

- 195.00 MHz IF SAW Filter / 28.40 MHz Bandwidth
- Revision 0: 30 Sep. 2011

## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-10	-	70
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	-	195.00	-
Insertion Loss at Fo	dB	-	12.00	14.00
Group Delay Variation at Fo ± 12.50 MHz	nsec	-	35	80
Absolute Delay at Fo	usec	-	0.71	0.80
Passband Ripple Variation at Fo ± 12.50 MHz	dB	-	0.55	1.00
Bandwidth at -1dB	MHz	28.00	28.40	-
Bandwidth at -3dB	MHz	29.00	29.75	-
Bandwidth at -30dB	MHz	-	33.70	34.50
Ultimate Rejection				
Fo ± 35.00 MHz	dB	40	48	
Fo ± 40.00 MHz	dB	45	54	
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.

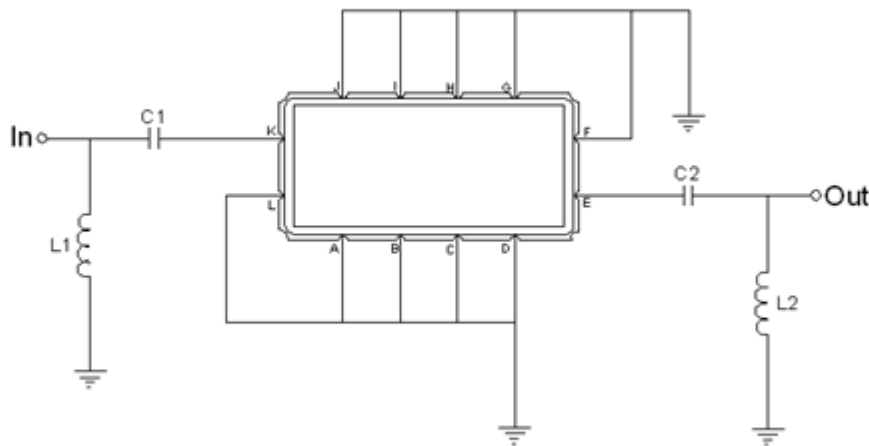
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL19528A:** 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



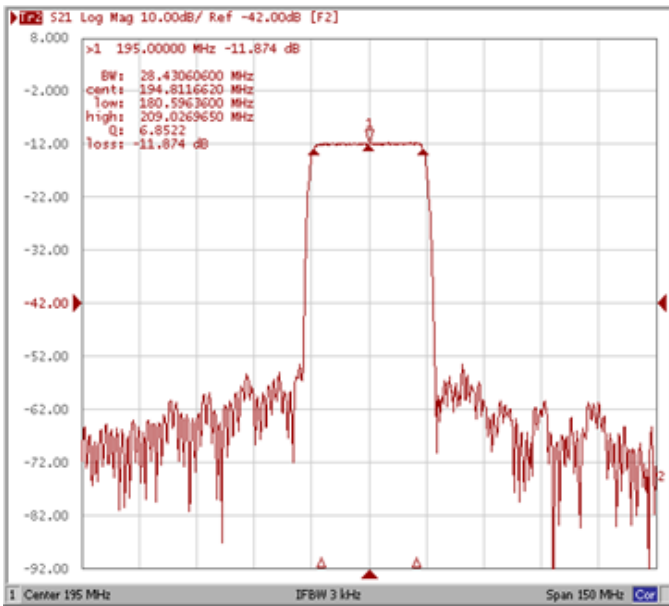
Test Fixture & Values	
Input	L1 = 33nH, C1=160pF
Output	L2 = 27nH, C2=160pF
Source/Load Impedance	50 Ω

