



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-IF162.3M-12A	162.3MHz IF SAW Filter 12.65MHz Bandwidth

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Response
- o Smith Chart
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Notes

- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



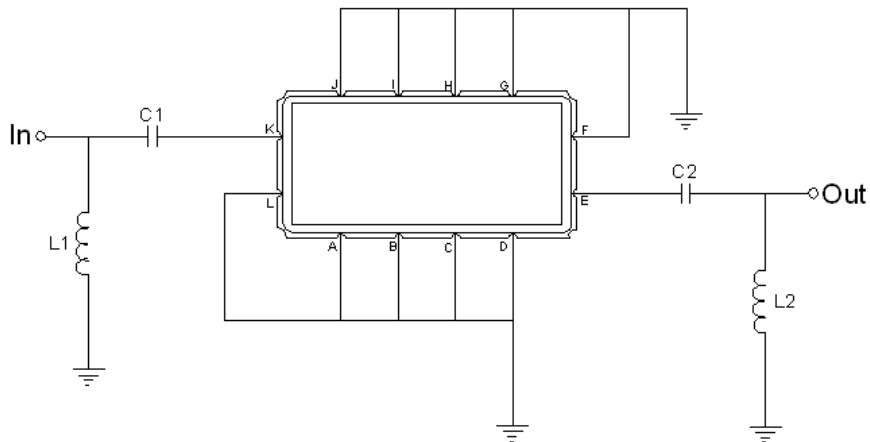


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 39 nH, C1 = 330 pF
Output	L2 = 39 nH, C2 = 330 pF
Source/Load Impedance	50 Ω

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-5	-	+65
Storage Temperature Range	°C	-30	-	+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	-

Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).

Those impedances could be modified with different impedance values and/or structures, if necessary.

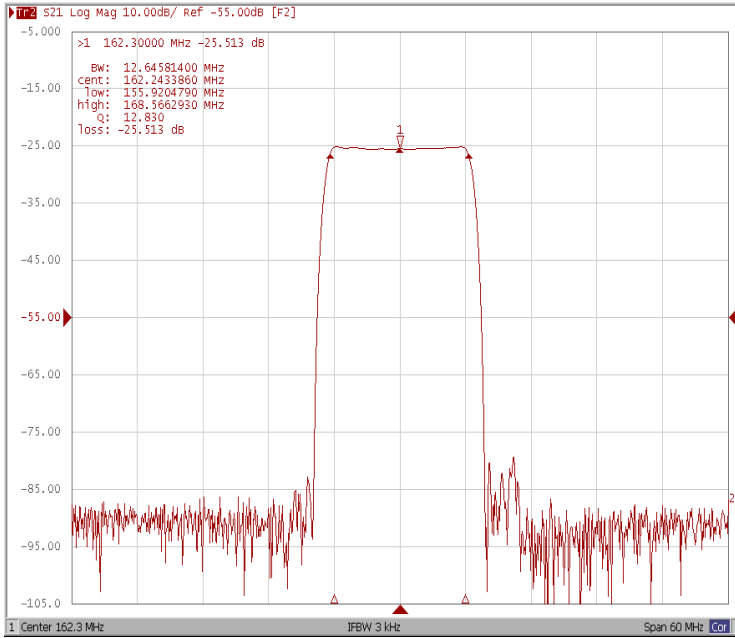
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	162.3	-
Insertion Loss at Fo	dB	-	25.5	27.0
Group Delay Variation at Fo ±6.00 MHz	ns	-	20	50
Absolute Delay at Fo	us	-	2.16	-
Amplitude Ripple at Fo ±6.00 MHz	dB	-	0.50	-
Bandwidth at -1dB	MHz	12.50	12.65	-
Bandwidth at -3dB	MHz	-	13.15	-
Bandwidth at -25dB	MHz	-	14.80	15.00
Bandwidth at -40dB	MHz	-	15.25	15.60
Relative Attenuation				
Lower Sidelobe	dB	50	55	-
Upper Sidelobe	dB	50	55	-
Temperature Coefficient	ppm/°C	-	-23	-

