



REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF61.0M-10A	61.0MHz IF SAW Filter 10.0 MHz Bandwidth

Specification Contents

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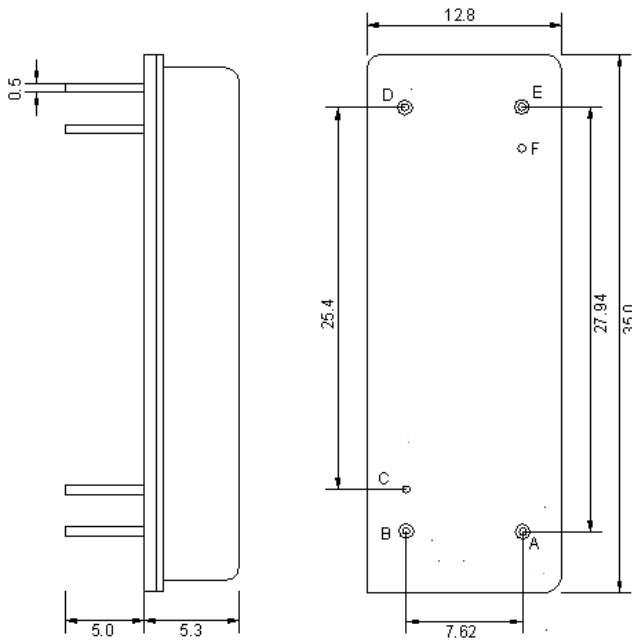
Notes

- 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)



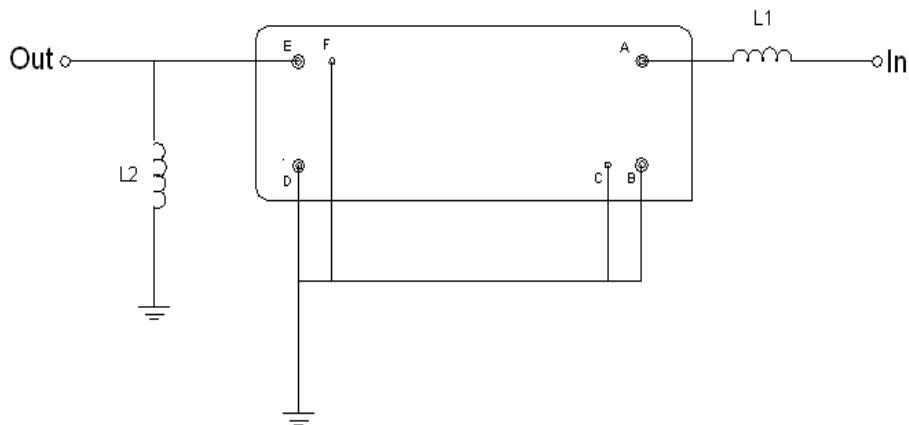


Mechanical Dimensions (mm)



Pin Description	
B, C, D, F	Ground
A	In
E	Out

Test Circuit



Test Fixture & Values	
Input	L1=82 nH Q >40
Output	L2=220 nH Q >40
Source/Load Impedance	50 Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-	45	-
Storage Temperature Range	°C	-20	-	70
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	28
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.

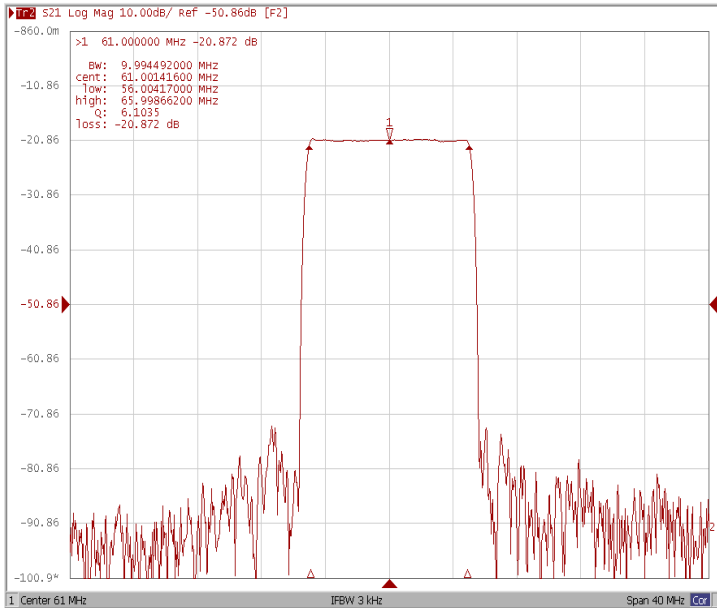
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	61.0	-
Insertion Loss at Fo	dB	-	20.90	23.00
Group Delay Variation (Fo±4.89MHz)	ns	-	47	90
Phase Linearity (Fo±4.89MHz)	deg	-	9	13
Absolute Delay Time at Fo	us	-	3.7	4.0
Temperature Coefficient	ppm/°C	-	-72	-
Amplitude Ripple (Fo±4.89MHz)	dB	-	0.6	1.0
Bandwidth at -1dB	MHz	9.78	9.99	-
Bandwidth at -45dB	MHz	-	11.10	11.25
Input &Out put Return Loss		-	2.3	-
Triple transit attenuation	dBc	35	-	-
Relative Attenuation				
10MHz~50MHz	dBc	40	60	-
@55.54 MHz	dBc	18	26	-
@55.64 MHz	dBc	10	16	-
@66.36MHz	dBc	10	16	-
@66.46 MHz	dBc	18	27	-
70.0MHz ~180MHz	dBc	40	55	-

