

- 491.00 MHz IF SAW Filter / 5.85 MHz Bandwidth
- Revision 0: 11. Jan. 2010

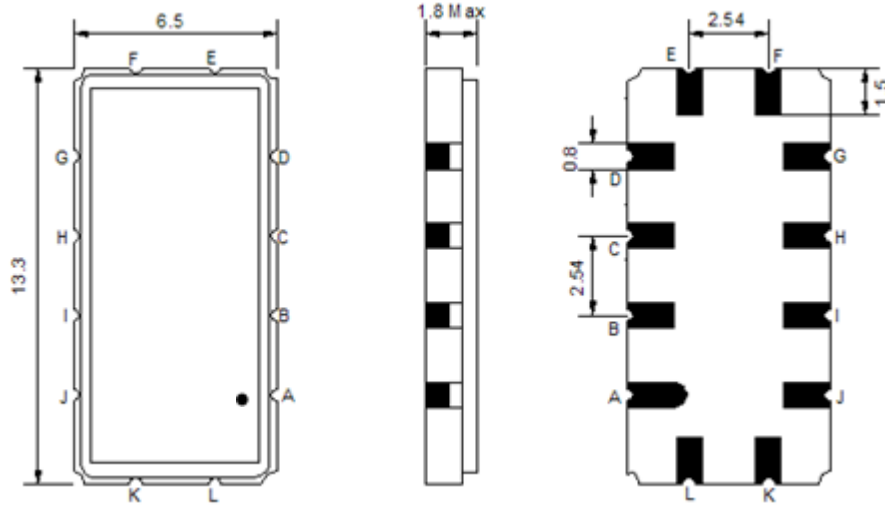
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-30	-	80
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	-	491.0	-
Insertion Loss at Fo	dB	-	21.6	23.0
Group Delay Variation at Fo ± 2.69 MHz	nsec	-	104	180
Absolute Delay at Fo	usec	-	1.38	
Passband Ripple Variation at Fo ± 2.69 MHz	dB	-	0.67	1.00
Bandwidth at -1dB	MHz	5.50	5.85	-
Bandwidth at -3dB	MHz	-	6.36	-
Bandwidth at -20dB	MHz	-	7.53	-
Bandwidth at -40dB	MHz	-	8.03	8.30
Ultimate Rejection	dB	-	52	-
Temperature Coefficient	ppm/°C	-	-0.03	-

**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.

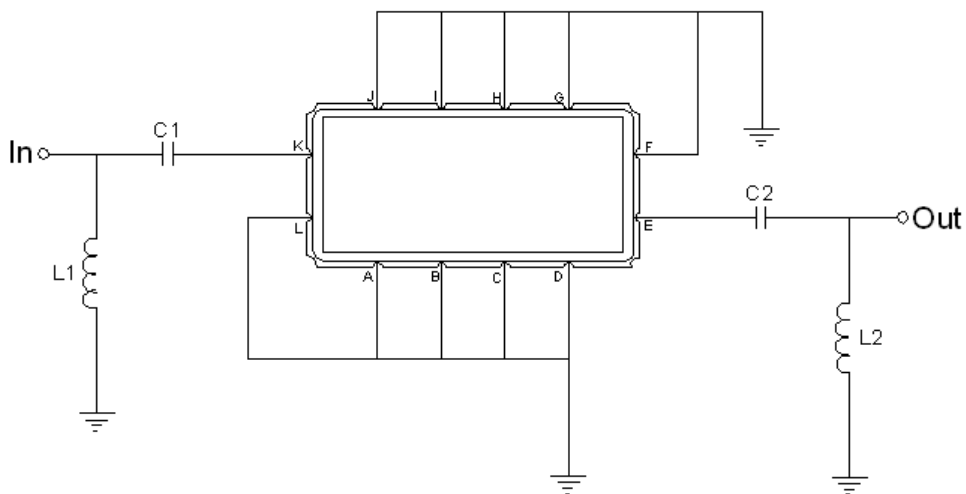
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TA49105A:** 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