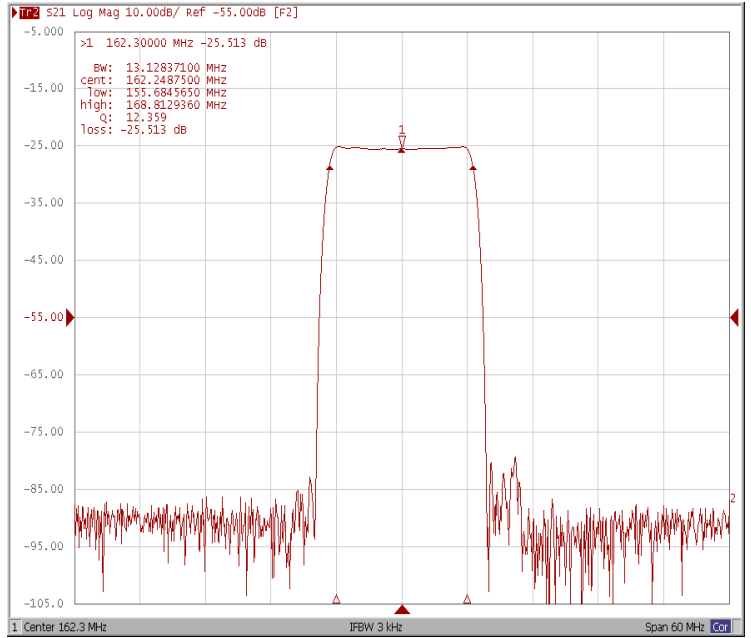


Frequency Response

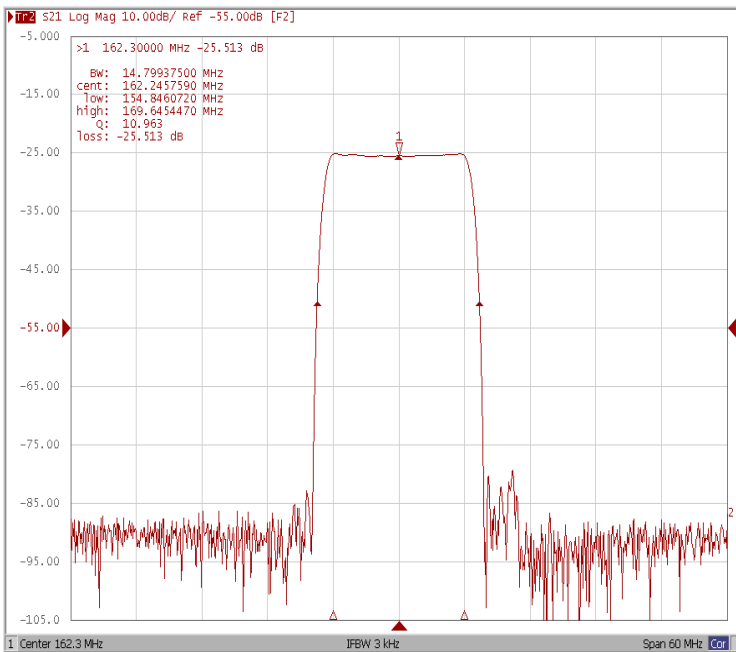
Bandwidth at -1.0 dB



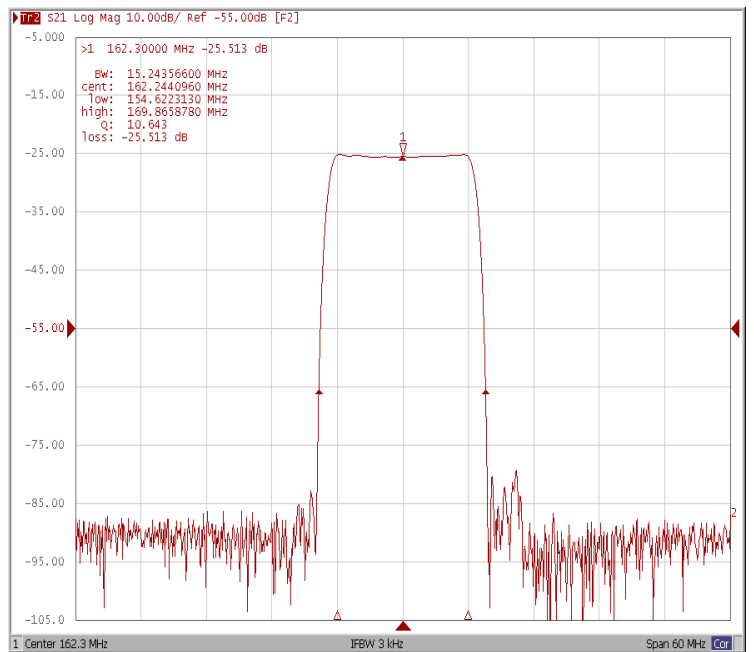
Bandwidth at -3.0 dB



Bandwidth at -25.0 dB

