



Total Solution Provider in Saw Device

SL07515DT

75.0 MHz IF SAW Filter
14.8 MHz Bandwidth
Revision 0: 1. Oct. 2008



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

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□ Electrical Characteristics

Maximum Ratings

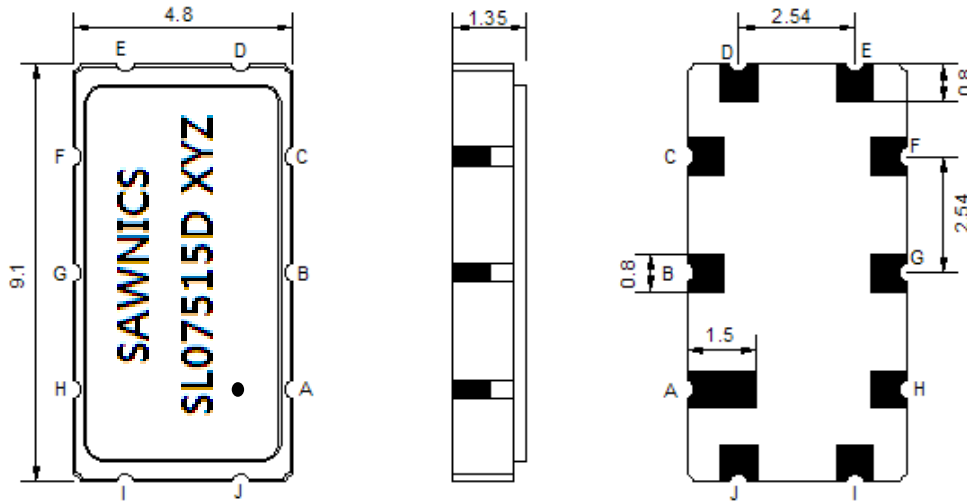
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	T			
Length x Width	mm ²	-	9.1 x 4.8	-
Height	mm	-	-	1.5

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	13.5	15.0
Group Delay Variation at Fo±6.875MHz	nsec	-	30	60
Absolute Delay Time at Fo	usec	-	0.96	-
Passband Ripple at Fo±6.875MHz	dB	-	0.46	0.8
Bandwidth at -1dB	MHz	-	14.8	-
Bandwidth at -3dB	MHz	-	15.67	-
Bandwidth at -40dB	MHz	-	19.85	20.5
Ultimate Rejection	dB	40	47	-
Temperature Coefficient	ppm/°C	-	-86	-
VSWR	-	-	3	

Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below)3.
Those impedances could be modified with different impedance values and/or structures, if necessary.

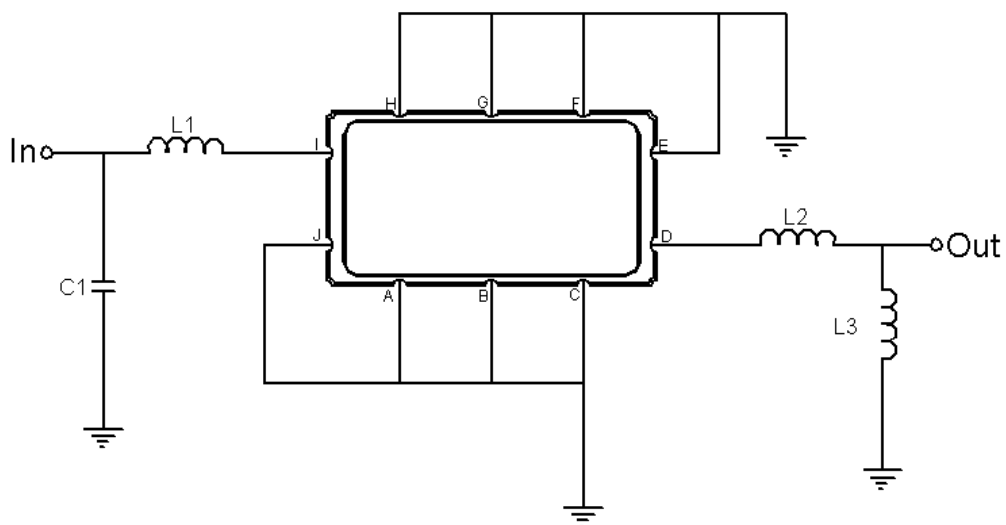
Package Dimensions



- ① SAWNICS: Brand
- ② SL07515D: 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, J	Ground
I	Input
D	Output

