

- 156.0 MHz IF SAW Filter / 45.43 MHz Bandwidth
- Revision 0: 19 Feb. 2009

## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-40	-	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	-	156.00	-
Insertion Loss at Fo	dB	-	17.00	18.50
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within fo ±20.0 MHz	dB <sub>p-p</sub>	-	0.35	0.80
Group Delay Variation within fo ±20.0 MHz	nsec	-	15	35
Absolute Delay at Fo	µsec	-	0.65	-
Bandwidth at -1.0 dB	MHz	44.00	45.43	-
Bandwidth at -40.0 dB	MHz	-	53.70	55.00
Relative Attenuation:				
10MHz~114MHz	dB	40	55	-
199MHz~239MHz	dB	40	52	-
239MHz~410MHz	dB	40	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.

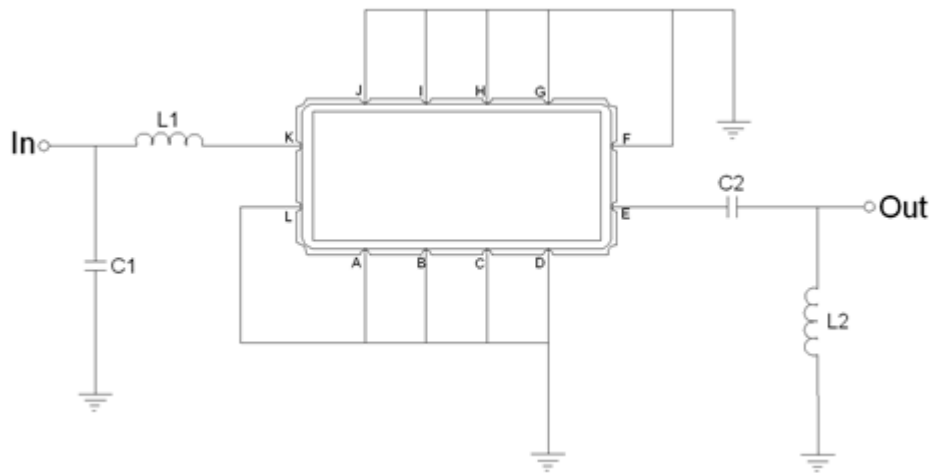
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL15640A:** 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

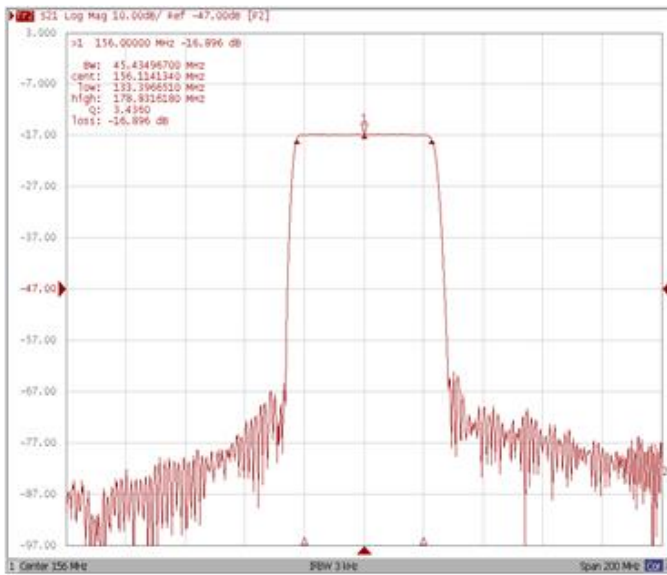


Test Fixture & Values	
<b>Input</b>	L1=27nH, C1=30pF
<b>Output</b>	L2=33nH, C2=100pF
<b>Source/Load Impedance</b>	50 Ω

