



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL75.0M-28A	75.0MHz IF SAW Filter 28.17MHz Bandwidth

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
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- o VSWR

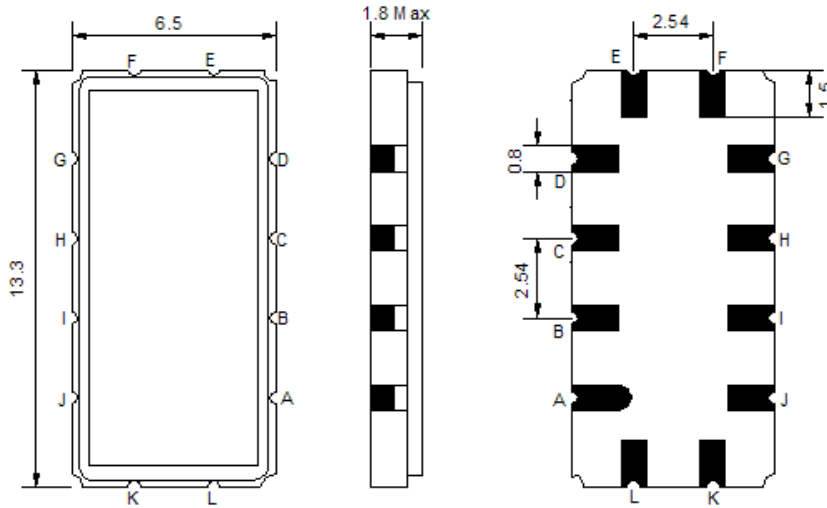
Notes

- 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)



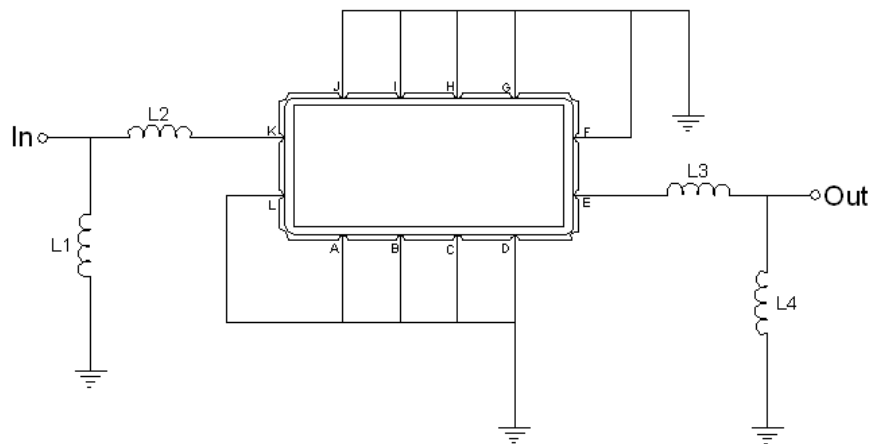


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 68 nH, L2 = 8.2 nH
Output	L3 = 10 nH, L4 = 82 nH
Source/Load Impedance	50 Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-20	-	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.

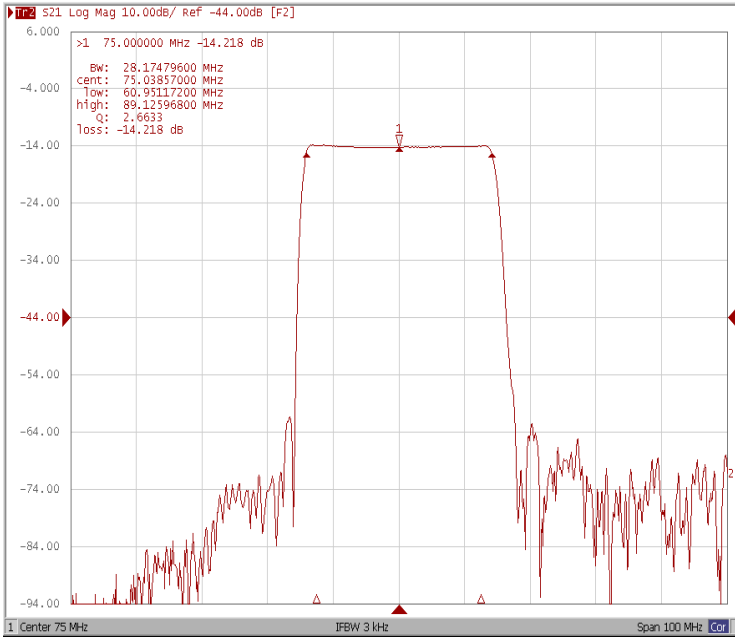
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	14.20	16.00
Group Delay Variation at Fo±12.48MHz	ns	-	21	40
Absolute Delay Time at Fo	us	-	0.99	-
Amplitude Ripple at Fo±12.48MHz	dB	-	0.45	0.90
Bandwidth at -1dB	MHz	27.90	28.17	-
Bandwidth at -3dB	MHz	-	28.96	-
Bandwidth at -15dB	MHz	-	30.78	31.10
Bandwidth at -40dB	MHz	-	32.78	-
Relative Attenuation				
Lower Sidelobe	dB	40	48	-
Upper Sidelobe	dB	40	48	-
Temperature Coefficient	ppm/°C	-	-86	-

