

# **SAW Measurement Report**

**SF0609 (609.0MHz**

**2.50MHz BW)**

Diplex Inc.  
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<http://diplex.info/line-card/sawtron/catv-saw-filters/>



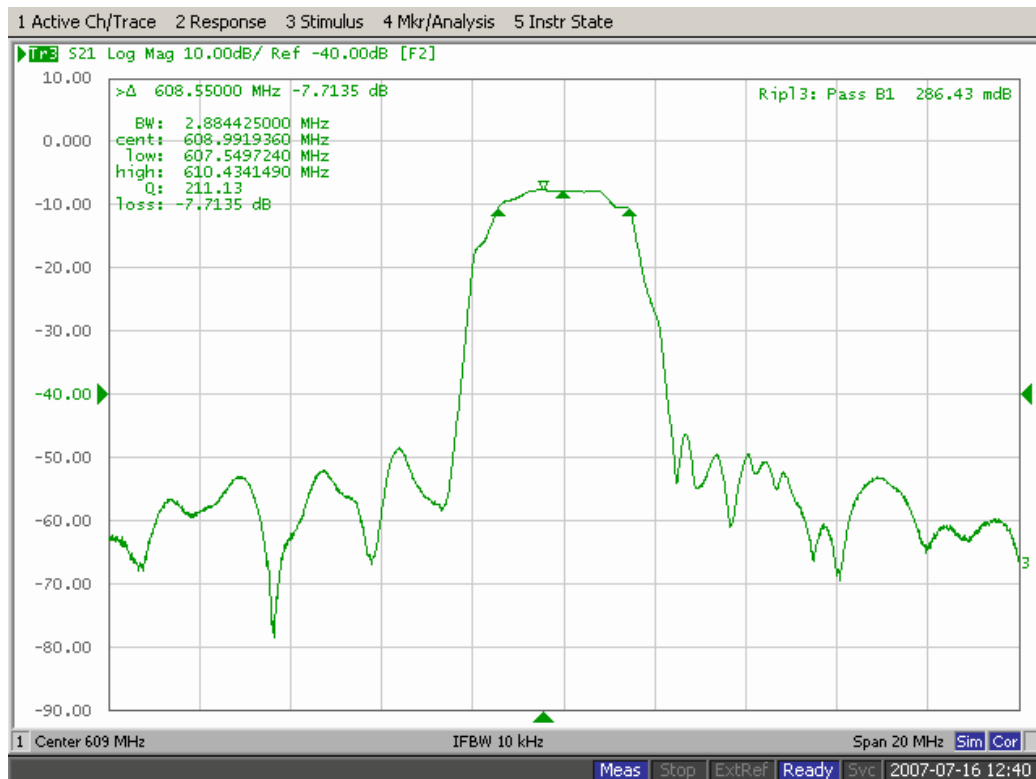
## ♣ Specification

SF0609

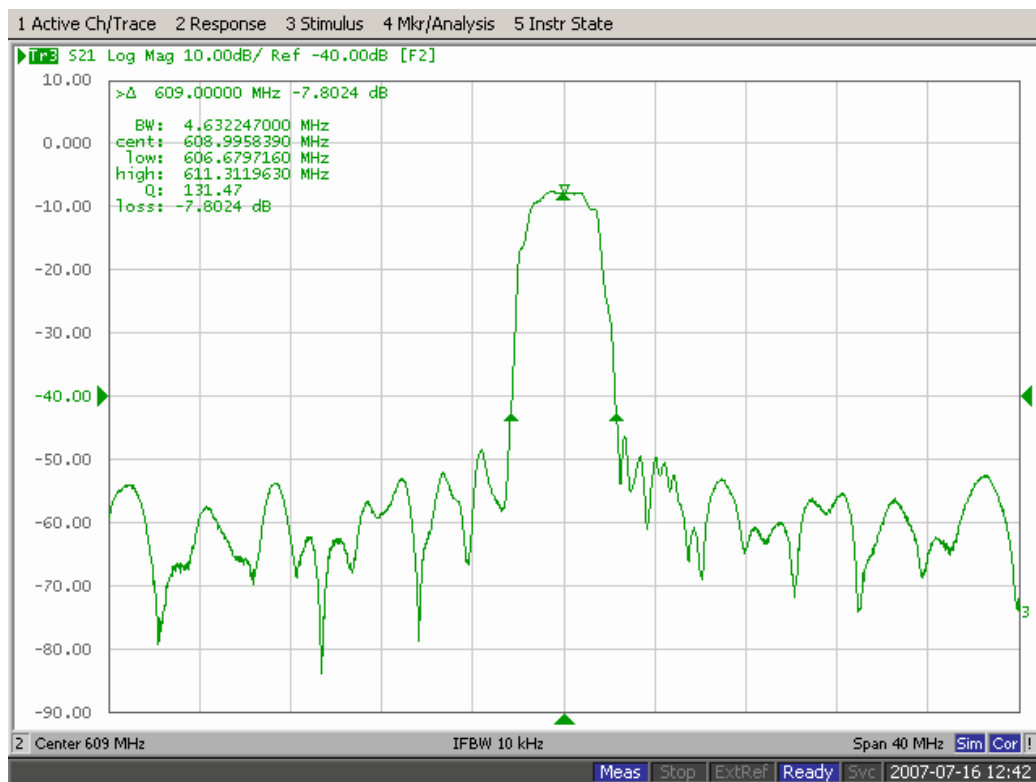
	Unit	Min	Typical	Max	Comments
Operation Temp	°C	-40	25	+85	
Center Frequency, Fc	MHz	608.5	<b>609.0</b>	609.5	3dB Fo ref to Max IL
Insertion Loss at Fc	dB		<b>7.8</b>	10.0	T = 25deg C
1dB Bandwidth	MHz	1.5	<b>1.88</b>		Ref to Max IL
3dB Bandwidth	MHz	2.6	<b>2.88</b>		Ref to Max IL
35dB Bandwidth	MHz		<b>4.63</b>	6.0	Ref to Max IL
Amplitude Ripple	P-P dB		<b>0.3</b>	1.2	Fc ± 750 KHz
Stop Band Rejection 5MHz ~ 570MHz	dBc	45	<b>60</b>		Ref to -10dB
570MHz ~ 605MHz	dBc	35	<b>46</b>		
613MHz ~ 650MHz	dBc	35	<b>43</b>		
650MHz ~ 862MHz	dBc	45	<b>55</b>		
Source/Load Impedance	Ω		<b>75</b>		
Temperature Coefficient	Ppm/K	-0.036			
Matching Components		External Fixed Value			
Package	mm <sup>3</sup>	7.0x5.0x1.65			
Notes	1. The typical value is measured by the demo board. 2. For 75ohm application.				

