



Total Solution Provider in Saw Device

SA13602AV

136.25MHz IF SAW Filter
2.05MHz Bandwidth
Revision 0 : 26. February. 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	0	-	70
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	V			
Length x Width	mm ²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

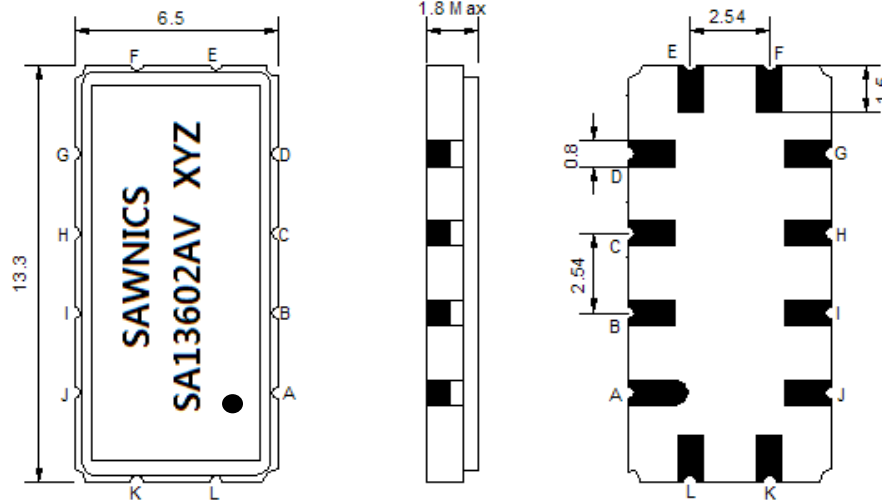
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	136.25	-
Insertion Loss at Fo	dB	-	18.5	21.0
Temperature Coefficient	ppm/°C	-	-0.03	-
Amplitude Ripple within fo ±0.75 MHz	dB _{p-p}	-	0.4	1.0
Group Delay Variation within fo ±0.75 MHz	nsec	-	90	150
Absolute Delay at Fo	µsec	-	1.70	-
Bandwidth at -1.0 dB	MHz	1.50	2.05	-
Bandwidth at -3.0 dB	MHz	-	2.35	-
Bandwidth at -40.0 dB	MHz	-	3.65	4.20
Relative Attenuation:				
Fo ±2.75 MHz	dB	55	60	
Lower Sidelobe	dB	50	55	-
Upper Sidelobe	dB	50	55	-

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.

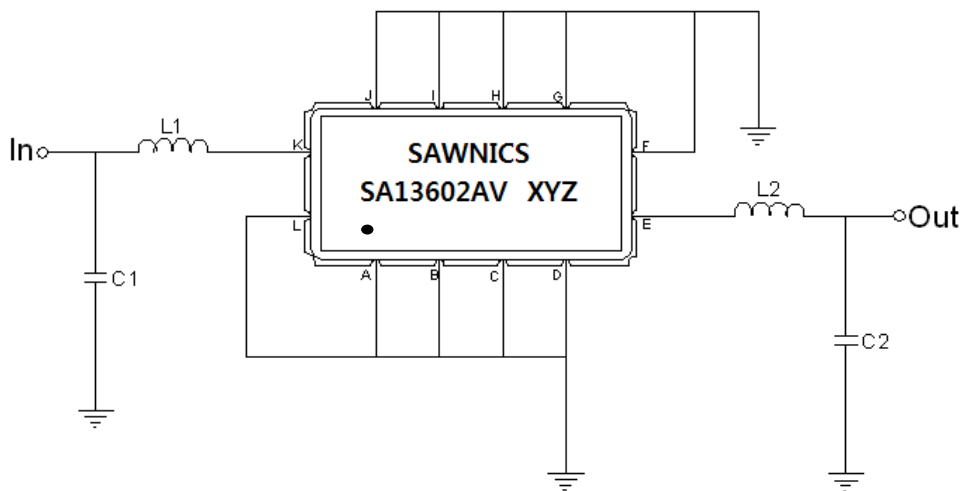
Package Dimensions



- ① SAWNICS: Brand
- ② SA13602A: 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



