



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL156.0M-40A	156.0MHz IF SAW Filter 45.43MHz Bandwidth

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Response
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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)



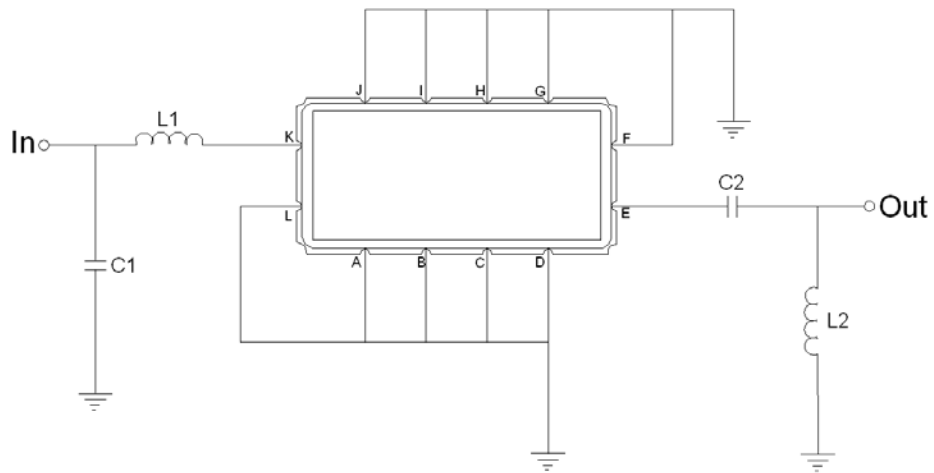


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=27nH, C1=30pF
Output	L2=33nH, C2=100pF
Source/Load Impedance	50 Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	-	85
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	-

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.

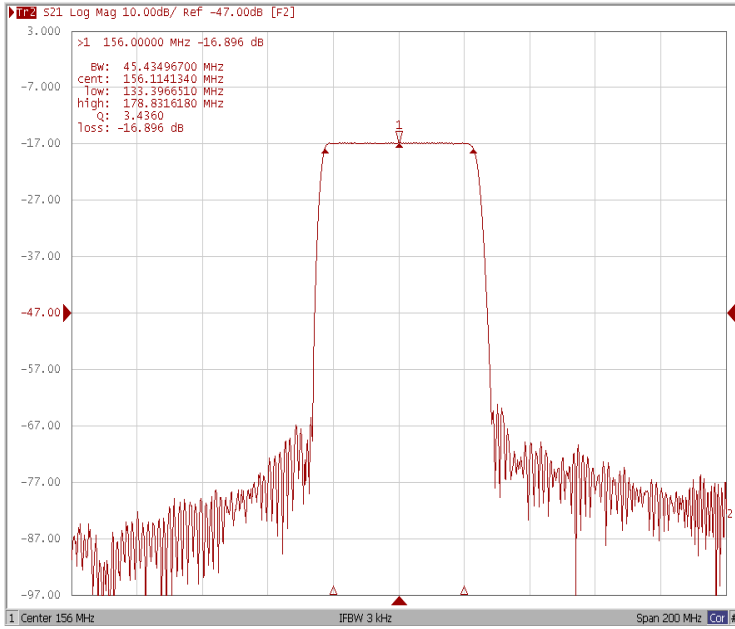
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	156.00	-
Insertion Loss at Fo	dB	-	17.00	18.50
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within fo ±20.0 MHz	dB _{p-p}	-	0.35	0.80
Group Delay Variation within fo ±20.0 MHz	nsec	-	15	35
Absolute Delay at Fo	µsec	-	0.65	-
Bandwidth at -1.0 dB	MHz	44.00	45.43	-
Bandwidth at -40.0 dB	MHz	-	53.70	55.00
Relative Attenuation:				
10MHz~114MHz	dB	40	55	-
199MHz~239MHz	dB	40	52	-
239MHz~410MHz	dB	40	45	-