Testing Environment



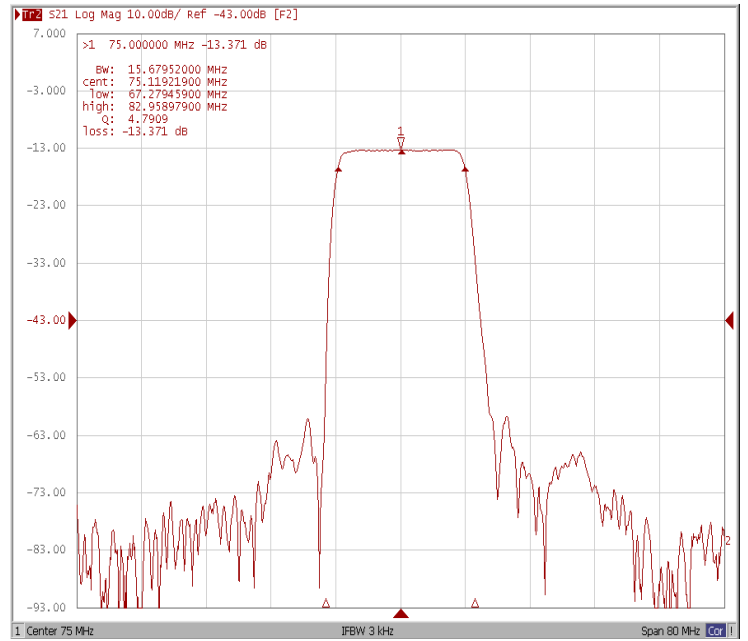
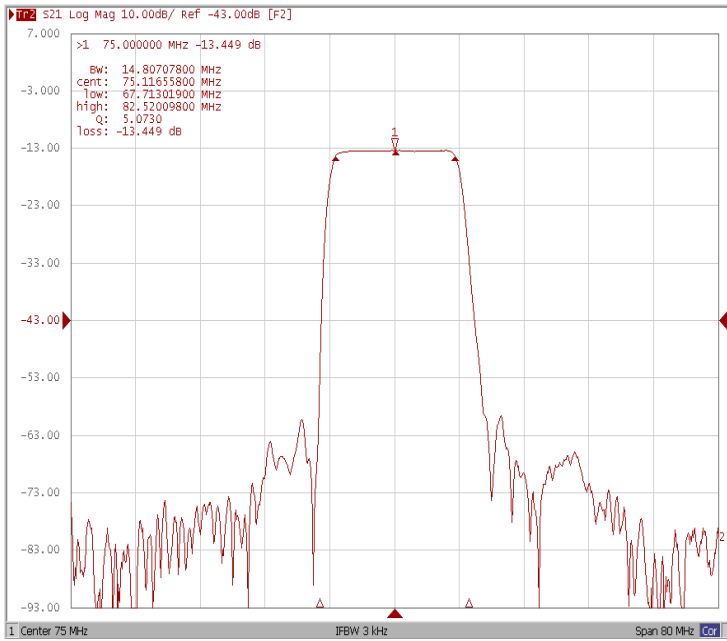
Test Fixture & Values	
Input	L1 = 120 nH , C1 = 20 pF
Output	L2 = 18 nH, L3 = 100 nH
Source/Load Impedance	50 Ω

