



Total Solution Provider in Saw Device

SL17408AS1

174.0 MHz IF SAW Filter
8.15 MHz Bandwidth
Revision 0: 27 February 2008



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- Electrical Characteristics
 - Package Dimensions
 - Testing Environment
 - Frequency Characteristics
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□ Electrical Characteristics

Maximum Ratings

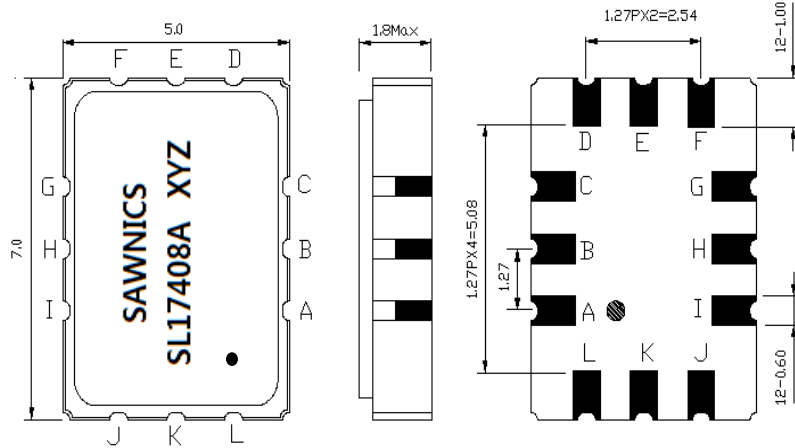
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	S1			
Length x Width	mm ²	-	7.0 x 5.0	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	173.80	174.00	174.20
Insertion Loss at Fo	dB	-	12.70	15.0
Amplitude Ripple Variation at Fo ± 3.0 MHz	dB _{p-p}	-	0.3	0.8
Group Delay Variation at Fo ± 3.0 MHz	nsec	-	30	80
Absolute Delay at Fo	µsec	-	0.70	-
Temperature Coefficient	ppm/°C	-	-18	-
Bandwidth at -1.0 dB	MHz	8.00	8.15	-
Bandwidth at -3.0 dB	MHz	-	9.35	-
Bandwidth at -40.0 dB	MHz	-	13.30	14.00
Relative Attenuation				
Lower Sidelobe	dB	40	45	-
Upper Sidelobe	dB	40	50	-

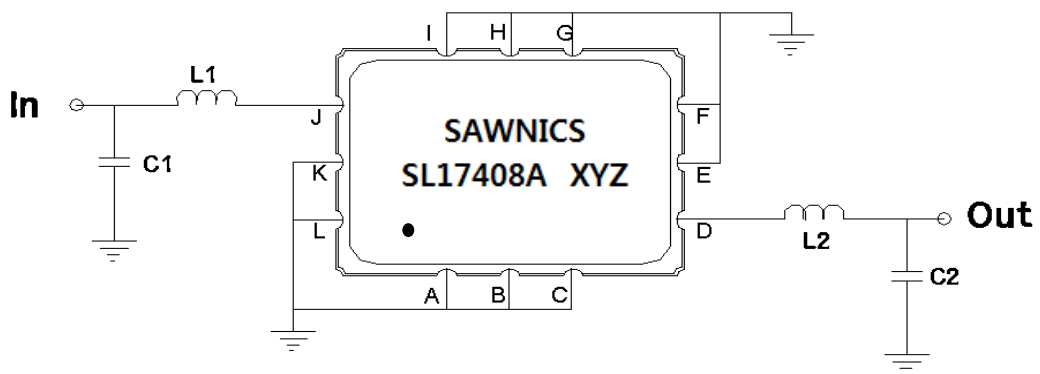
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



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

Testing Environment

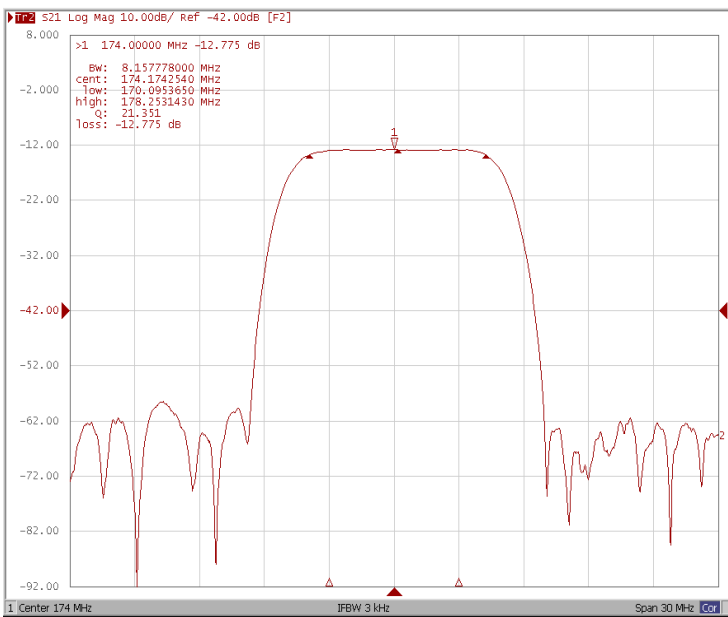


Test Fixture & Values	
Input	L1=47 nH , C1=27 pF
Output	L1=47 nH , C2=33 pF
Source/Load Impedance	50 Ω