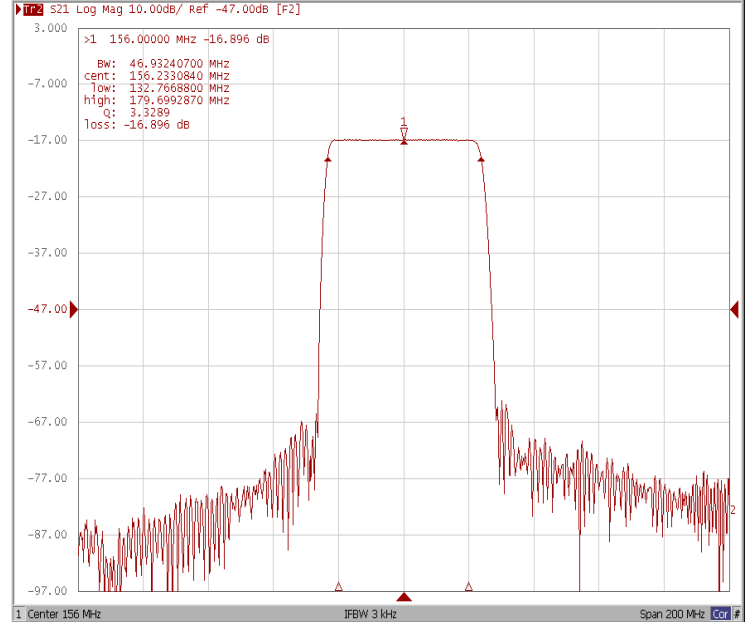


Frequency Response

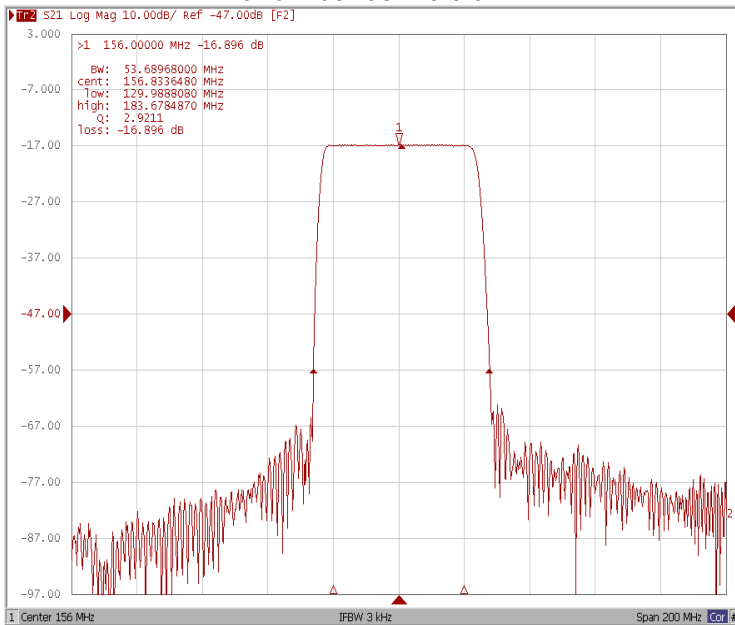
Bandwidth at -1.0 dB



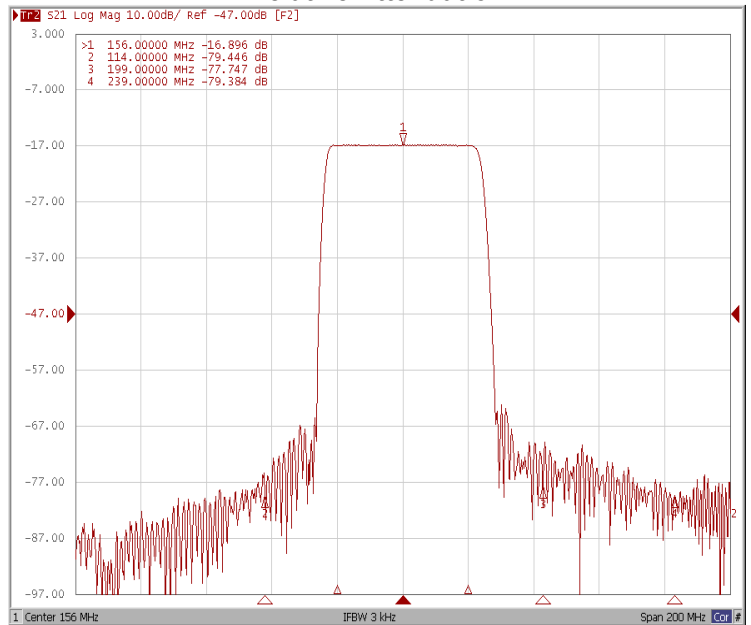
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