## Frequency Characteristics

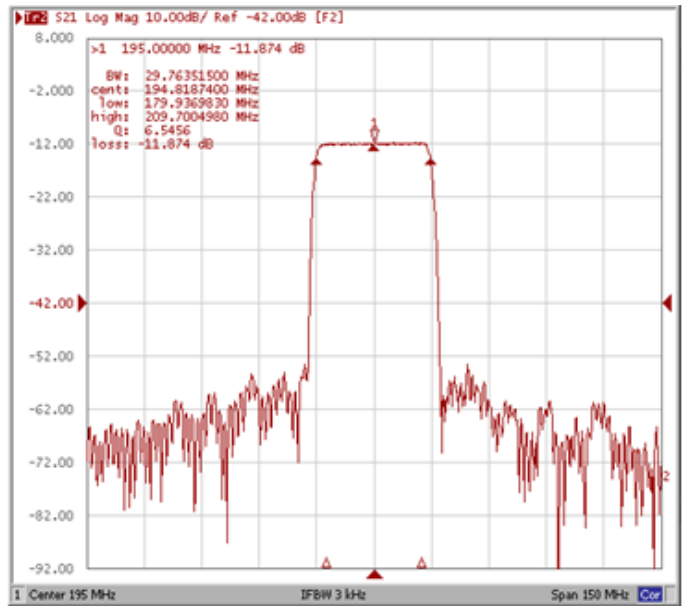
### Frequency Response

Operating Temperature : +25 °C

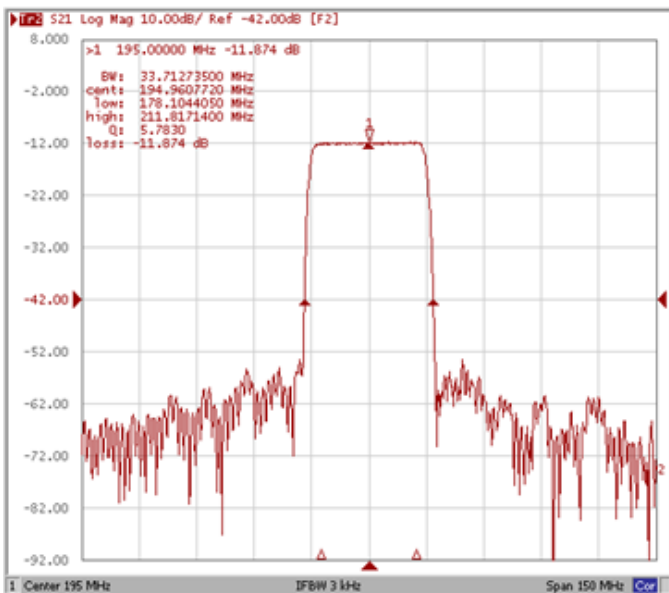
#### Bandwidth at -1.0 dB



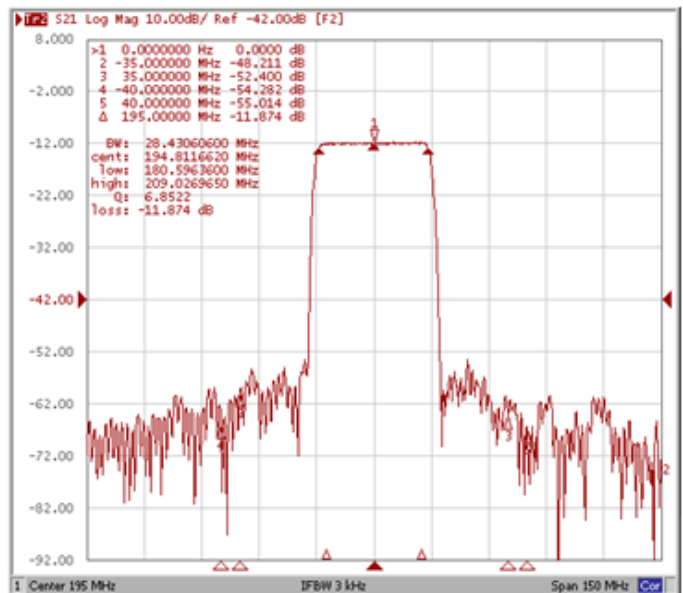
#### Bandwidth at -3.0 dB



#### Bandwidth at -30.0 dB

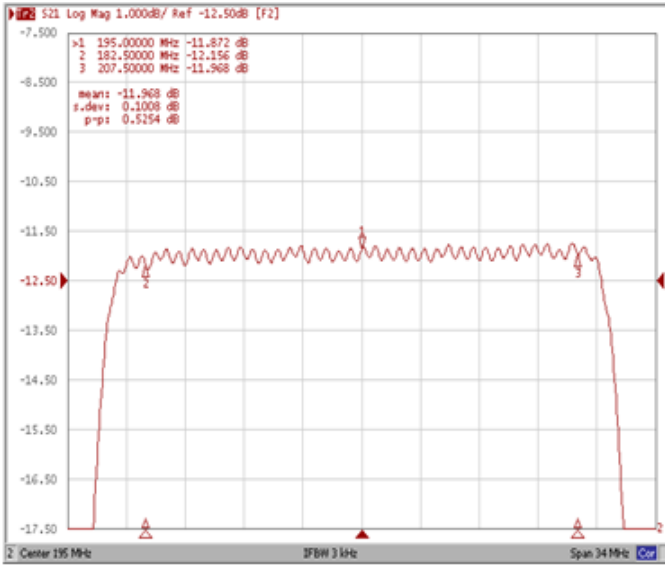


