

- 198.50 MHz IF SAW Filter / 10.90 MHz Bandwidth
- Revision 0: 04 May 2011

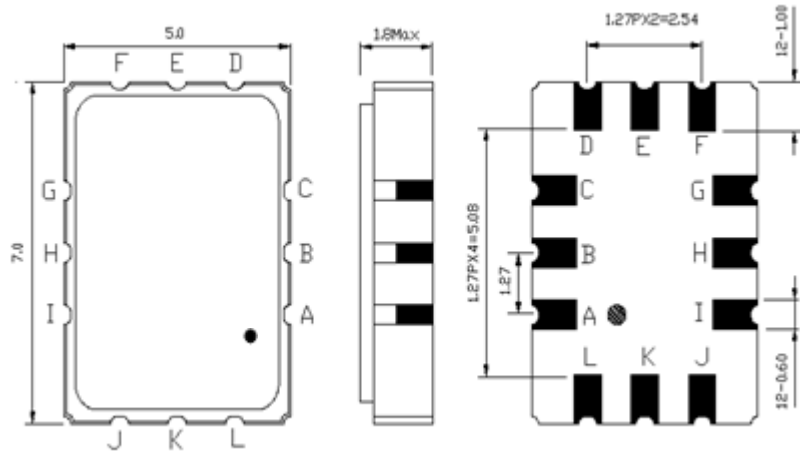
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation Temperature Range	°C	-40	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (Balanced) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (Balanced) <sup>(1)</sup>	Ω	-	50	-
Package type & size	S1			
Length x Width	mm <sup>2</sup>	-	7.0 x 5.0	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	198.50	-
Insertion Loss at Fo	dB	-	12.00	15.00
Amplitude Ripple at Fo ± 4.50MHz	dB <sub>p-p</sub>	-	0.35	1.0
Group Delay Variation at Fo ± 4.50MHz	ns	-	25	60
Absolute Delay at Fo	μs	-	0.64	-
Temperature Coefficient	ppm/°C	-	-20	-
Bandwidth at -1.0 dB	MHz	10.70	10.90	-
Bandwidth at -3.0 dB	MHz	-	12.25	-
Bandwidth at -40.0 dB	MHz	-	16.85	17.10
Ultimate Rejection	dB	-	45	-

**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.

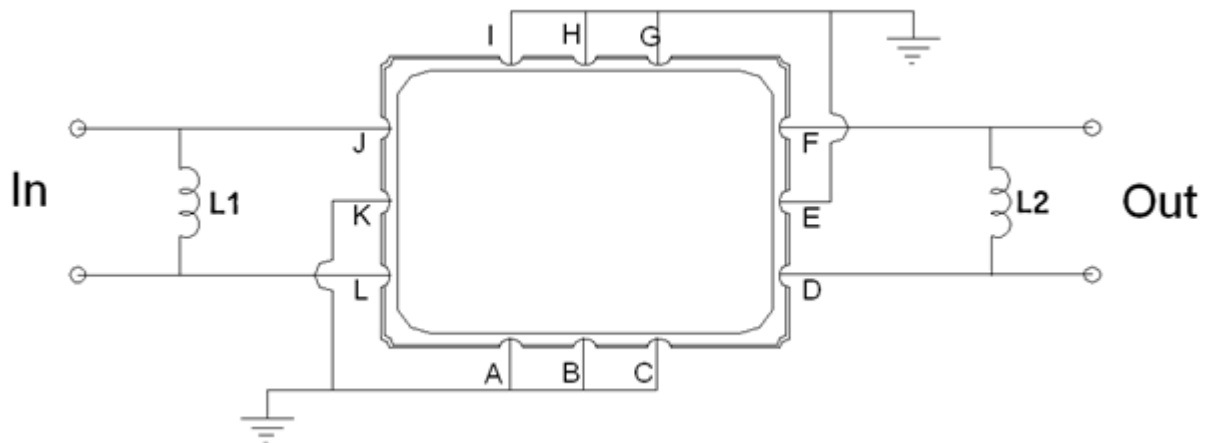
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL19811A:** Model Name
- ③ **X :** Date Code (Year)
- ④ **Y :** Date Code (Month)
- ⑤ **Z:** Date Code (Date)
- : Index Dot

Pin Description	
A, B, C, E, F, G, H, I, K, L	Ground
J	Input +
L	Input -
D	Output +
F	Output -