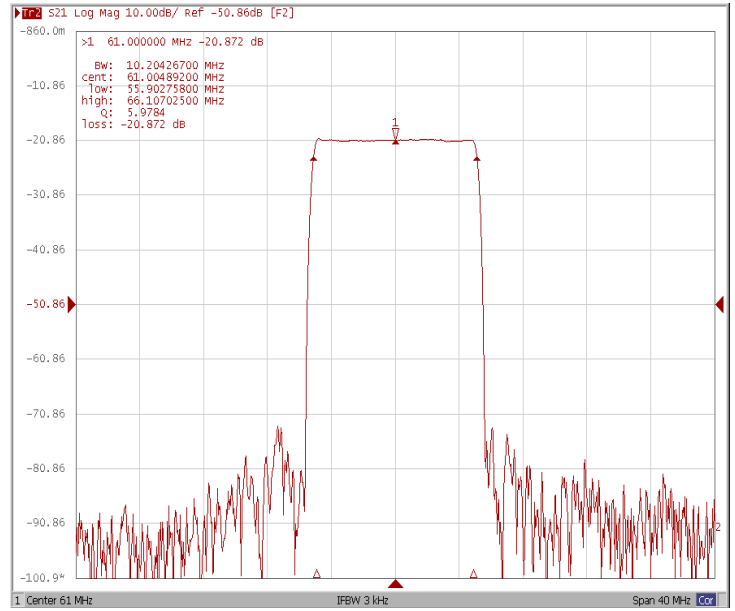


Frequency Response

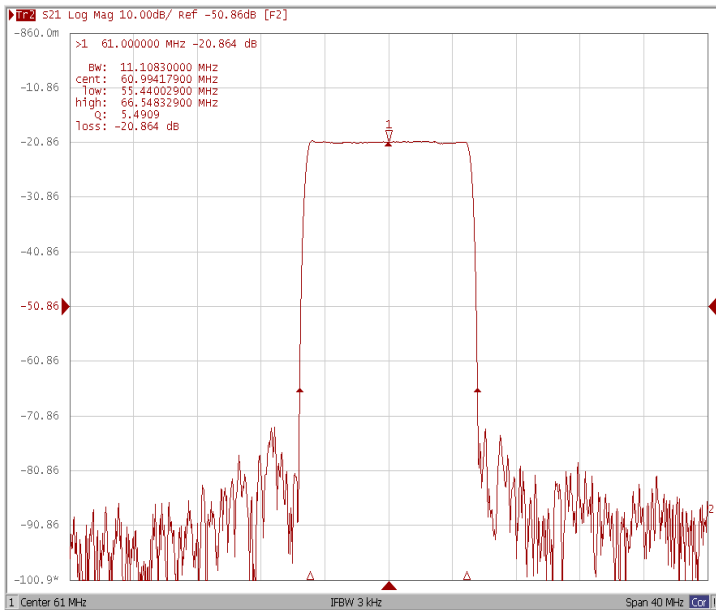
Bandwidth at -1.0 dB



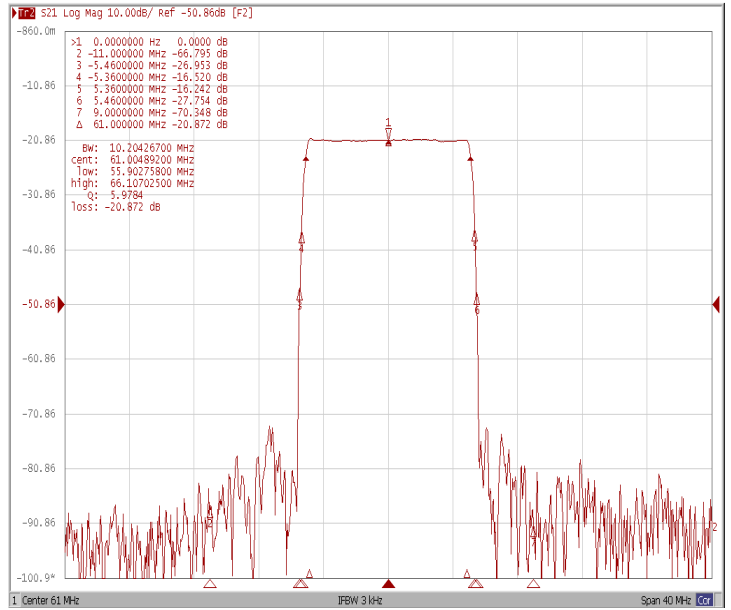
Bandwidth at -3.0 dB