# ♣ Performance: SF0609\_75ohm app

## Near Band

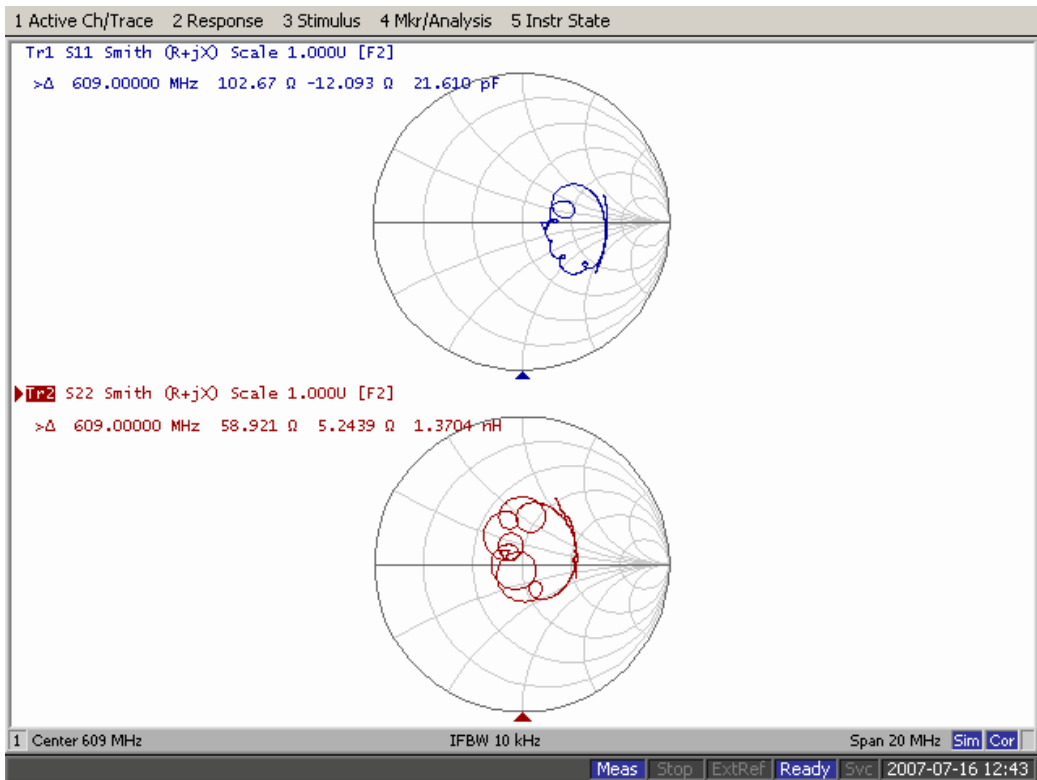


## Wide Band



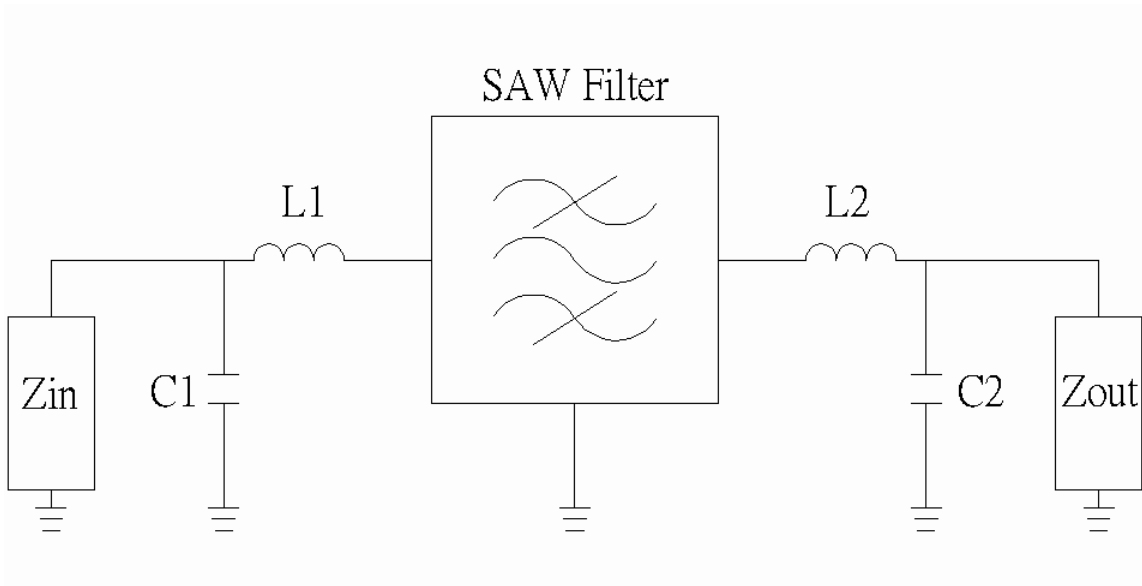
♣ Performance: SF0609\_75ohm app

# Impedance





## Matching Circuit

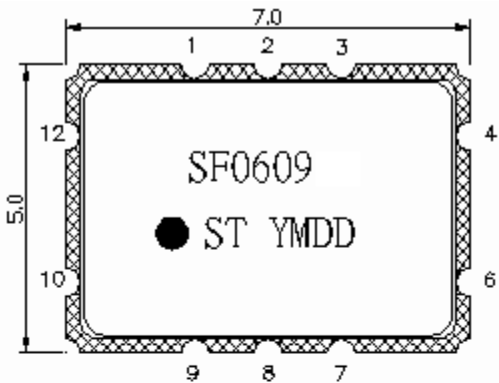


Both  $Z_{in}$  and  $Z_{out}$  are  $75\Omega$ .

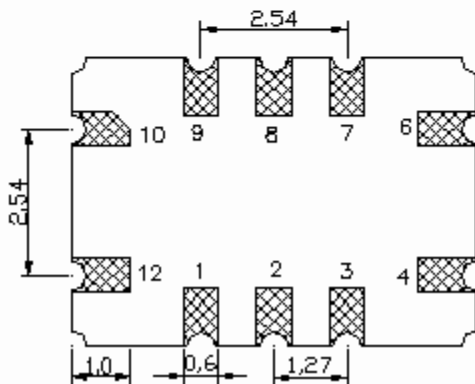
$C1 = 8.0\text{pF}$  ;  $L1 = 15.0\text{nH}$

$C2 = 10.0\text{pF}$ ;  $L2 = 15.0\text{nH}$

# ♣ Package In/Out Pin and Laser Marking Assignment



Input+: 12  
 Inout-: 10  
 Output+: 6  
 Output-: 4  
 Ground: Others



Y: Year Code (2007 = 7)  
 M: Month Code (Jan=1, Oct=A)  
 DD: Date Code (01~31)



# Package In/Out Pin and Laser Marking Assignment