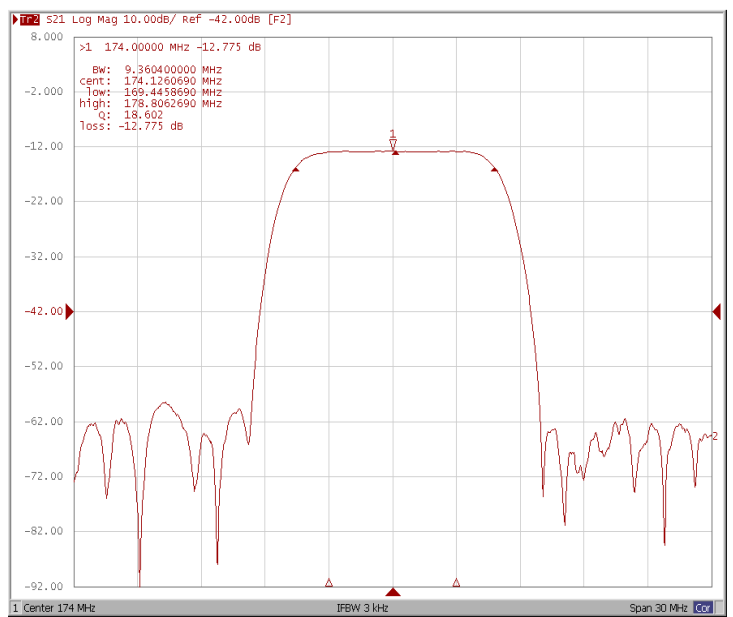
□ Frequency Characteristics

Frequency Response

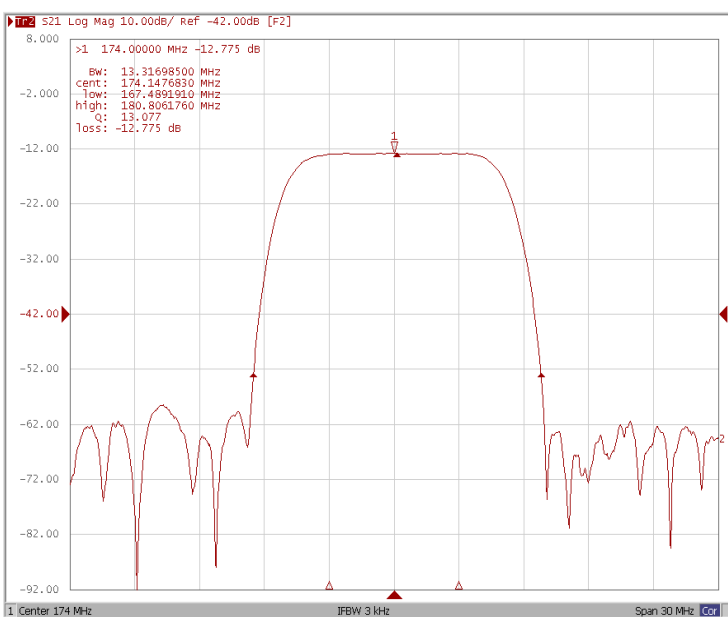
Bandwidth at -1.0 dB



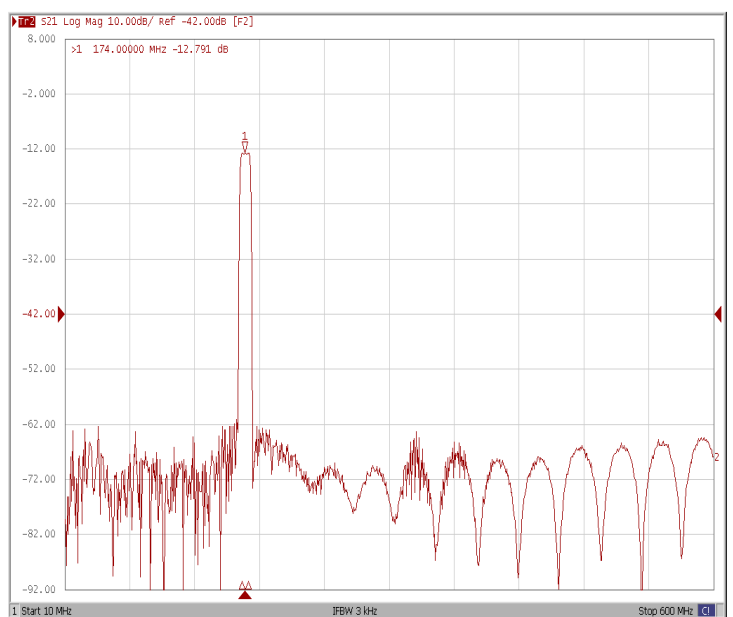
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