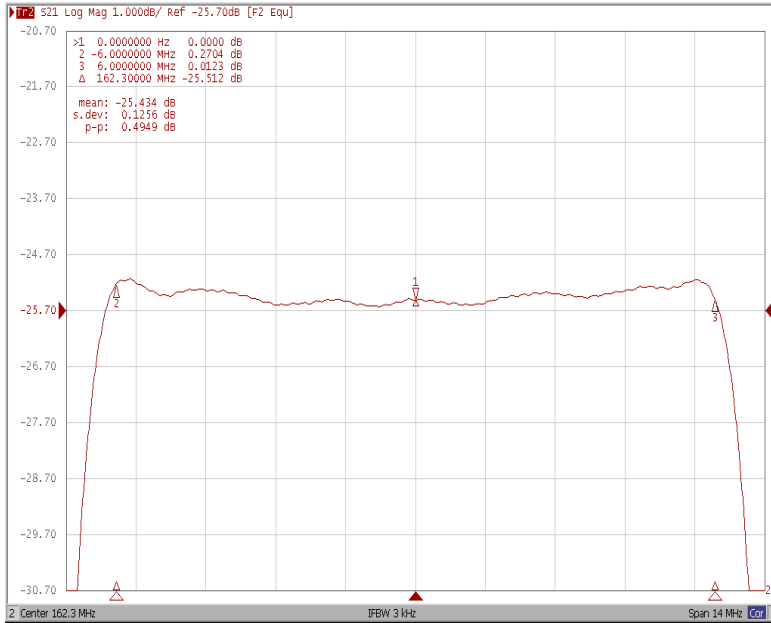


Bandwidth at -40.0 dB

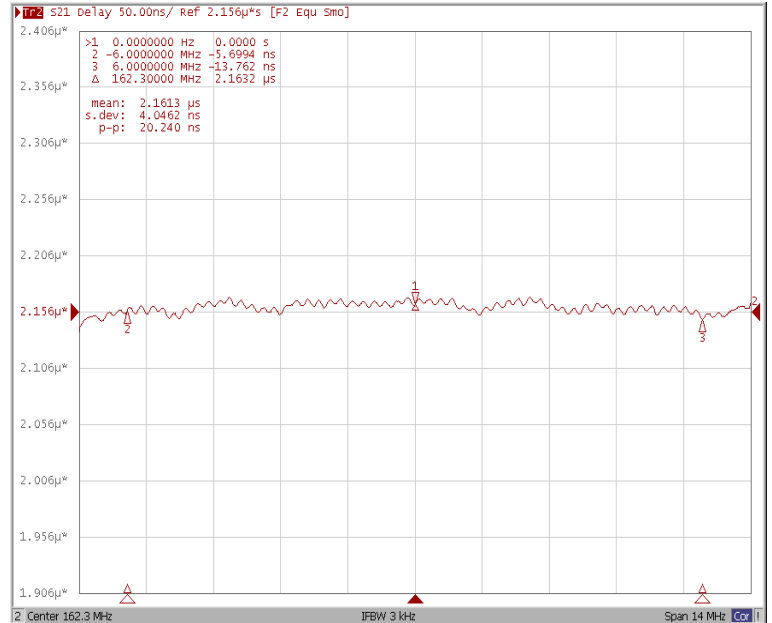




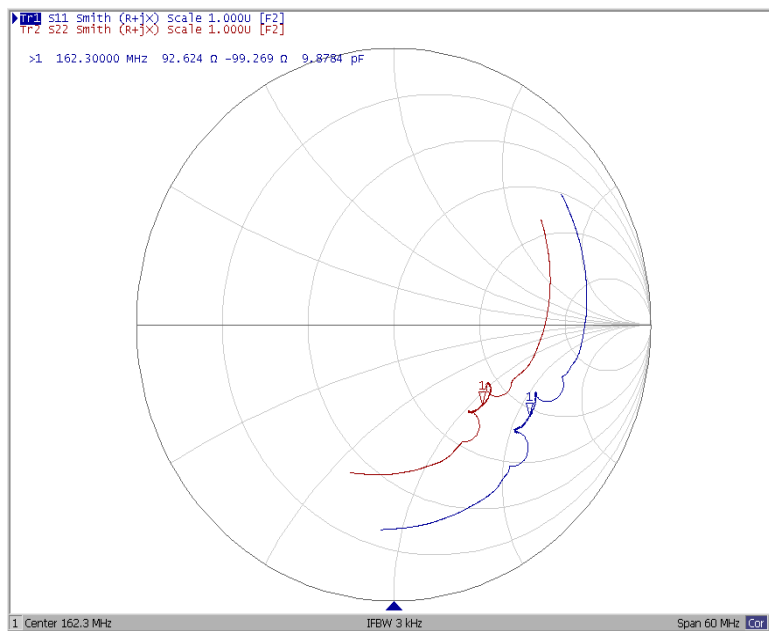
Ripple Variation at Fo ±6.00 MHz



Group Delay Variation at Fo ±6.00 MHz



Smith Chart





VSWR