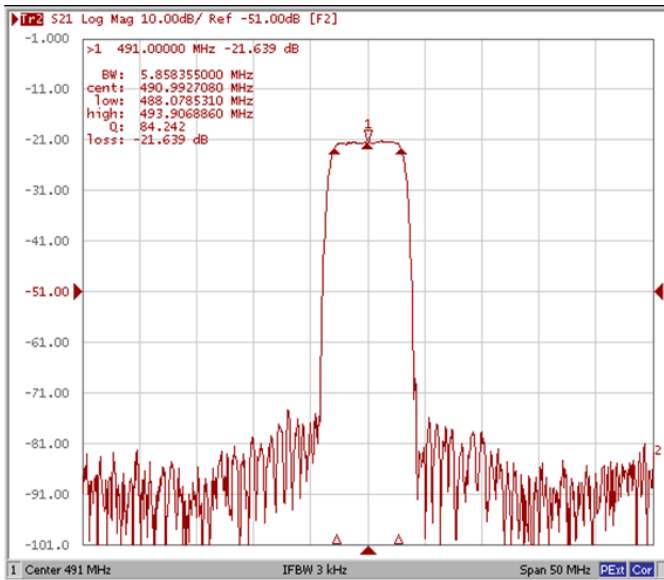


Test Fixture & Values	
<b>Input</b>	L1 = 5.6 nH, C1 = 14 pF
<b>Output</b>	L2 = 3.9 nH, C2 = 13 pF
<b>Source/Load Impedance</b>	50 $\Omega$

