



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-IF205.0M-04A	205MHz IF SAW Filter 4.80MHz Bandwidth

Specification Contents

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

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)



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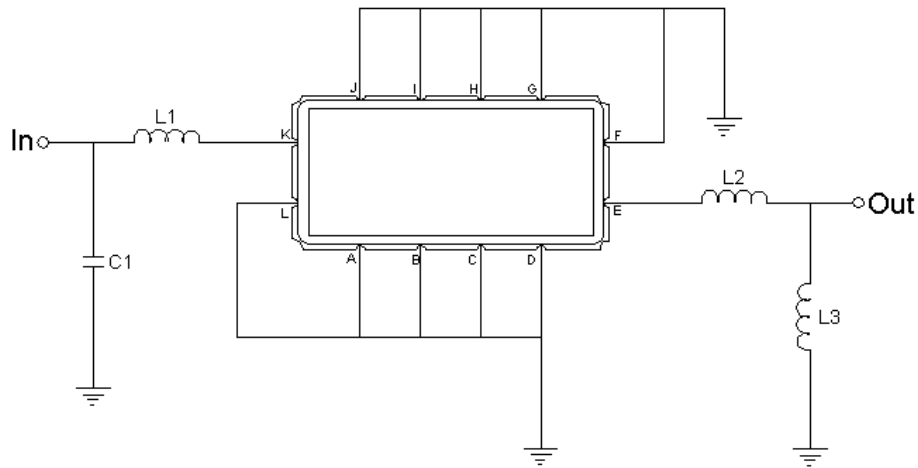


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=39nH, C1=36pF
Output	L2=6.8nH, L3=12nH
Source/Load Impedance	50 Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-5	-	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	-

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	204.85	205.0	205.15
Insertion Loss at Fo	dB	-	23.0	25.0
Amplitude Ripple within fo ±2.2 MHz	dB _{p-p}	-	0.5	1.0
Group Delay Variation within fo ±2.2 MHz	nsec	-	55	100
Absolute Delay at Fo	μsec	-	1.81	2.0
Bandwidth at -1.0 dB	MHz	4.40	4.80	-
Bandwidth at -3.0 dB	MHz	-	5.18	-
Bandwidth at -40.0 dB	MHz	-	6.42	6.60
Ultimate Rejection	dB	40	47	-
Temperature Coefficient	ppm/°C	-	-0.03	-



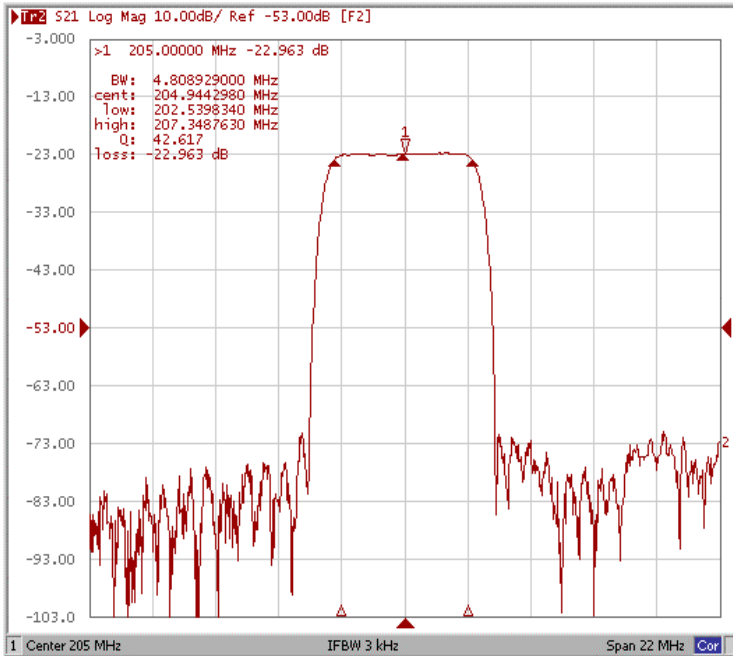
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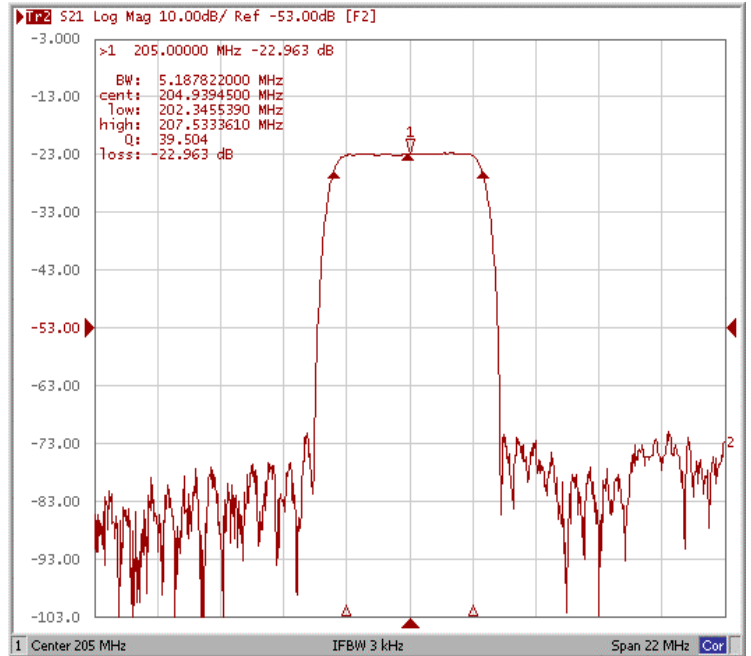
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Frequency Response