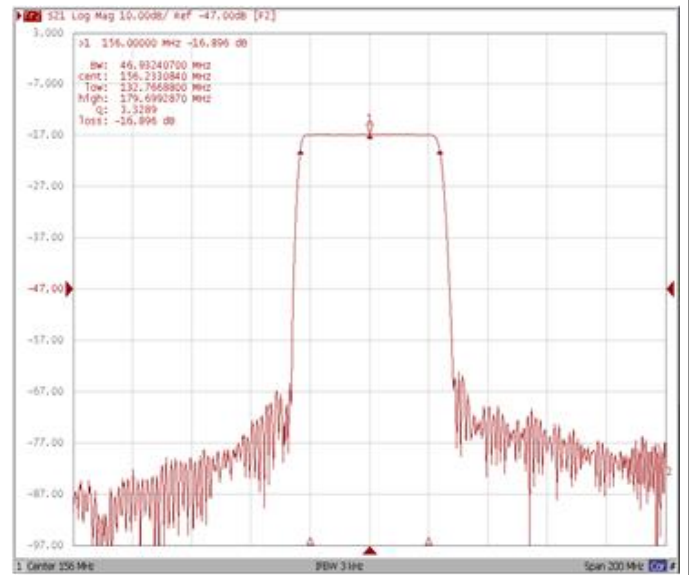
## Frequency Characteristics

### Frequency Response

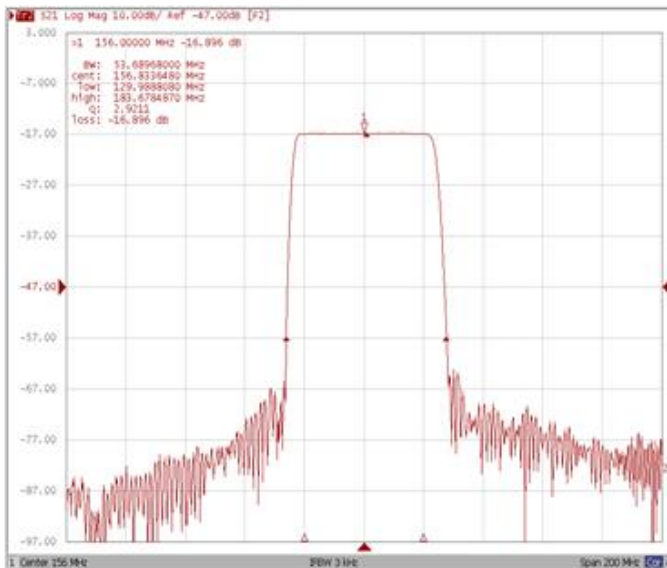
**Bandwidth at -1.0 dB**



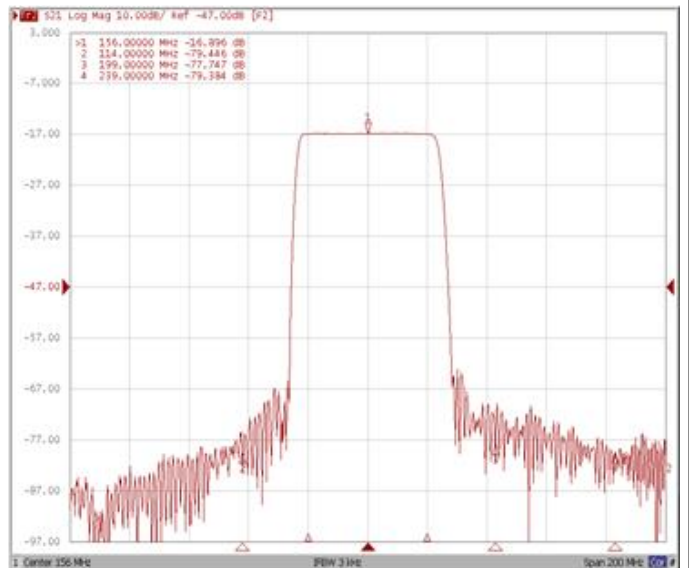
**Bandwidth at -3.0 dB**



**Bandwidth at -40.0 dB**

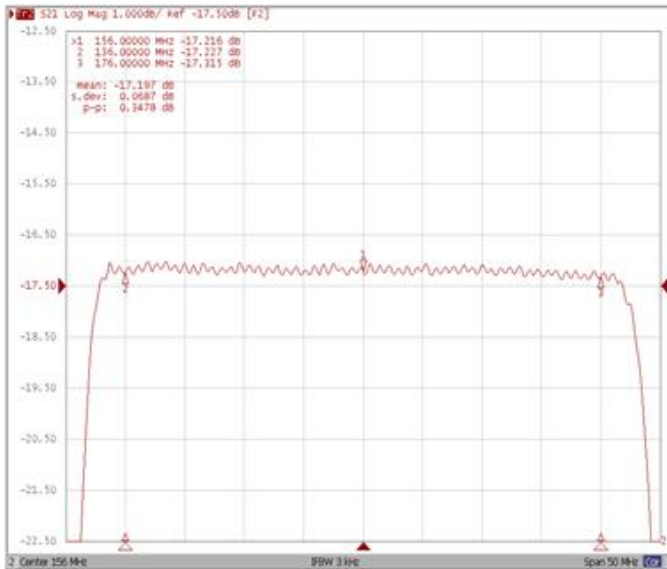