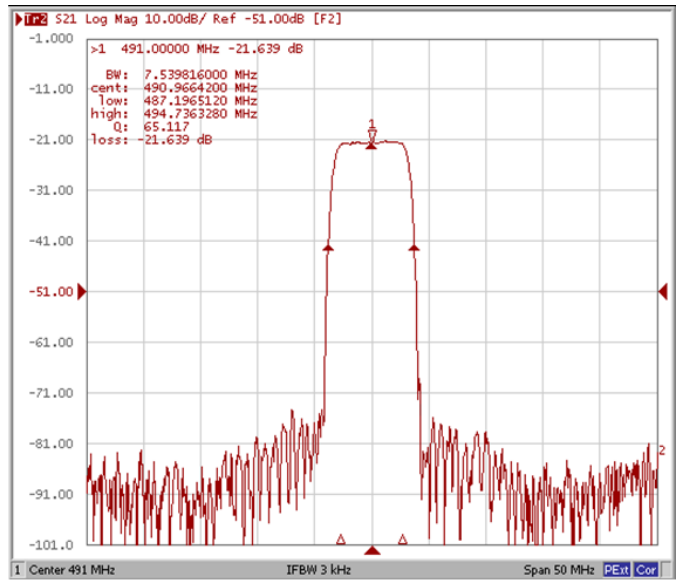
## Frequency Characteristics

### Frequency Response

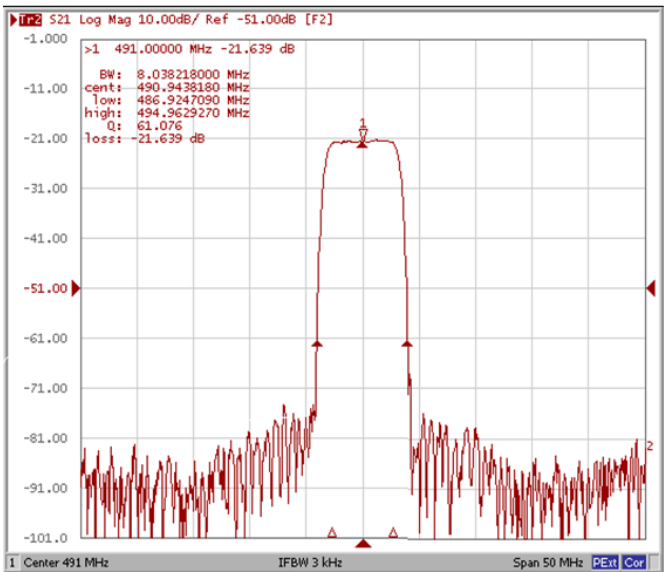
**Bandwidth at -1.0 dB**



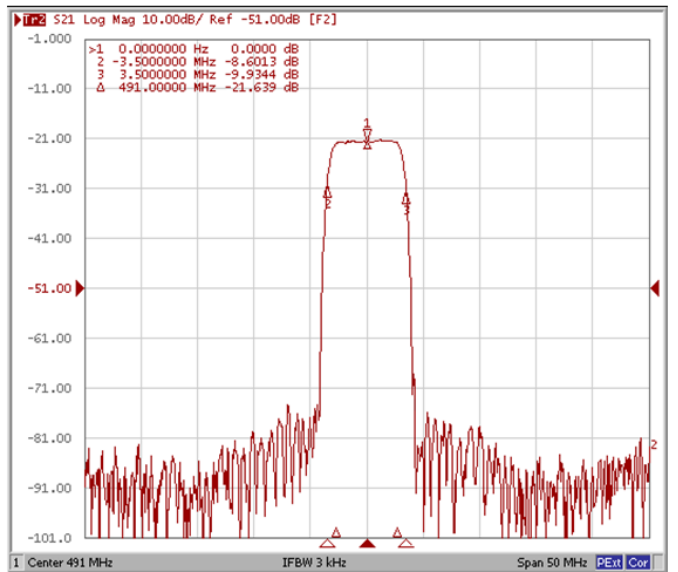
**Bandwidth at -20.0 dB**



**Bandwidth at -40.0 dB**

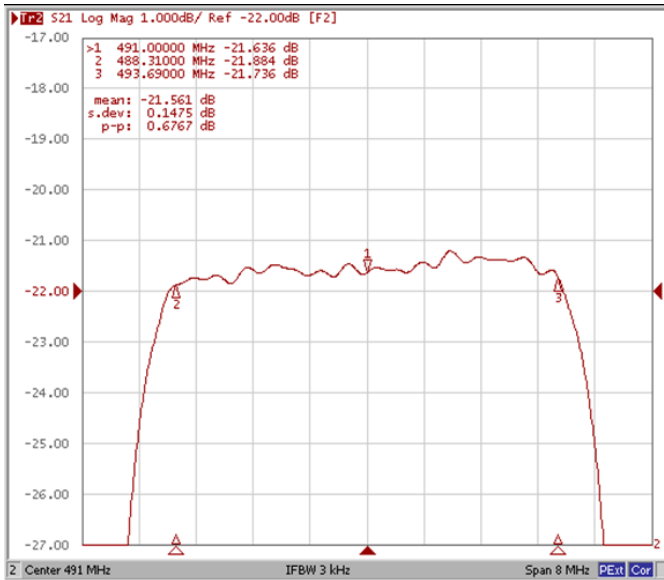


**Attenuation (Fo±3.5MHz)**

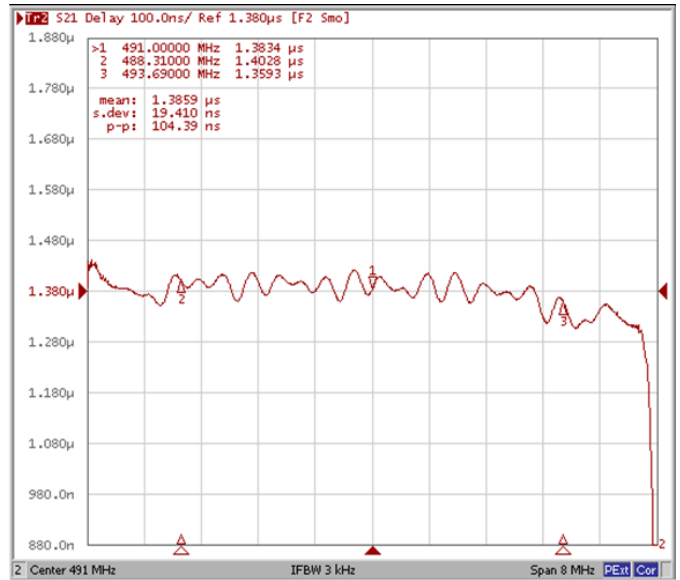


## Frequency Response

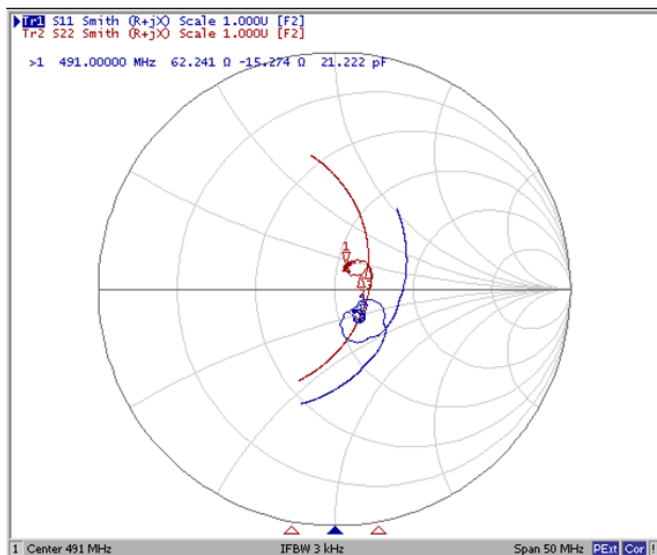
**Ripple Variation Fo±2.69MHz**



**Group Delay Variation Fo±2.69MHz**



**Smith Chart**



**VSWR**