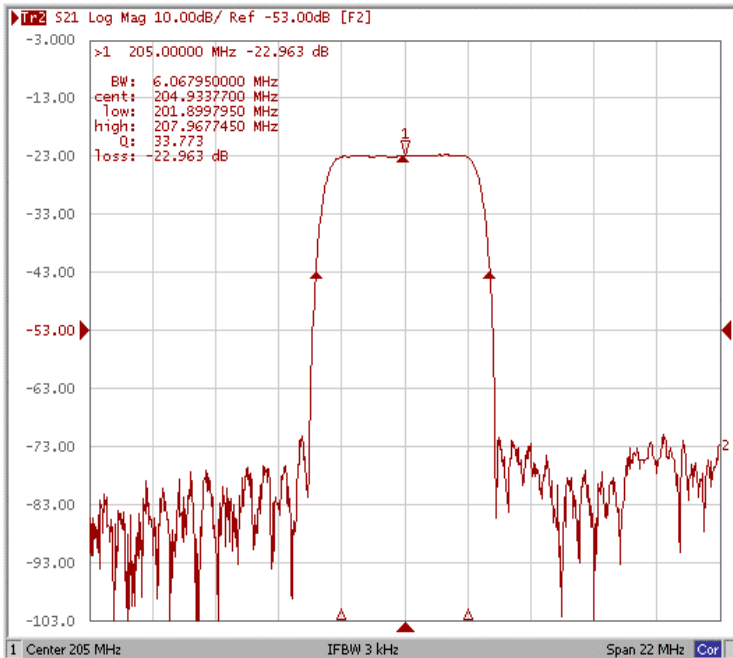
Bandwidth at -1.0 dB



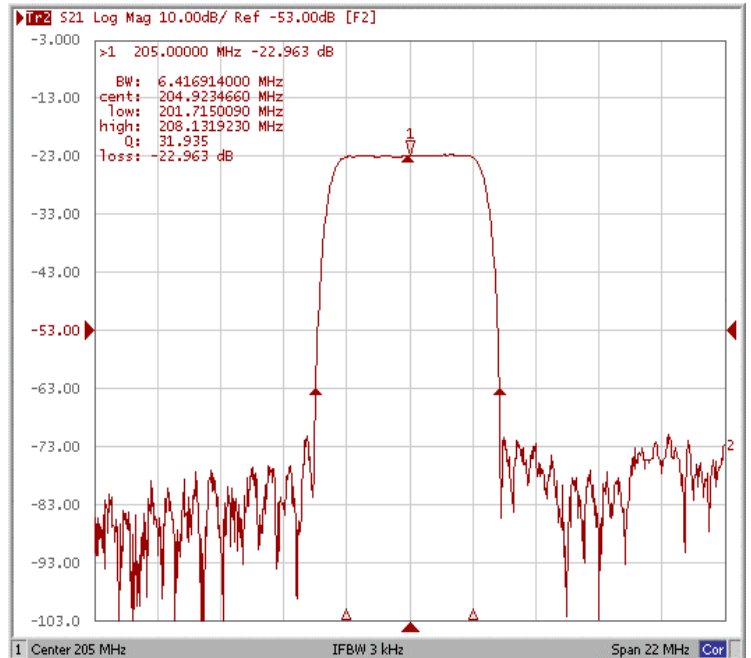
Bandwidth at -3.0 dB



Bandwidth at -20.0 dB

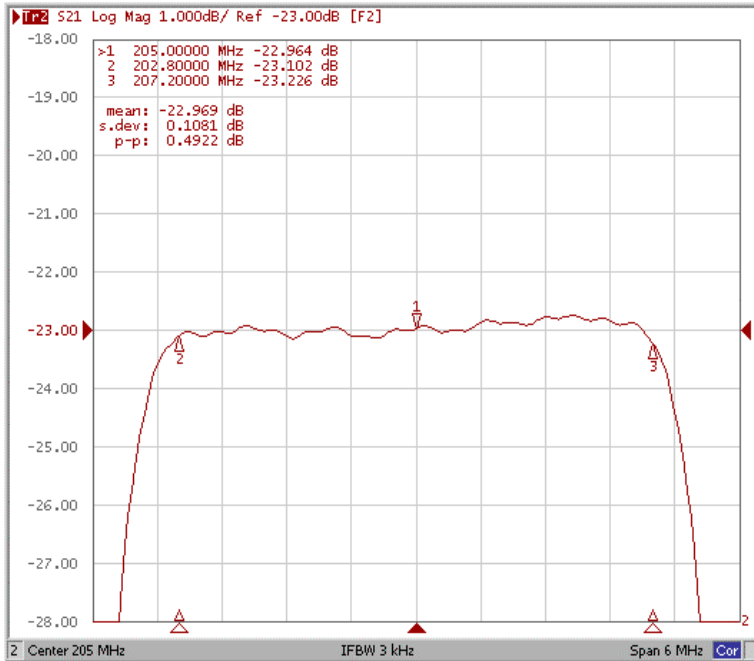