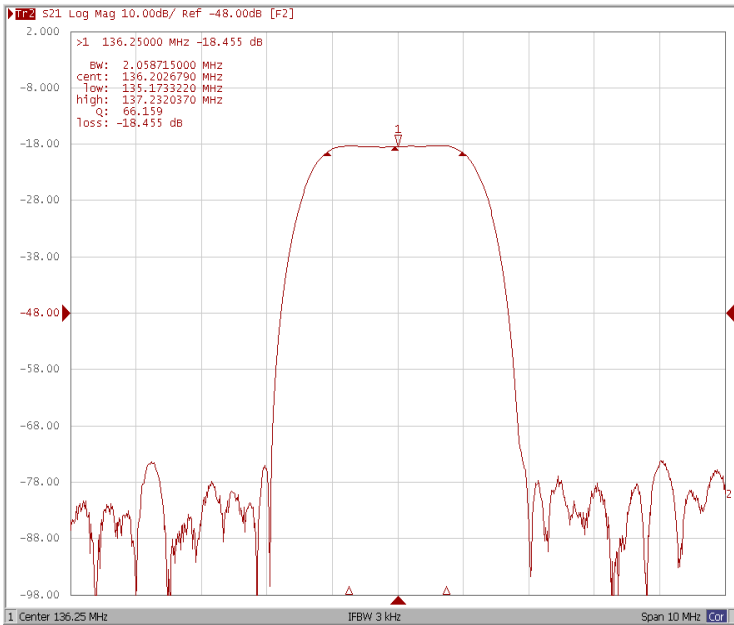
Test Fixture & Values	
Input	L1=82nH, C1=36pF
Output	L2=68nH, C1=47pF
Source/Load Impedance	50 Ω