Bandwidth at -45.0 dB

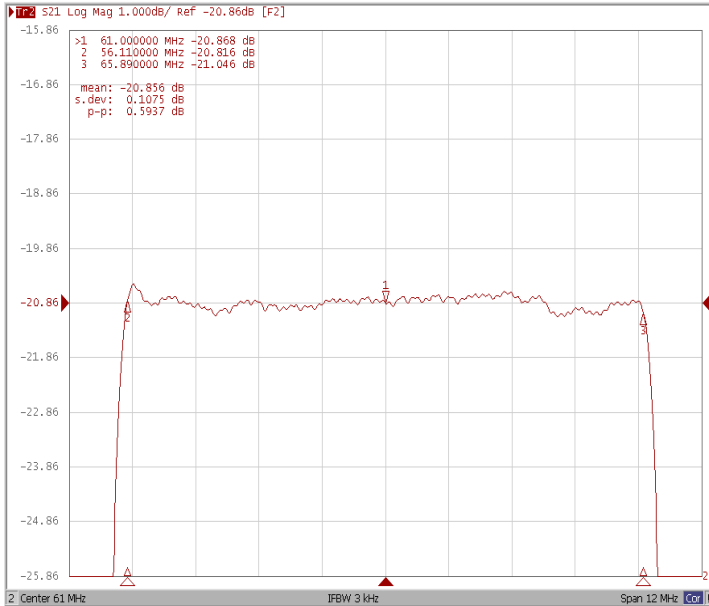


Relative Attenuation

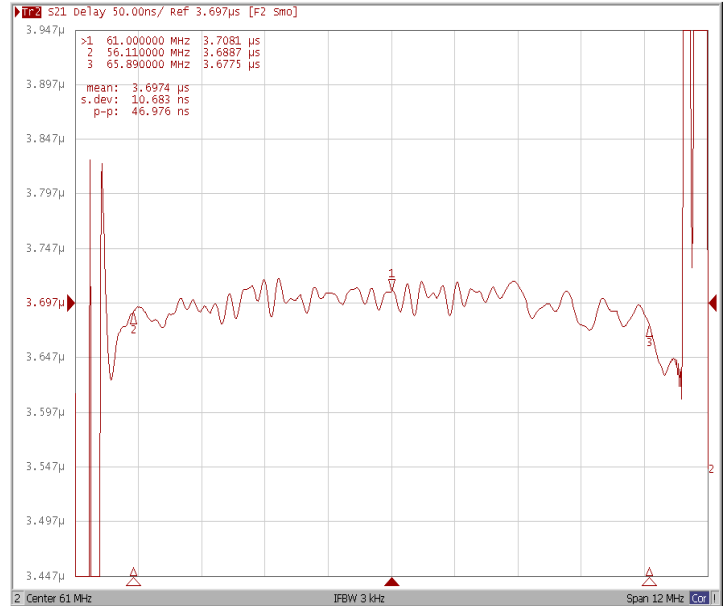




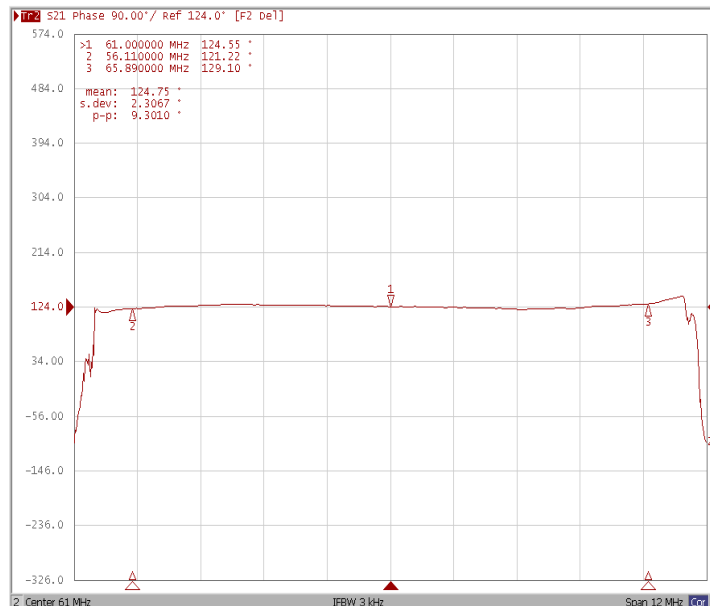
Ripple Variation Fo±4.89MHz



