



Total Solution Provider in Saw Device

SA16020AD1

160.0MHz IF SAW Filter

19.3 MHz Bandwidth

Revision 0: 23. Novemeber. 2007



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

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□ Electrical Characteristics

Maximum Ratings

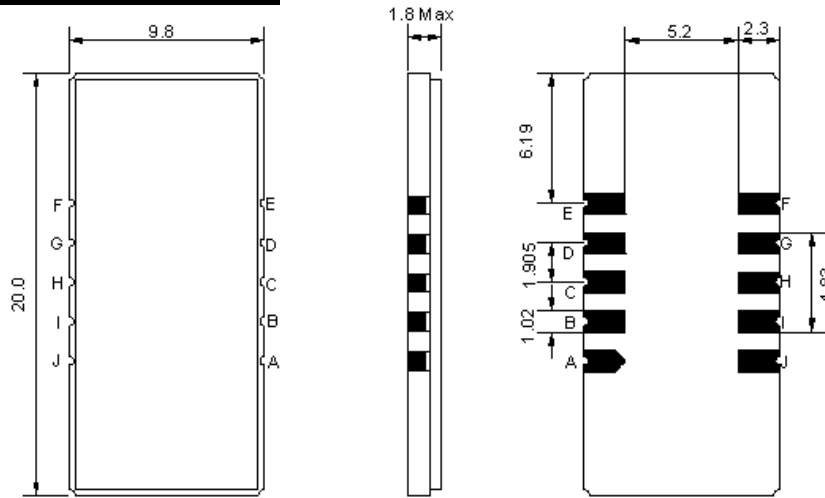
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-	25	-
Storage Temperature Range	°C	-	-	-
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ¹⁾	Ω	-	50	-
Package type & size	D1			
Length x Width	mm ²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	160.0	-
Insertion Loss at Fo	dB	-	27.7	29.5
Amplitude Ripple Variation at Fo ± 9.65 MHz	dB _{p-p}	-	0.75	-
Group Delay Variation at Fo ± 9.65 MHz	nsec	-	30	80
Absolute Delay at Fo	µsec	-	2.09	-
Temperature Coefficient	ppm/°C	-	-72	-
Bandwidth at -1.0 dB	MHz	-	20.03	-
Bandwidth at -3.0 dB	MHz	-	20.43	-
Bandwidth at -20.0 dB	MHz	-	21.42	-
Bandwidth at -40.0 dB	MHz	-	21.87	-
Relative Attenuation				
Lower Sidelobe	dB	-	50	-
Upper Sidelobe	dB	-	50	-

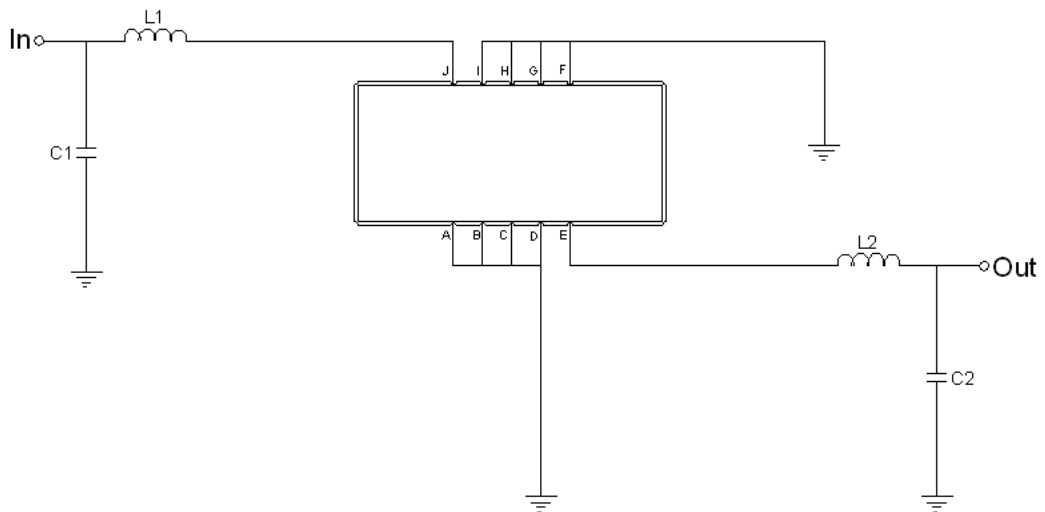
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