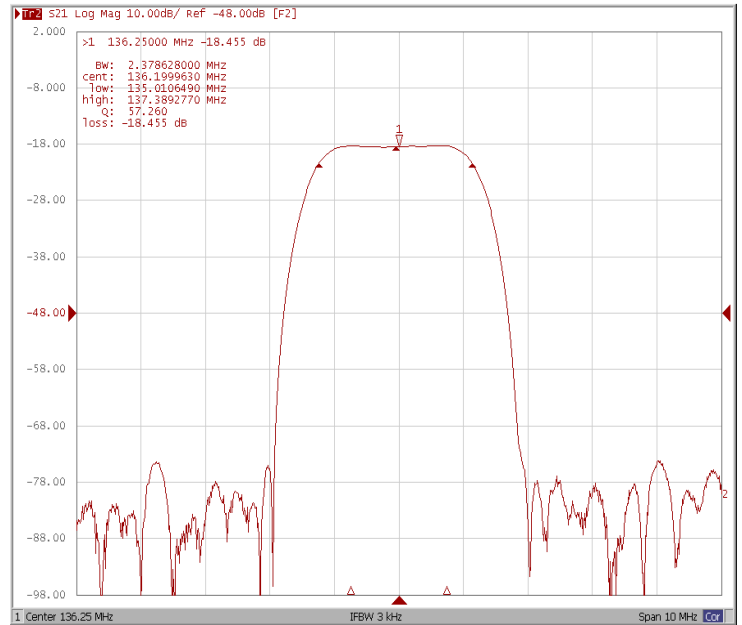
Frequency Characteristics

Frequency Response

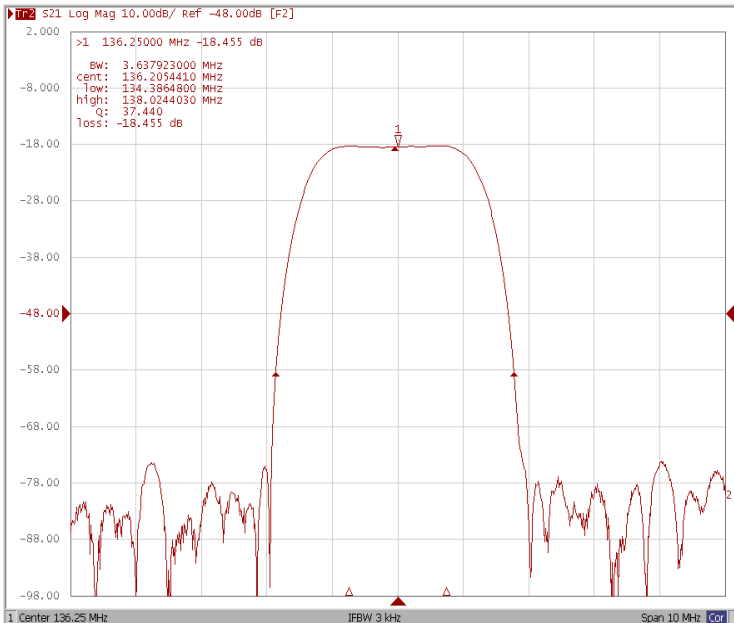
Bandwidth at -1.0 dB



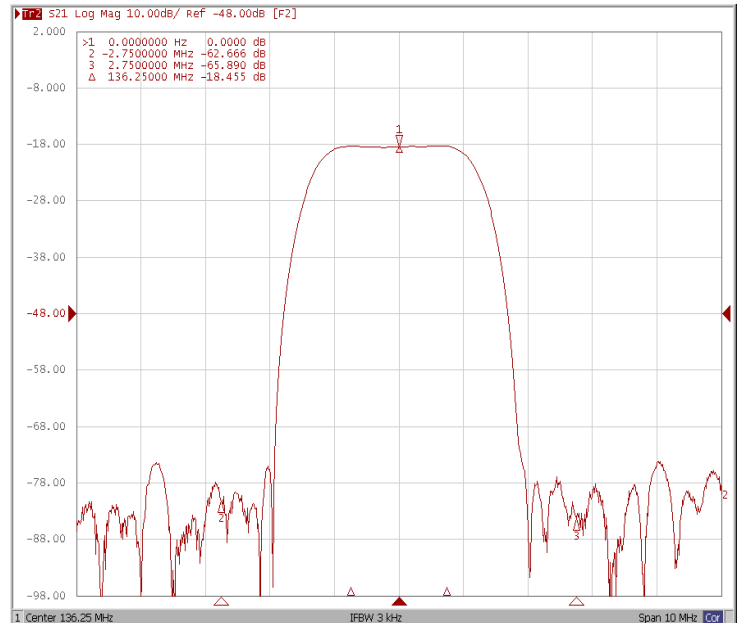
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Attenuation Fo±2.75MHz