Group Delay Variation Fo±4.89MHz

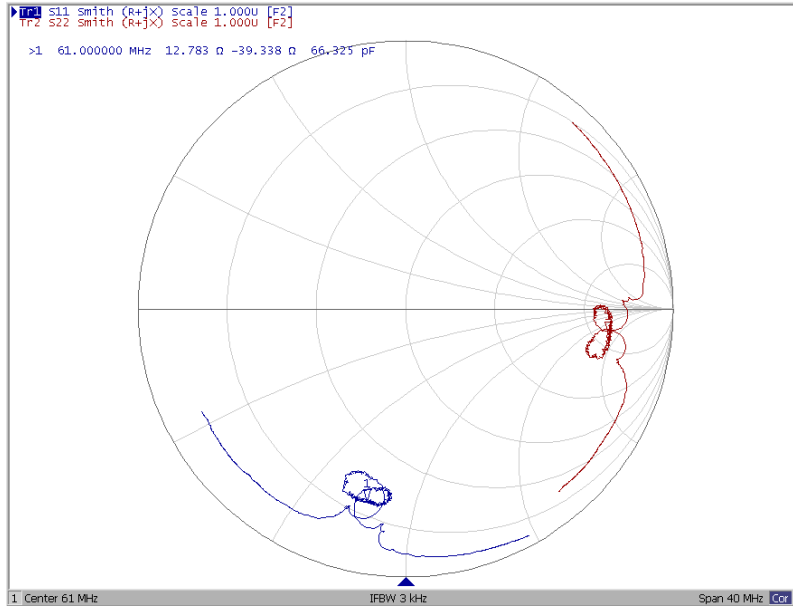


Phase Linearity Fo±4.89MHz



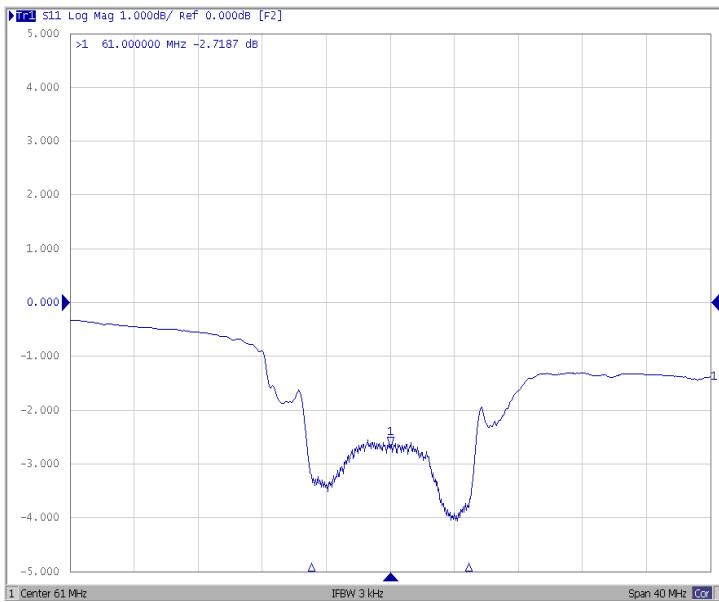


Smith Chart



Return Loss

S11



S22





VSWR

S11



S22