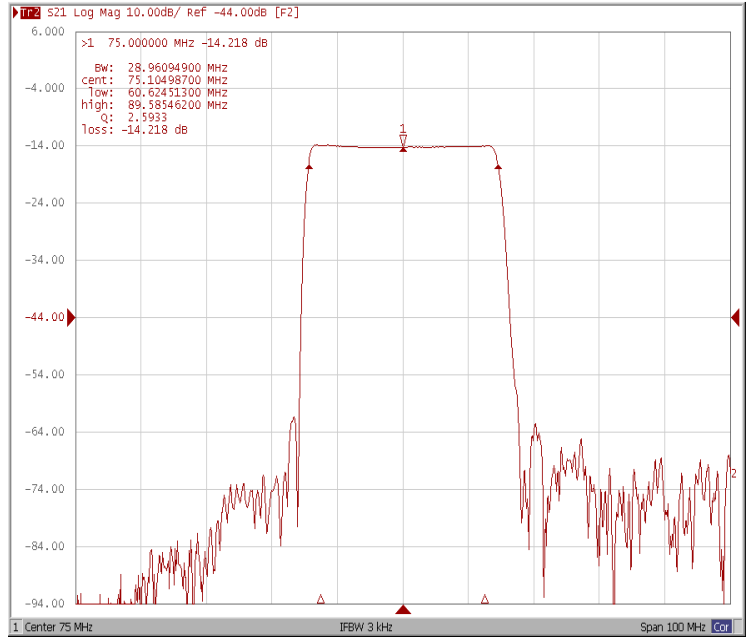


Frequency Response

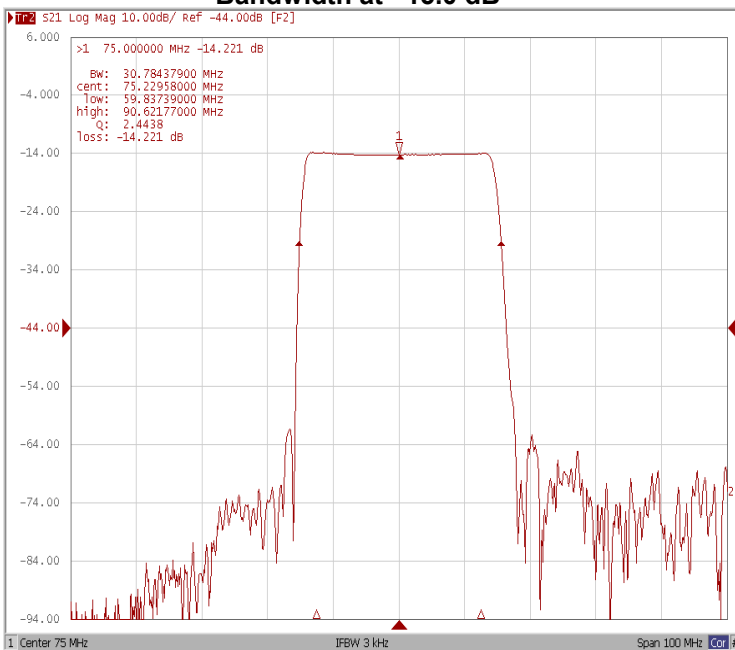
Bandwidth at -1.0 dB



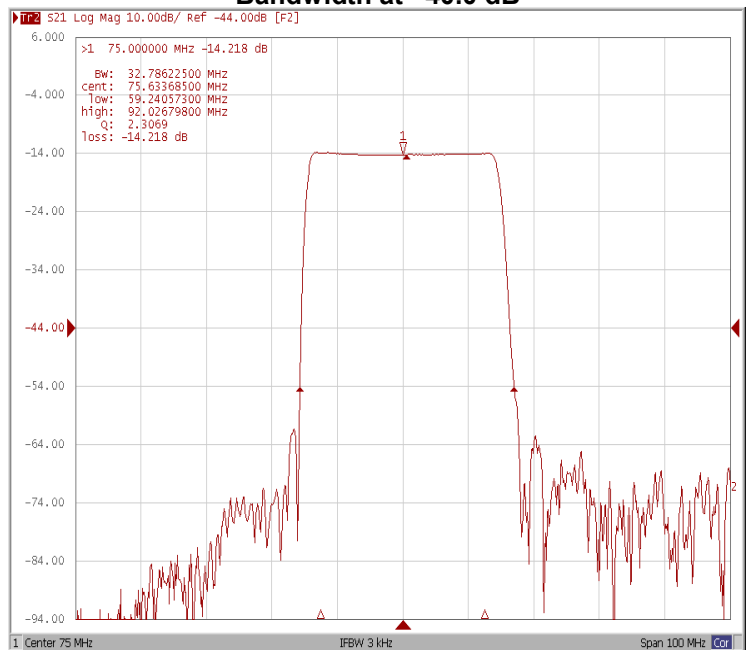
Bandwidth at -3.0 dB



Bandwidth at -15.0 dB

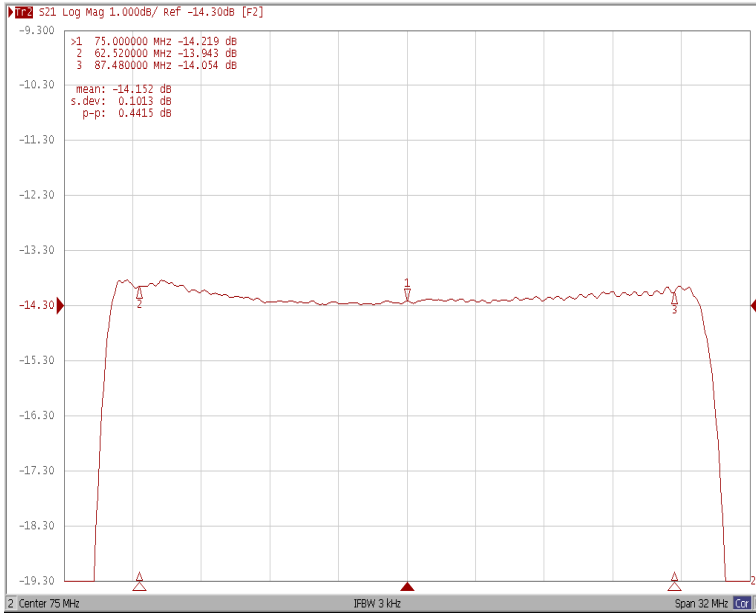