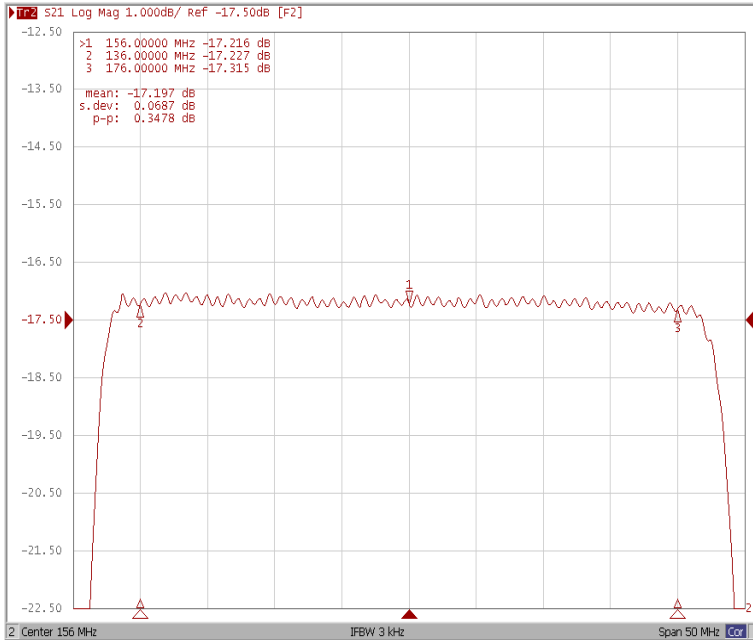


Relative Attenuation

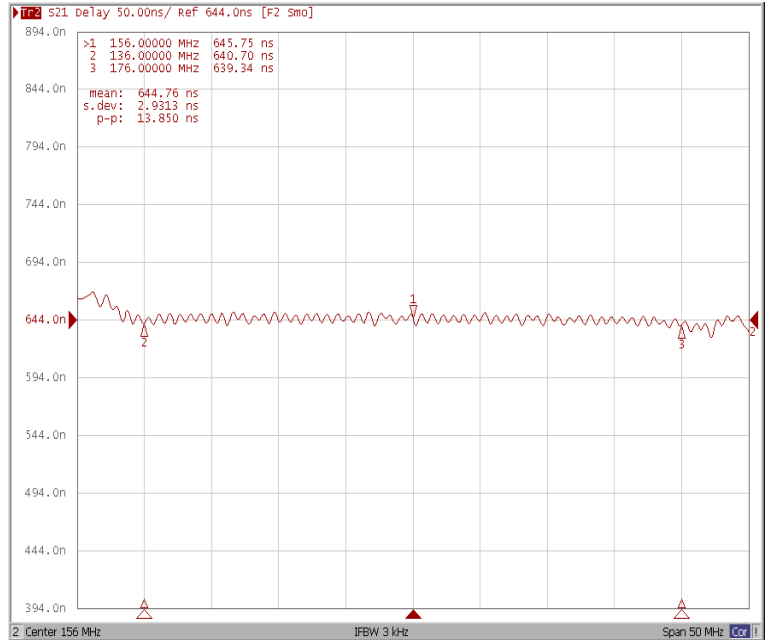




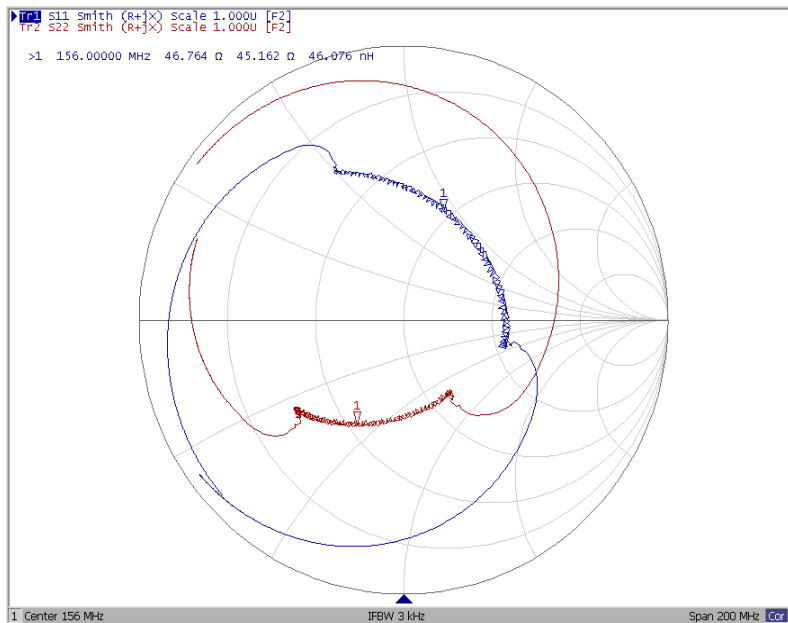
Ripple Variation Fo±20.0MHz



Group Delay Variation Fo±20.0MHz



Smith Chart





VSWR