#### Attenuation Fo ± 35.00 MHz/ Fo ± 40.00 MHz

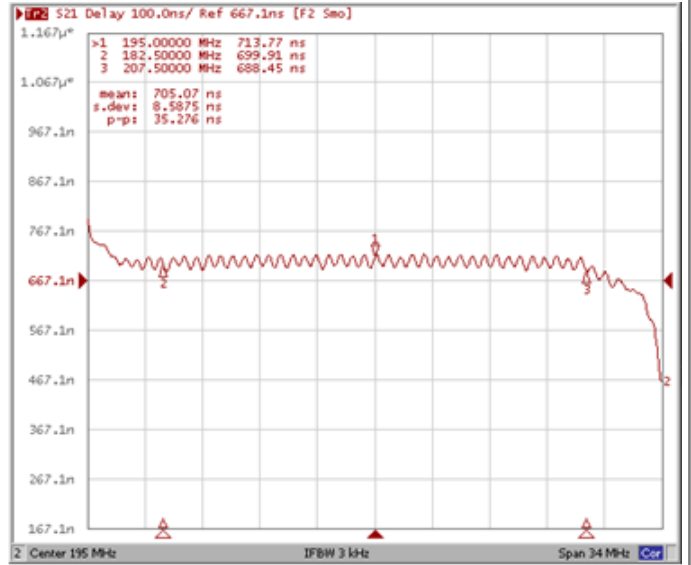


**Frequency Response**

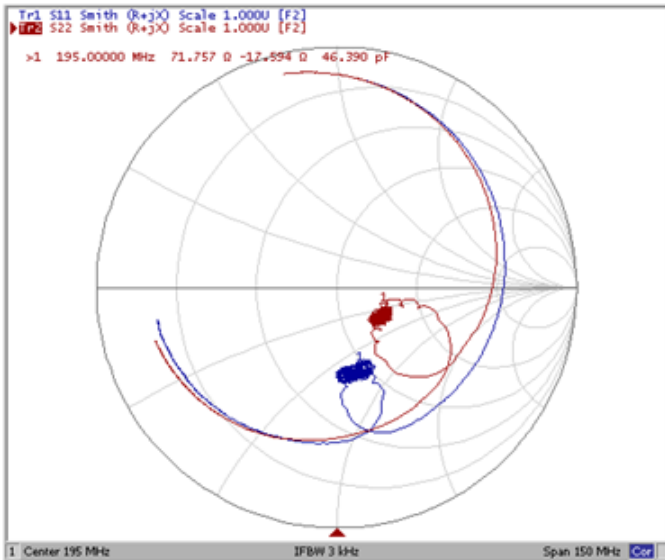
**Ripple Variation Fo±12.50MHz**



**Group Delay Variation Fo±12.50MHz**



**Smith Chart**



**VSWR**