## Testing Environment

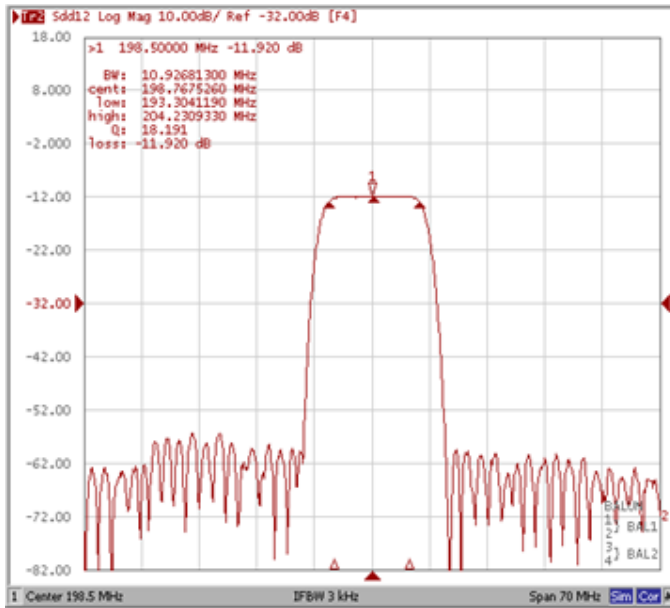


Test Fixture & Values	
Input	L1=22 nH
Output	L2=33 nH
Source/Load Impedance	50 Ω

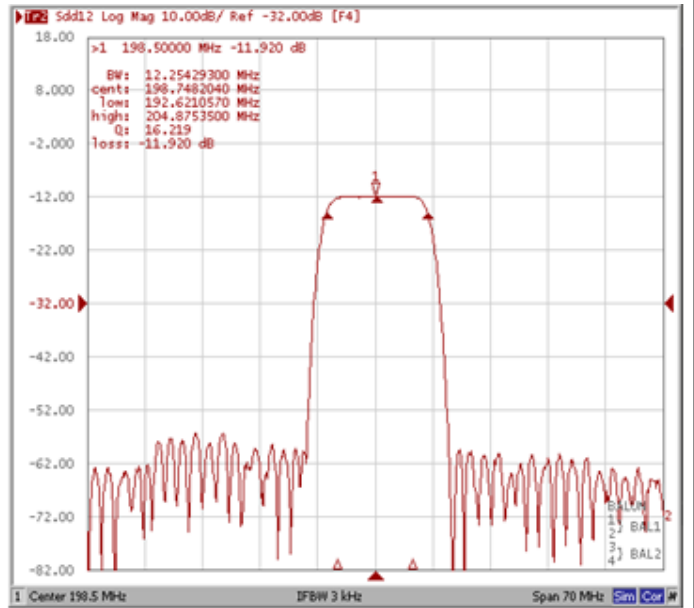
## Frequency Characteristics

### Frequency Response

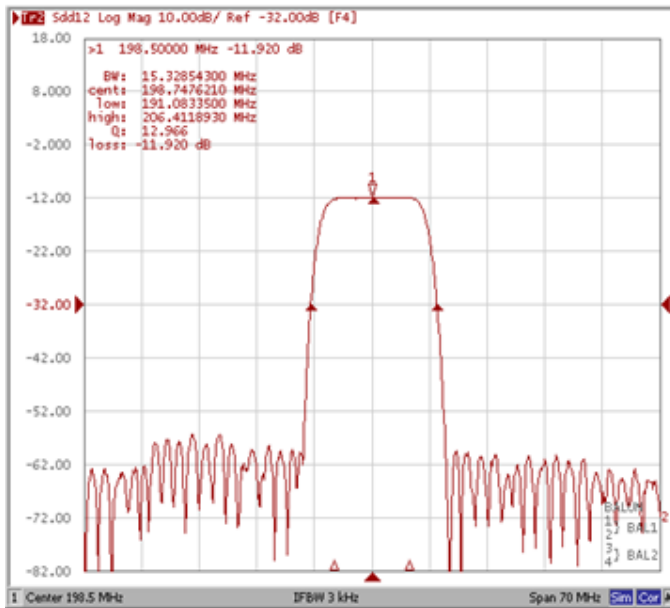
**Bandwidth at -1.0 dB**



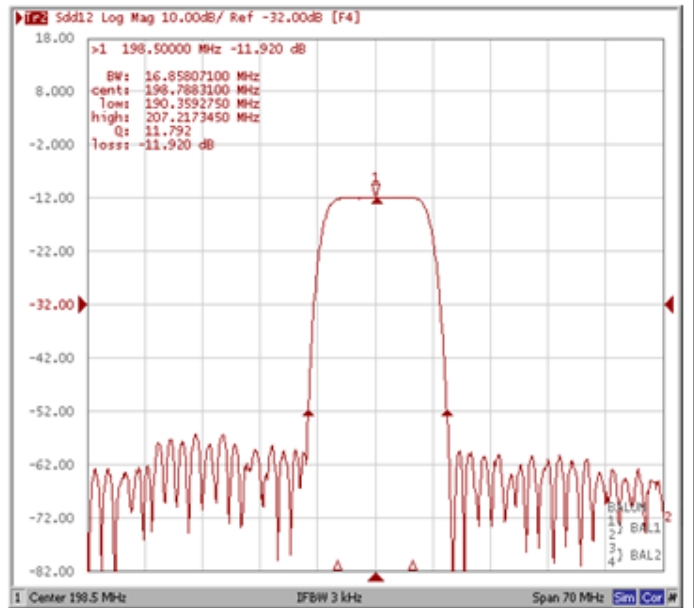