**Relative Attenuation**

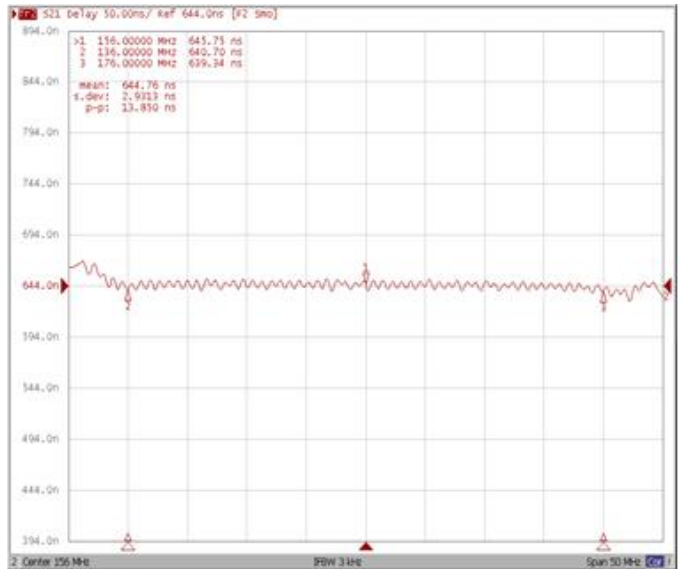


**Frequency Response**

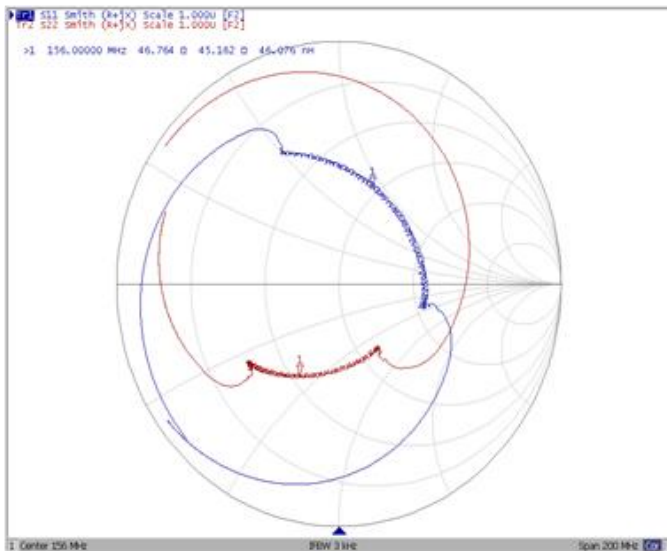
**Ripple Variation Fo±20.0MHz**



**Group Delay Variation Fo±20.0MHz**



**Smith Chart**



**SWR**