□ Package Dimensions



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

□ Testing Environment

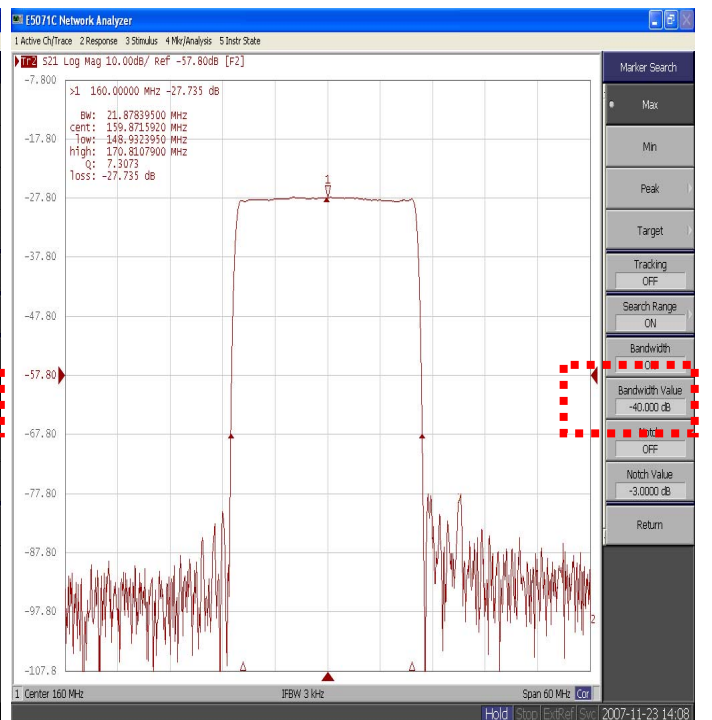
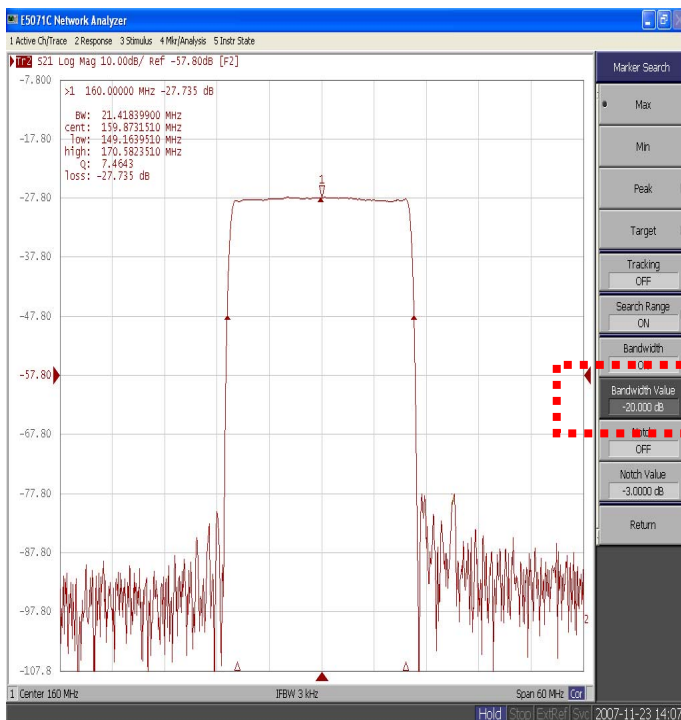
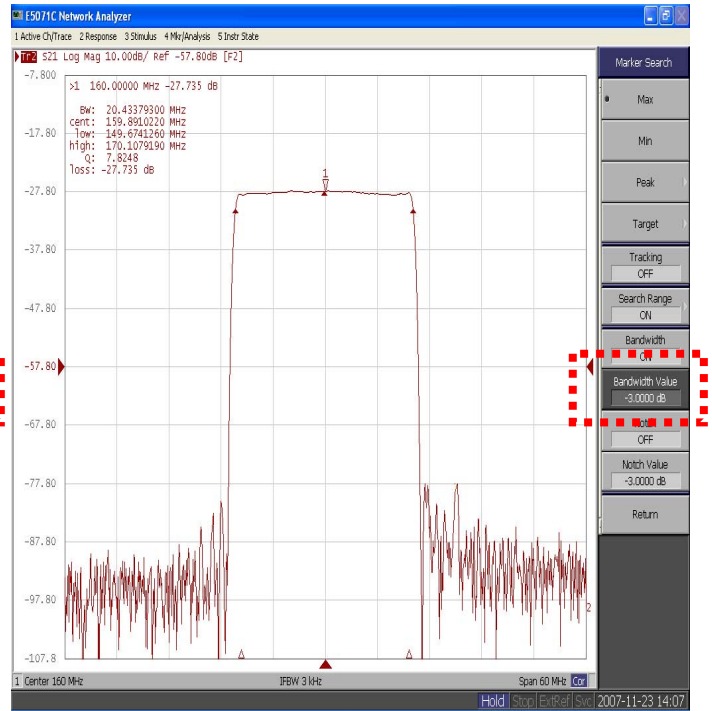
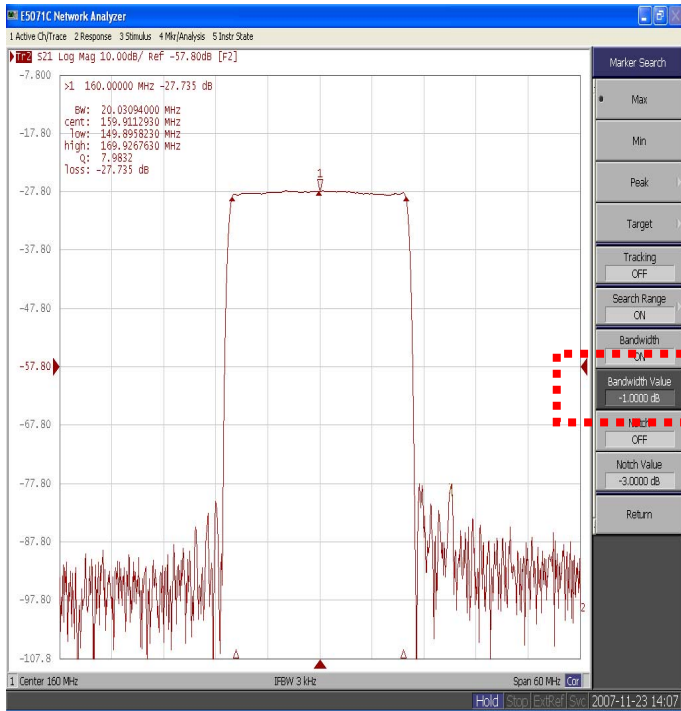


Test Fixture & Values	
Input	L1=10 nH , C1=13 pF
Output	L2=12 nH , C2=13 pF
Source/Load Impedance	50 Ω



Frequency Characteristics

Frequency Response





Frequency Response