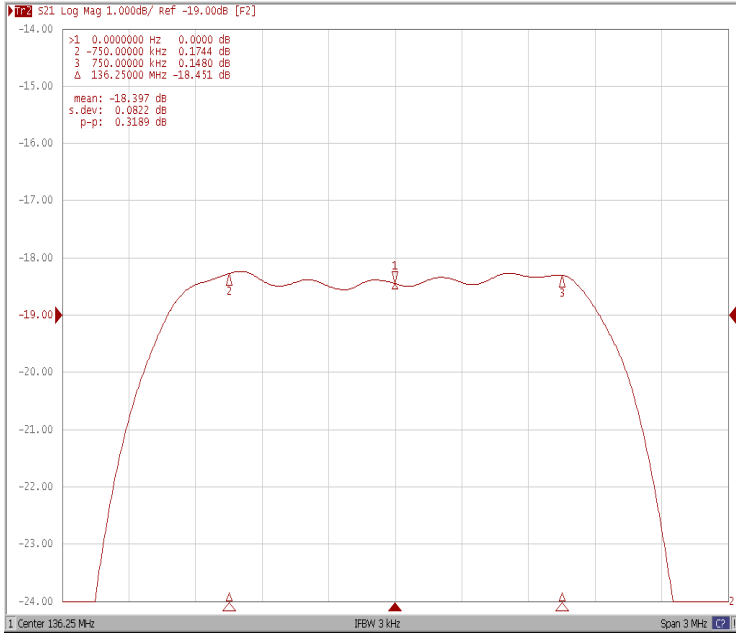




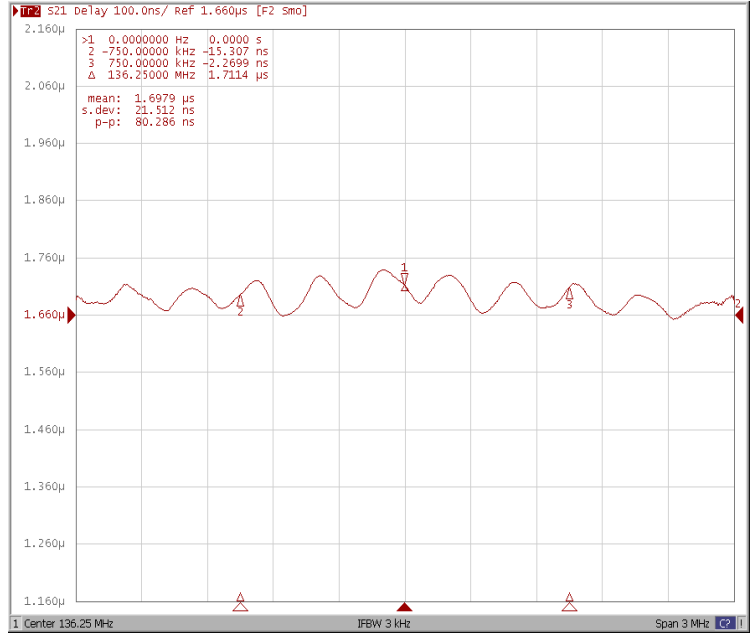
Frequency Characteristics

Frequency Response

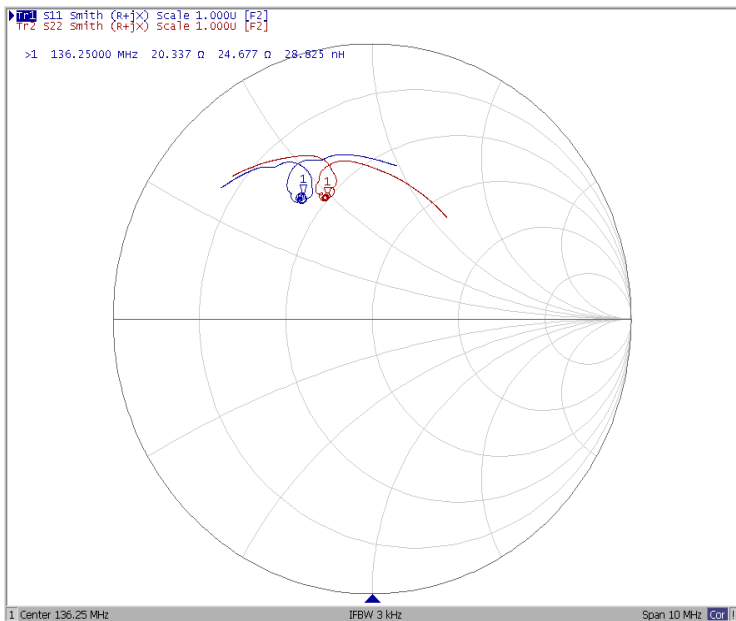
Ripple Variation Fo±0.75MHz



Group Delay Variation Fo±0.75MHz



Smith Chart



SWR