Frequency Characteristics

Frequency Response

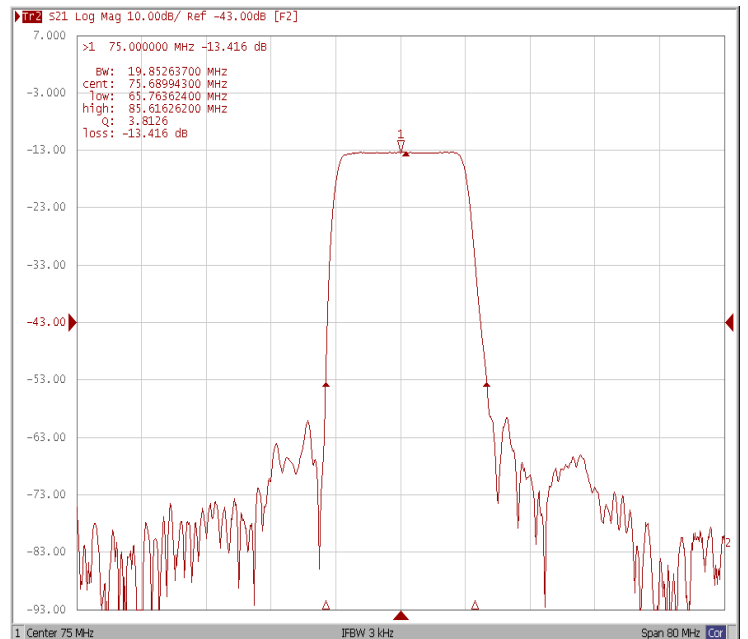
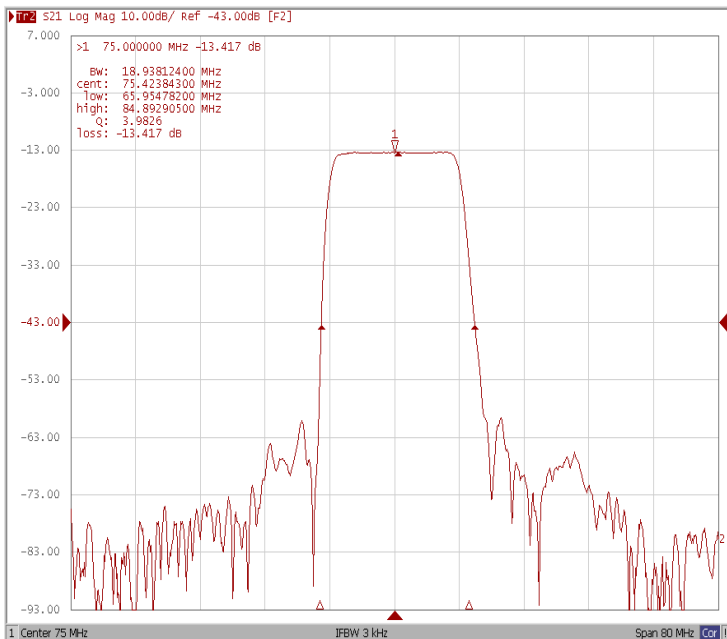
Bandwidth at -1.0 dB

