

- 125.00 MHz IF SAW Filter / 16.83 MHz Bandwidth
- Revision 1: 28. Oct. 2010

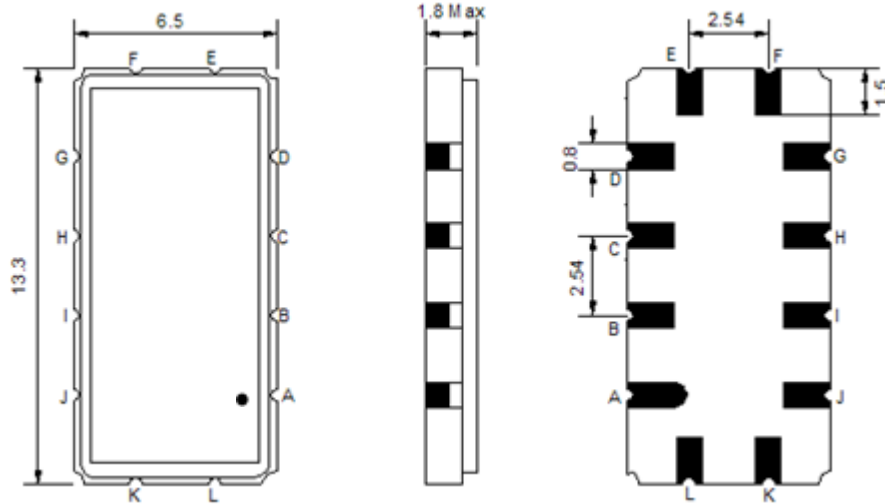
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation Temperature Range	°C	-30	-	85
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	-	125.00	-
Insertion Loss at Fo	dB	-	20.20	22.00
Group Delay Variation at Fo ± 7.47 MHz	nsec	-	26	60
Absolute Delay at Fo	usec	-	1.38	1.40
Passband Ripple Variation at Fo ± 7.47 MHz	dB	-	0.45	0.90
Bandwidth at -1dB	MHz	16.60	16.83	-
Bandwidth at -3dB	MHz	-	17.40	-
Bandwidth at -40dB	MHz	-	19.75	19.95
Ultimate Rejection	dB	50	58	-
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.

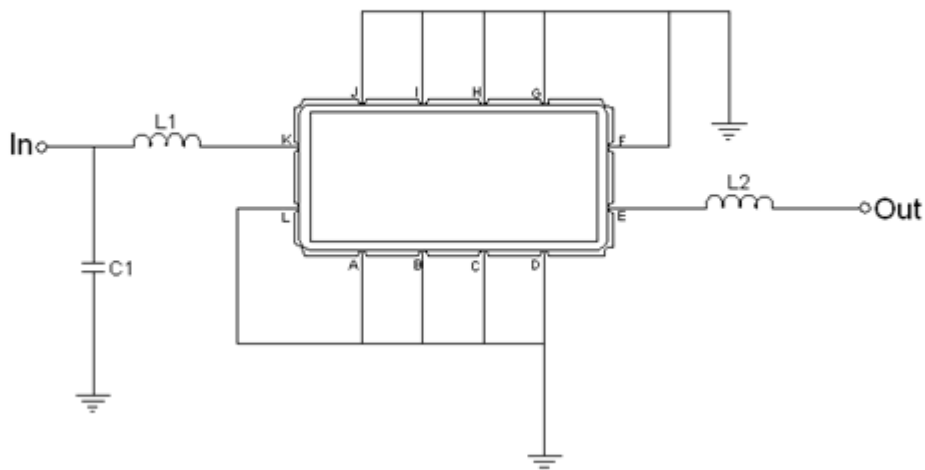
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TA12516A:** 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 = 15nH, C1=2pF
Output	L2 = 15nH
Source/Load Impedance	50 Ω

