PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL75.0M-40C	75.0 MHz IF SAW Filter 41.00 MHz Bandwidth

Specification Contents

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

Notes

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

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Oscilent Part Number

813-SL75.0M-40C

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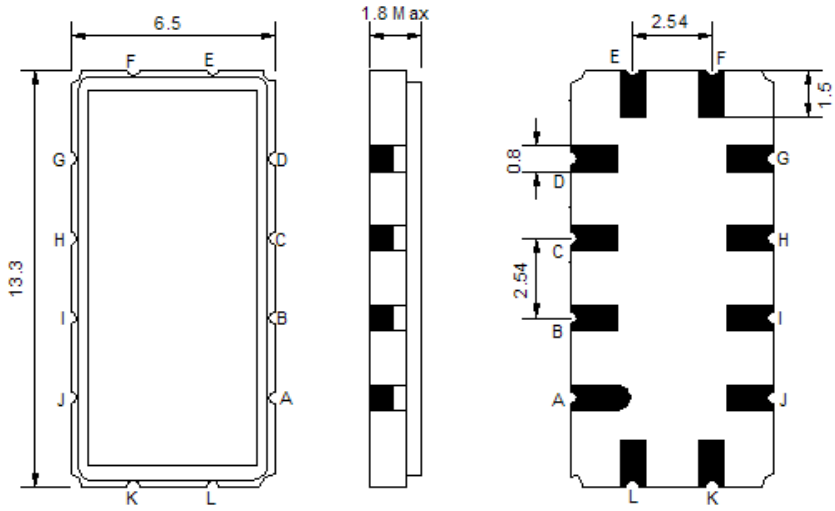
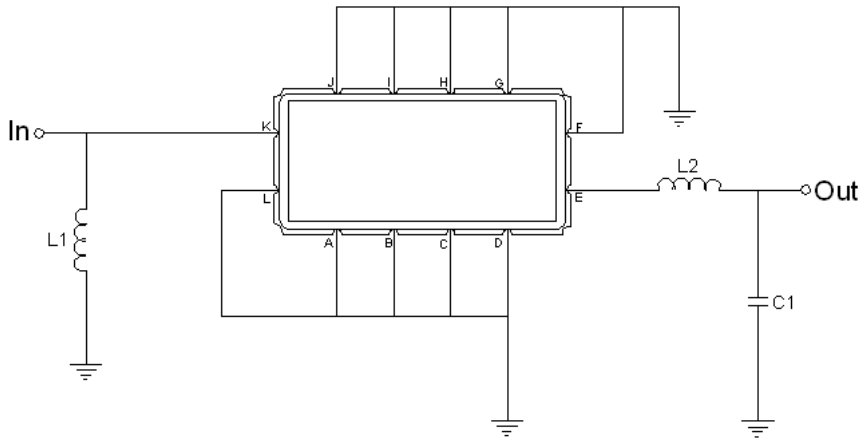
75.0 MHz IF SAW Filter 41.00 MHz Bandwidth

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 = 82 nH
Output	L2 = 82 nH, C1 = 22 pF
Source/Load Impedance	50 Ω

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-	25	-
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	-

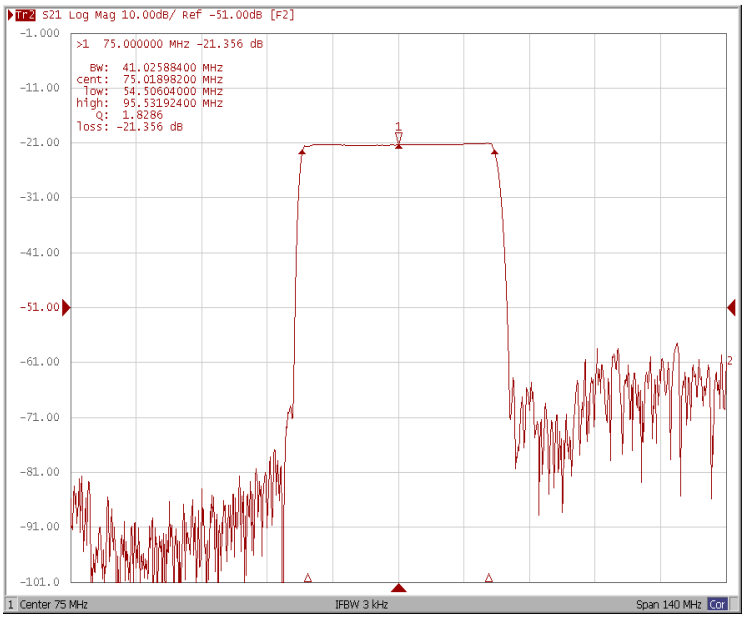
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