Bandwidth at -3.0 dB



Bandwidth at -30.0 dB

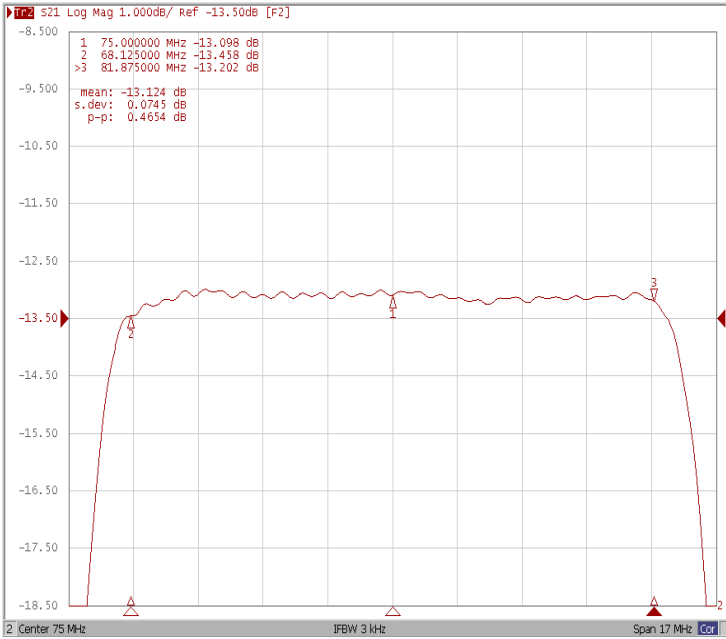
Bandwidth at -40.0 dB



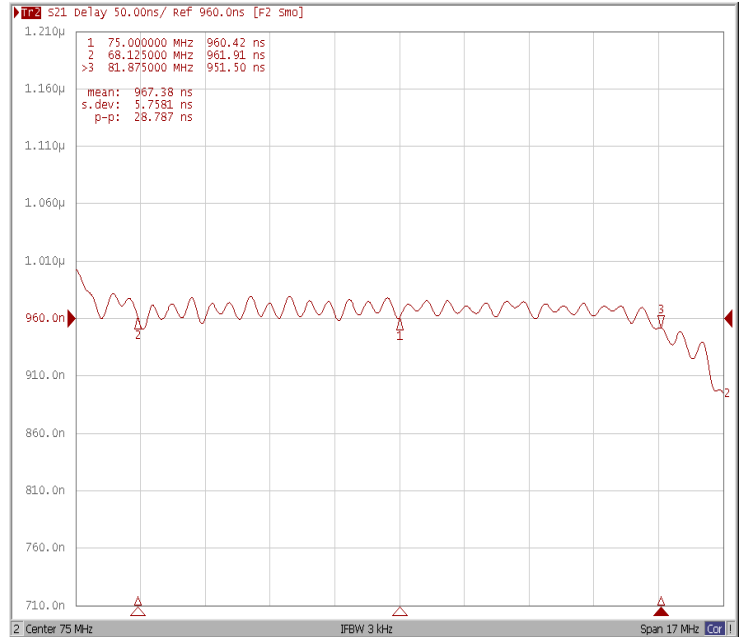


Frequency Response

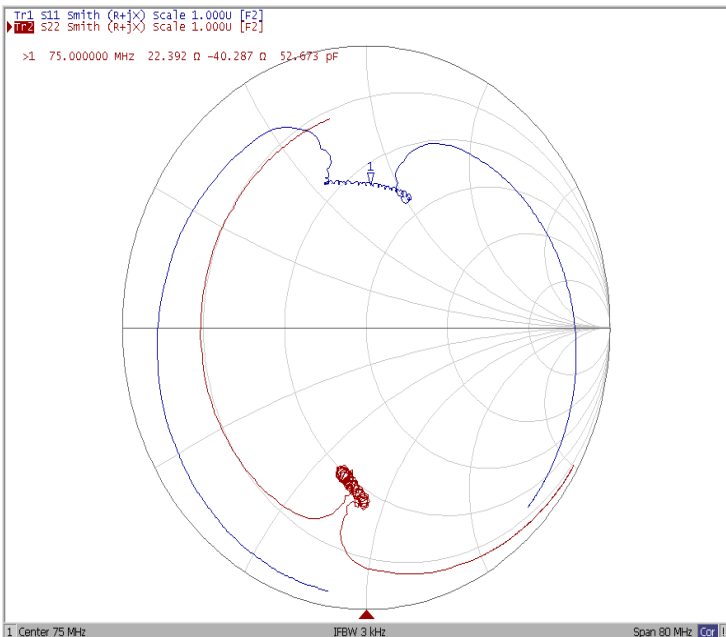
Ripple Variation Fo±6.875MHz



Group Delay Variation Fo±6.875MHz



Smith Chart



VSWR