Bandwidth at -40.0 dB

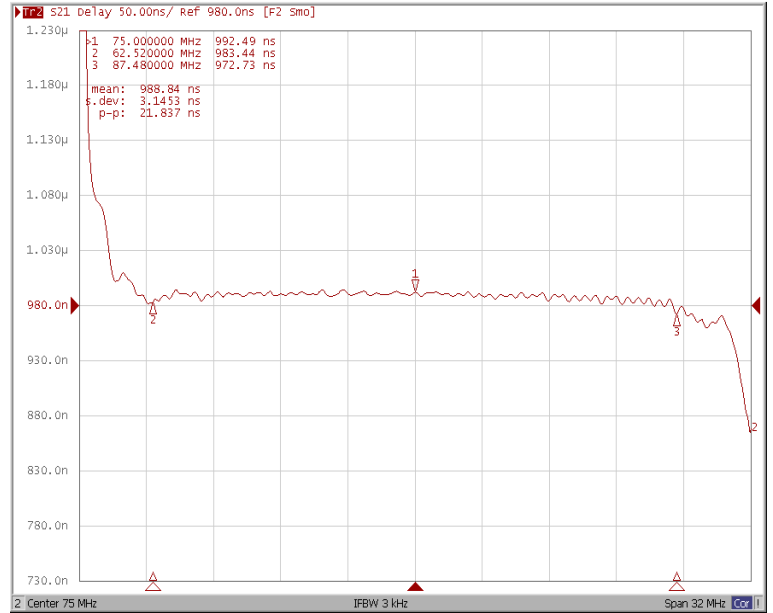




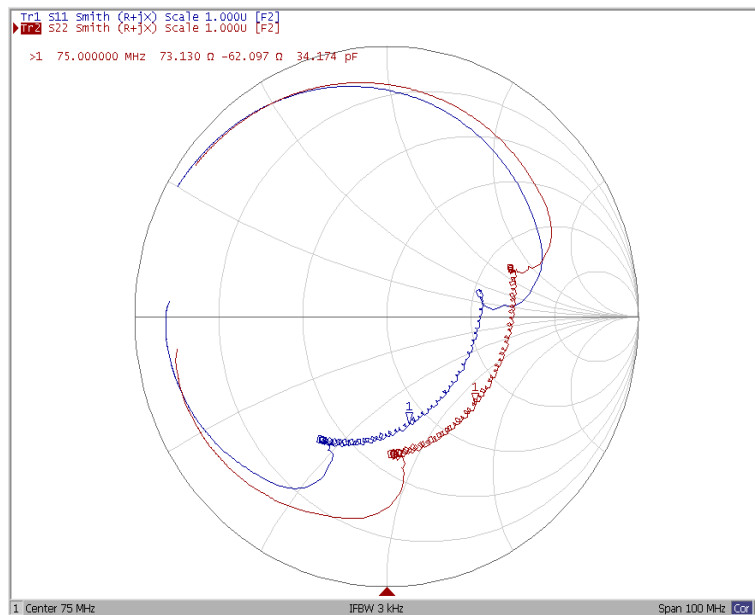
Ripple Variation at $F_o \pm 12.48\text{MHz}$



Group Delay Variation at $F_o \pm 12.48\text{MHz}$



Smith Chart





VSWR