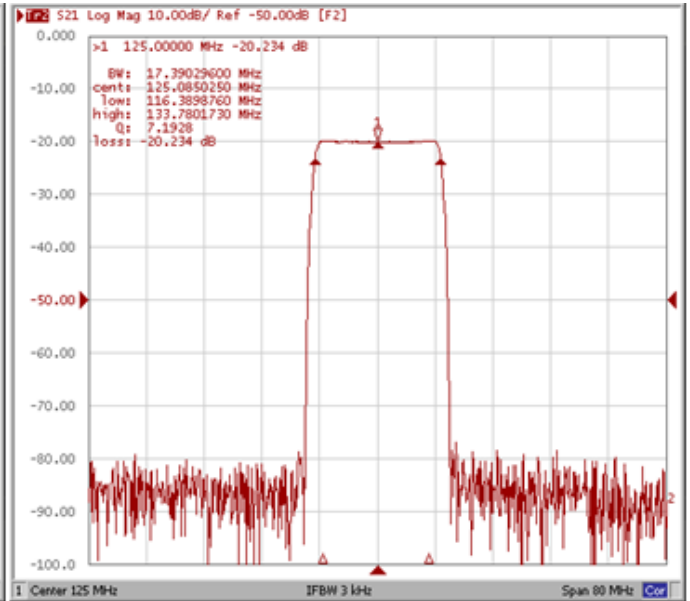
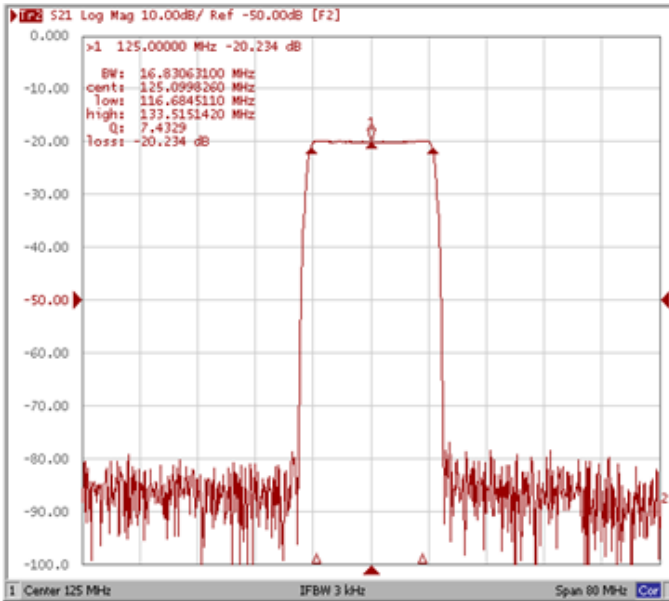
## Frequency Characteristics

**Frequency Response**

Operating Temperature : +25°C

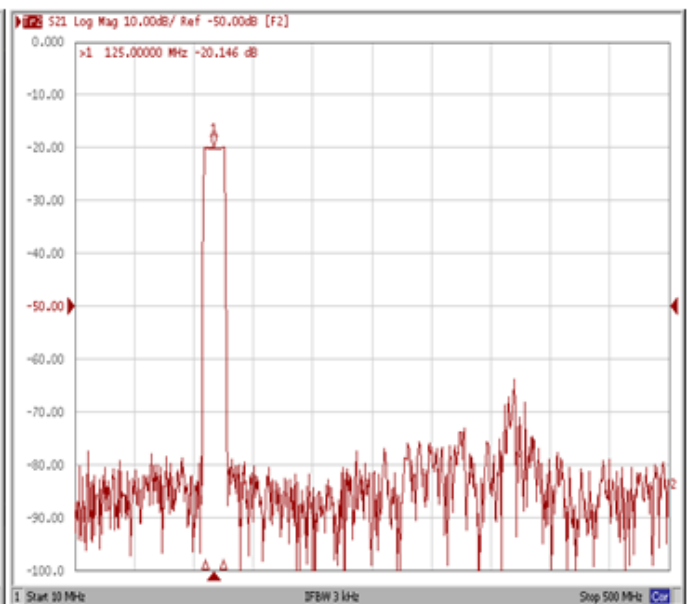
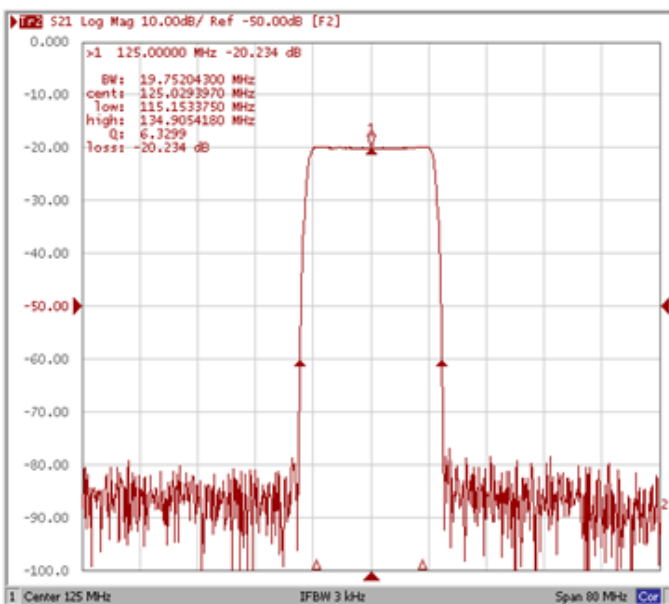
### Bandwidth at -1.0 dB