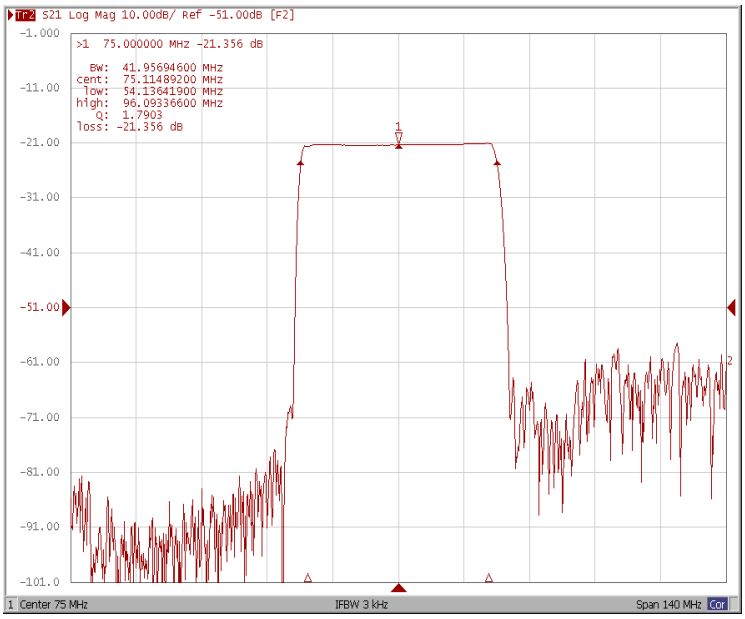
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	21.40	23.00
Group Delay Variation at Fo ± 19.40 MHz	nsec	-	20	50
Absolute Delay at Fo	usec	-	0.99	-
Passband Ripple Variation at Fo ± 19.40 MHz	dB	-	0.45	0.90
Bandwidth at -1dB	MHz	-	41.00	-
Bandwidth at -3dB	MHz	41.60	41.95	-
Bandwidth at -20dB	MHz	-	44.60	44.90
Bandwidth at -40dB	MHz	-	45.95	-
Ultimate Rejection	dB	-	38	-
Temperature Coefficient	ppm/°C	-	-86	-