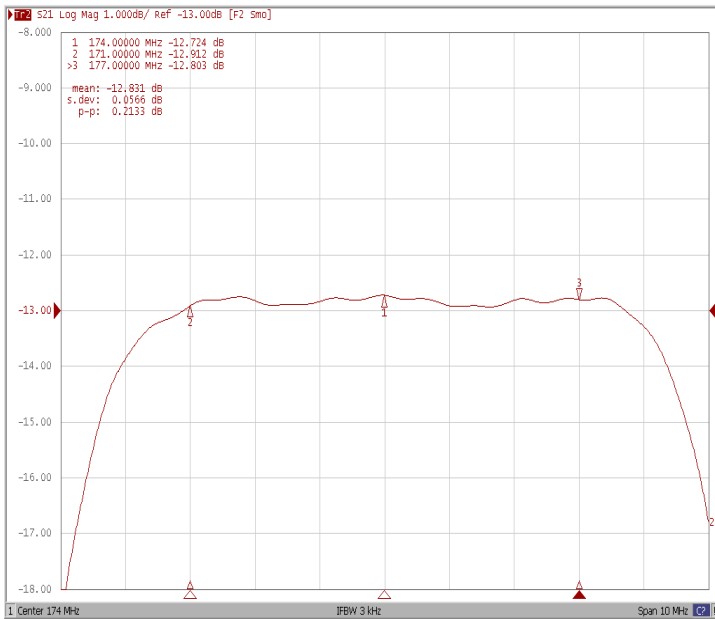
Wide-Band



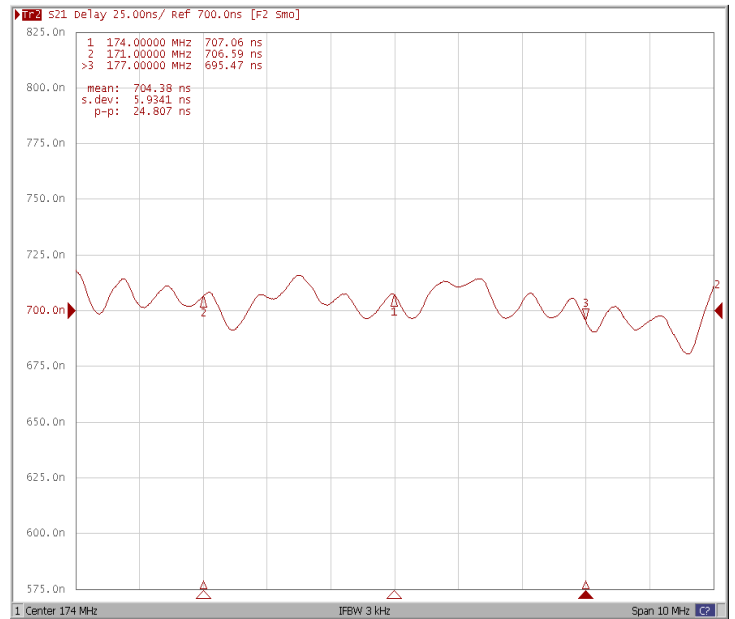
Frequency Characteristics

Frequency Response

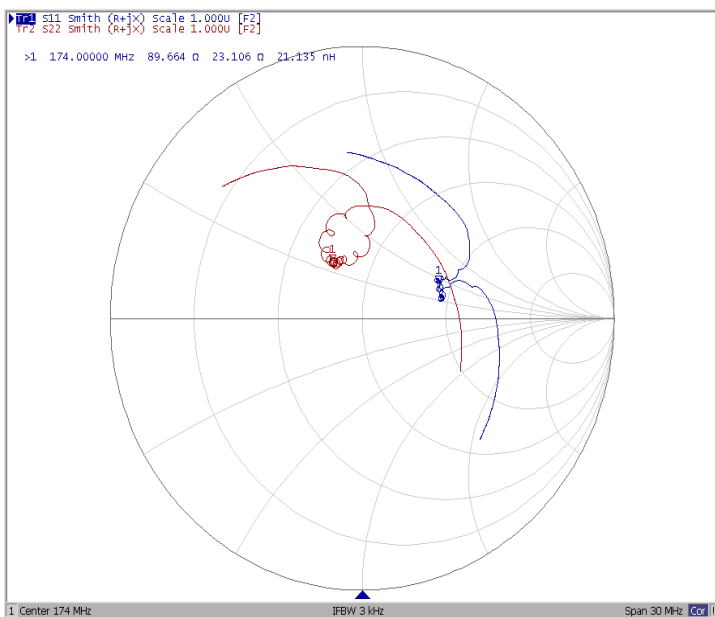
Ripple Variation Fo±3.0MHz



Group Delay Variation Fo±3.0MHz



Smith Chart



Attenuation

