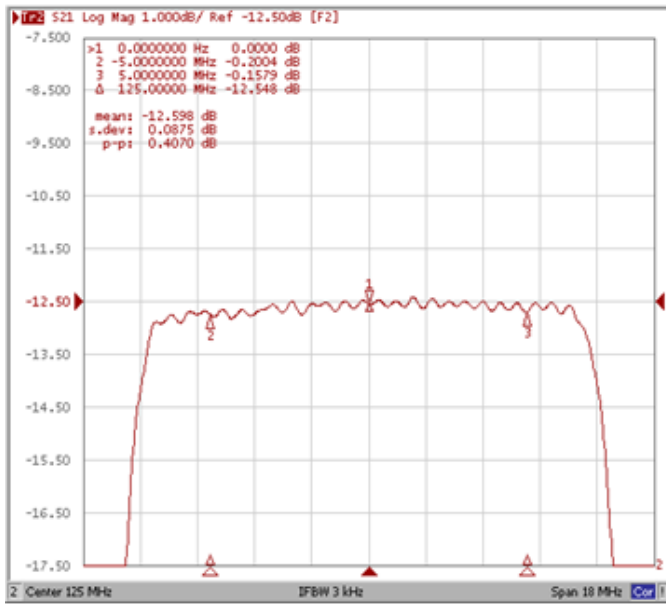
#### Bandwidth at -40.0 dB

#### Relative Attenuation Fo ± 11.0 MHz

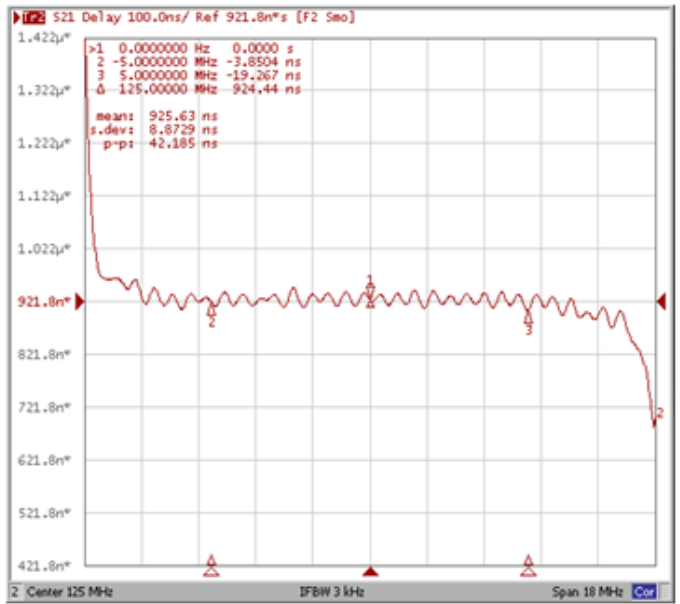


**Frequency Response**

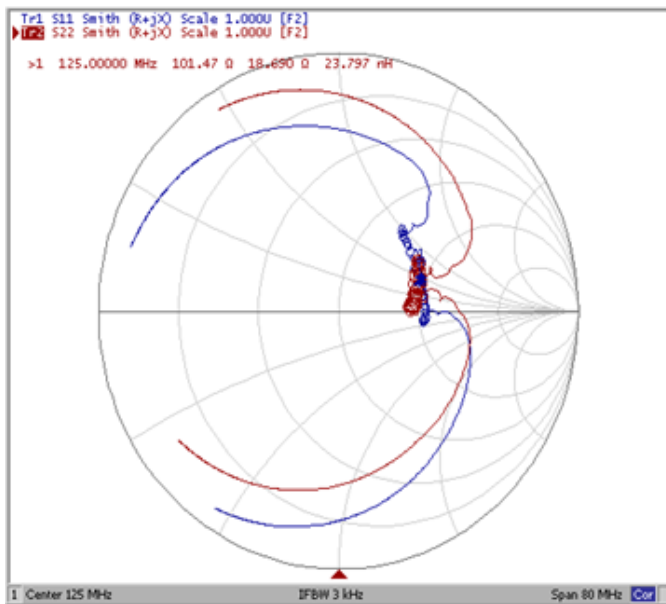
**Ripple Variation Fo±5.0MHz**



**Group Delay Variation Fo±5.0MHz**



**Smith Chart**



**VSWR**