Bandwidth at -40.0 dB

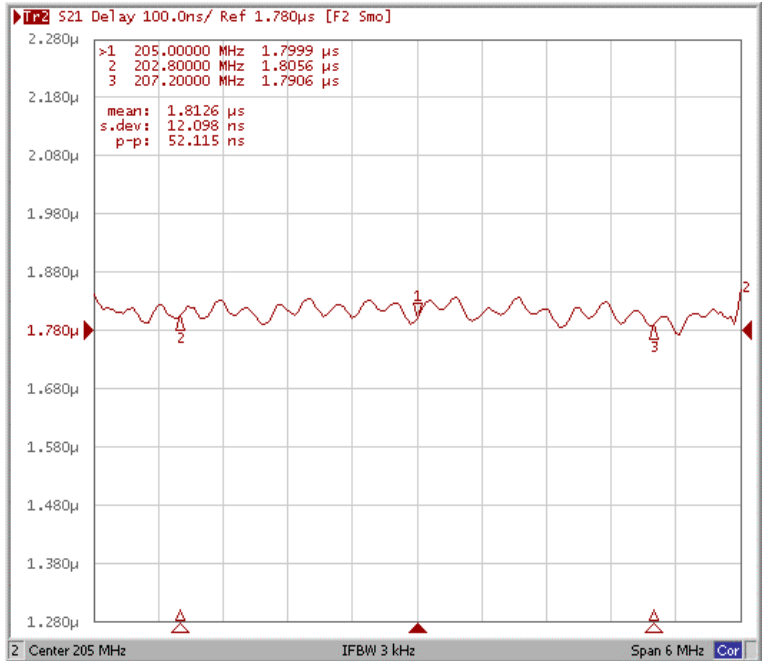




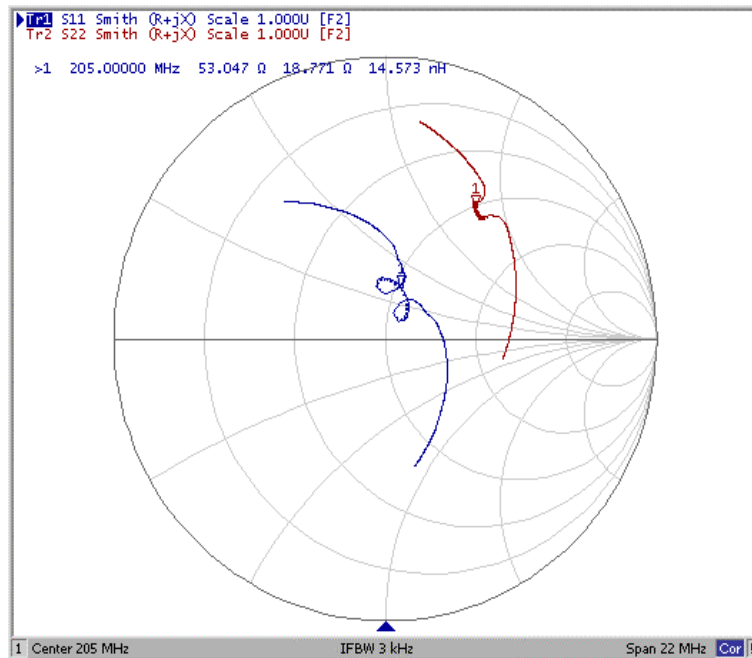
Ripple Variation Fo±2.2MHz



Group Delay Variation Fo±2.2MHz



Smith Chart





VSWR