Frequency Response

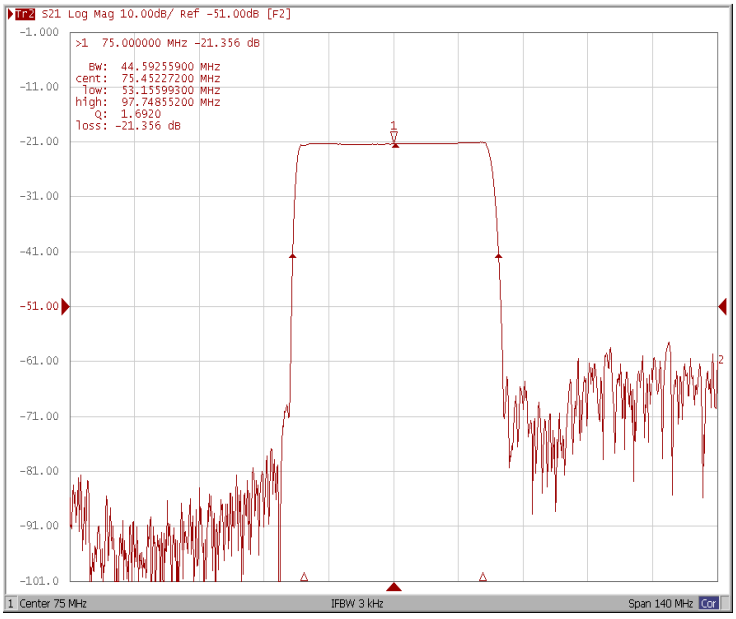
Bandwidth at –1.0 dB



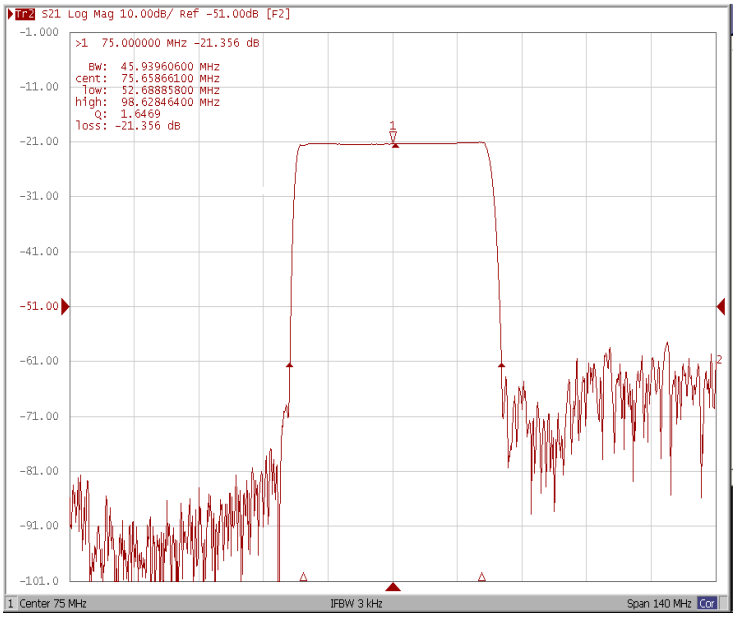
Bandwidth at –3.0 dB



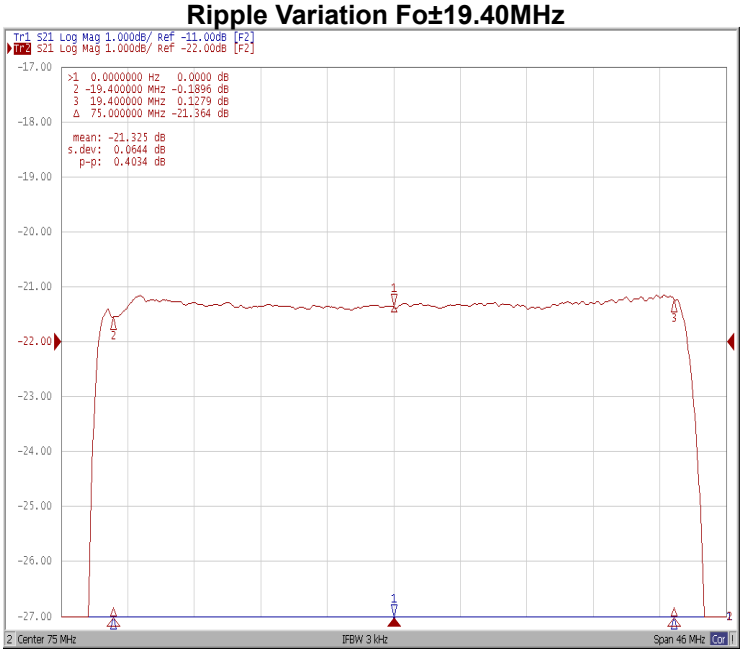
Bandwidth at –20.0 dB



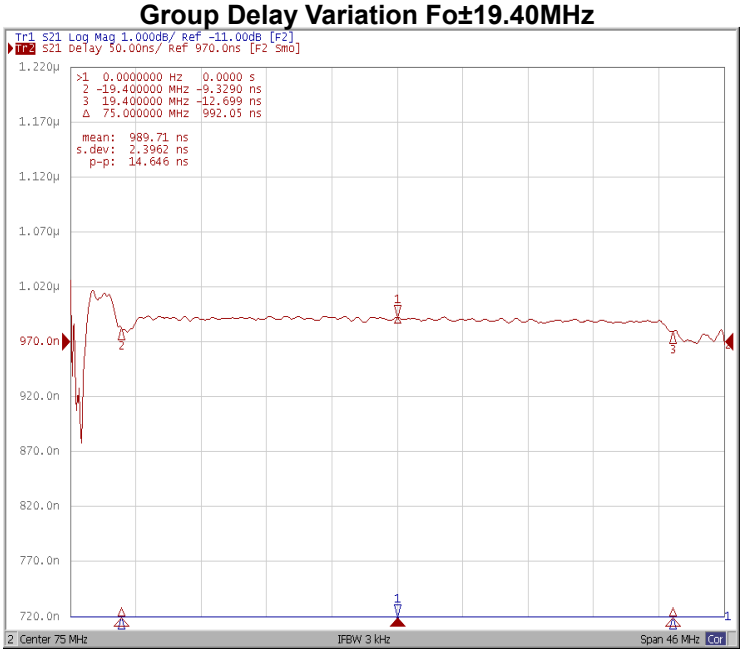
Bandwidth at –40.0 dB



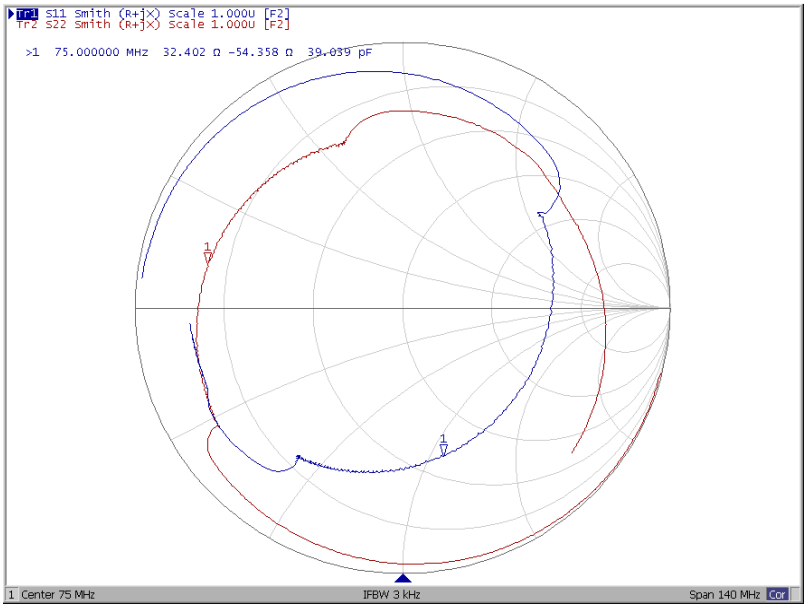