**Bandwidth at -3.0 dB**



**Bandwidth at -20.0 dB**



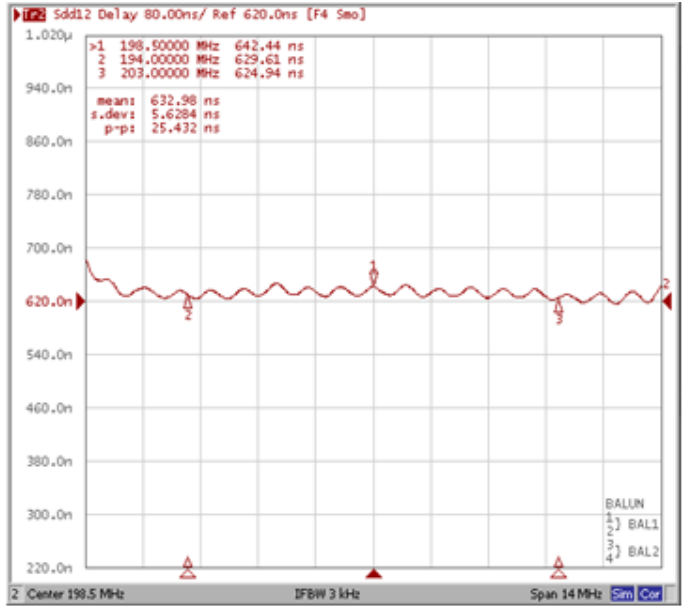
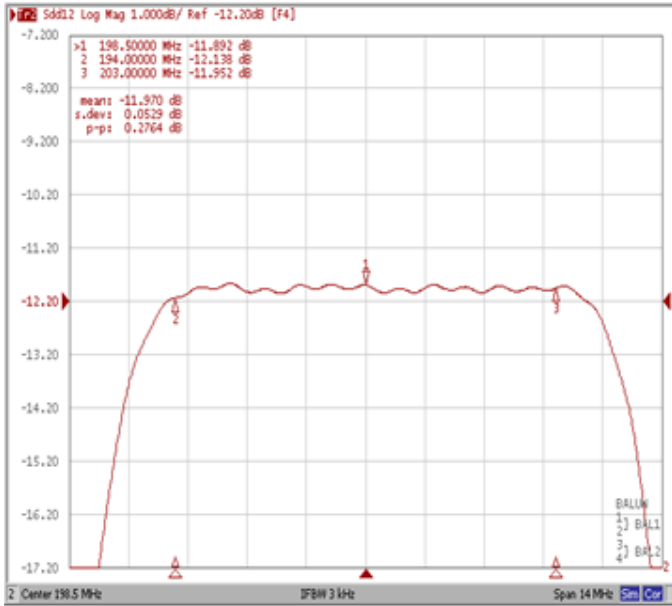
**Bandwidth at -40.0 dB**



**Frequency Response**

**Ripple Variation at Fo ±4.50MHz**

**Group Delay Variation at Fo ±4.50MHz**



**Smith Chart**

**VSWR**