### Bandwidth at -3.0 dB



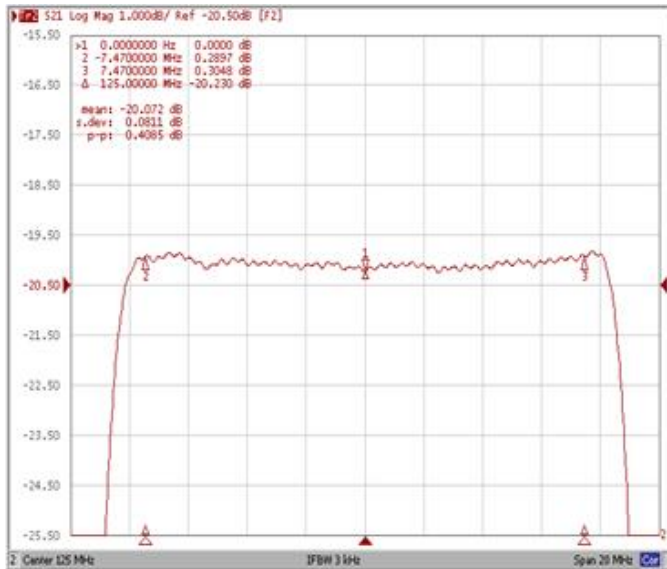
### Bandwidth at -40.0 dB

### Wide Band

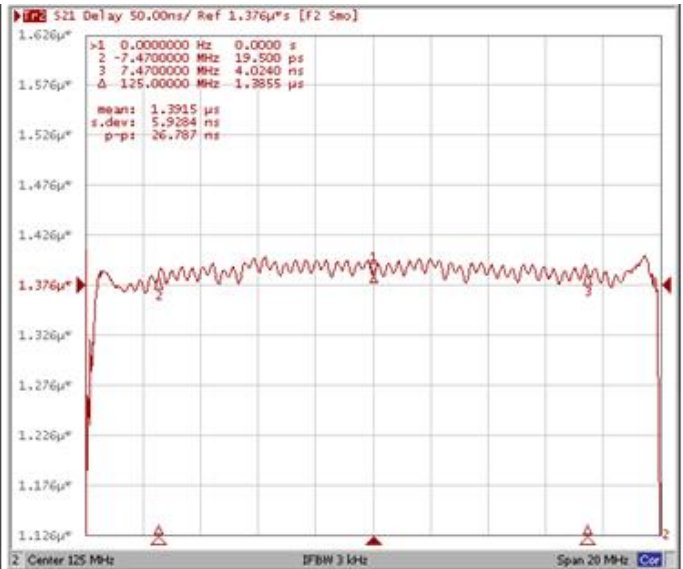


## Frequency Response

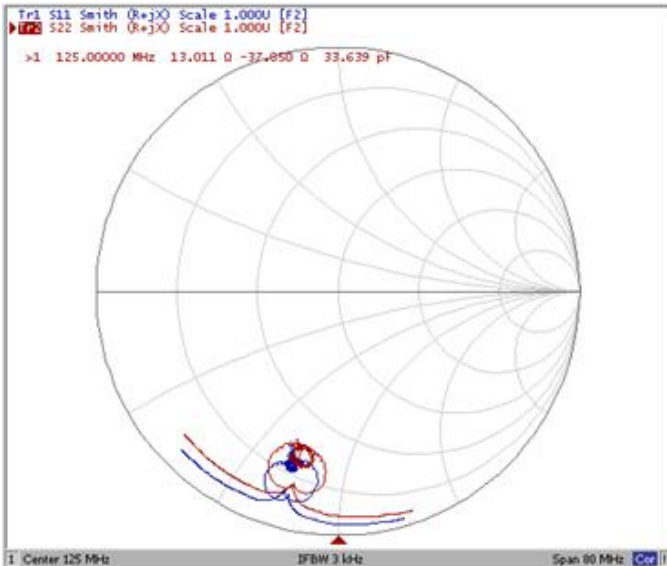
**Ripple Variation Fo±7.47MHz**



**Group Delay Variation Fo±7.47MHz**



**Smith Chart**



**VSWR**