Ripple Variation Fo±19.40MHz



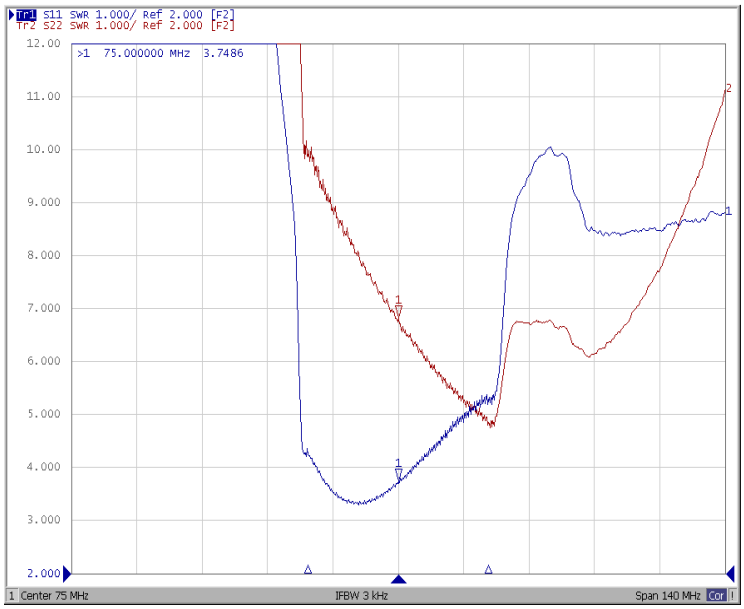
Group Delay Variation Fo±19.40MHz



Smith Chart



VSWR


Tr1 S11 SWR 1.000/ Ref 2.000 [F2]
Tr2 S22 SWR 1.000/ Ref 2.000 [F2]
>1 75.000000 MHz 3.7486
12.00
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1 Center 75 MHz
IFBW 3 kHz
Span 140 MHz
Cor