PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-IF65.0M-29C	65.0 MHz IF SAW Filter 29.19 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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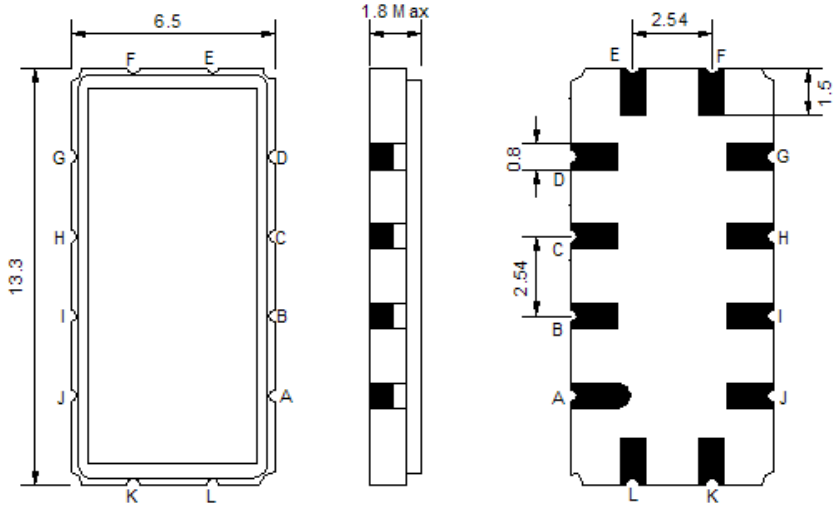
Oscilent Part Number

813-IF65.0M-29C

January 20110 Rev A

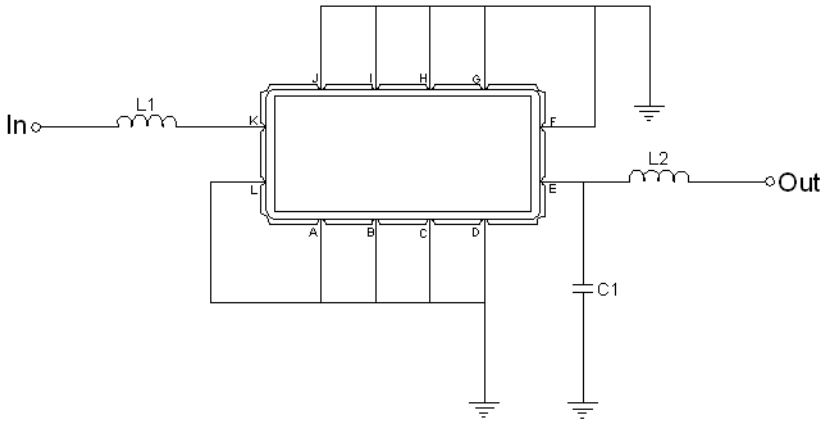
65.0 MHz IF SAW Filter 29.19 MHz Bandwidth

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 = 330 nH
Output	L2 = 270 nH, C1 = 14 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	-

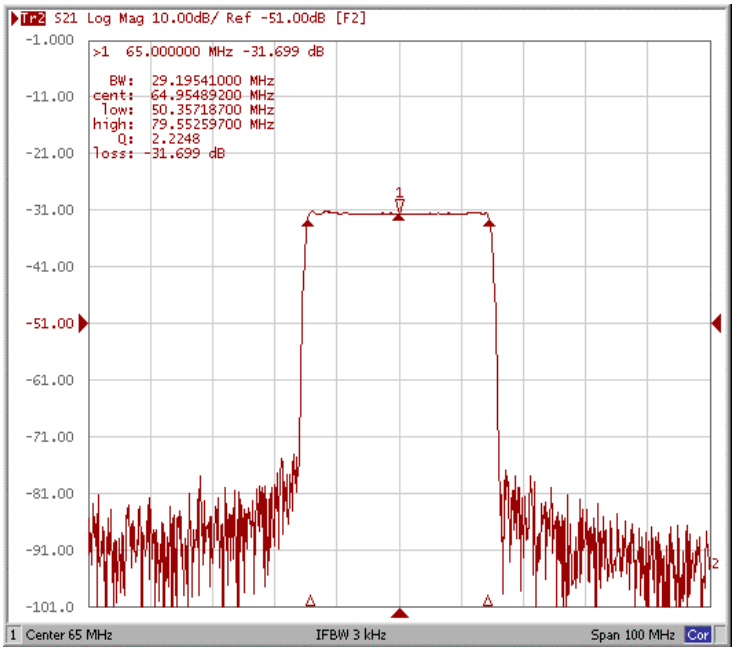
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

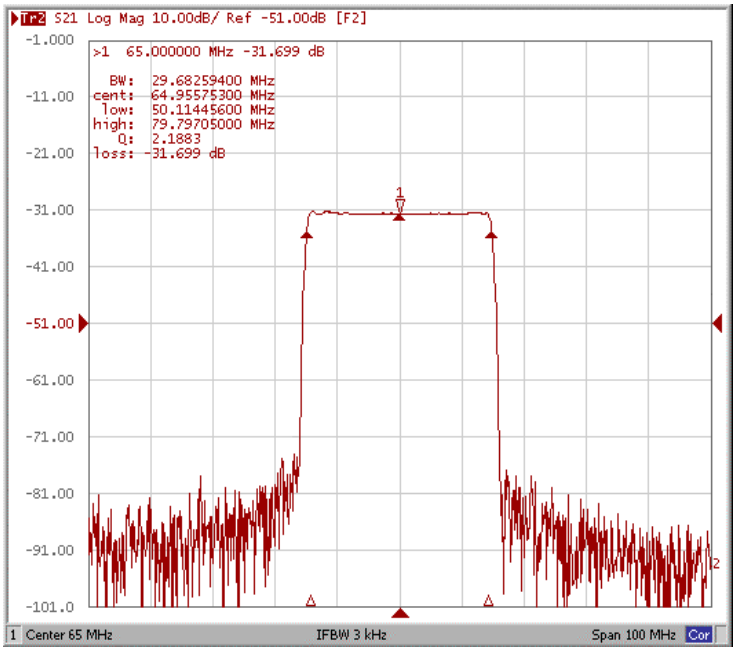
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	65.0	-
Insertion Loss at Fo	dB	-	31.6	33.5
Group Delay Variation at Fo ± 14.32 MHz	nsec	-	35	70
Absolute Delay at Fo	usec	-	1.74	-
Passband Ripple Variation at Fo ± 14.32 MHz	dB	-	0.6	1.0
Bandwidth at -1dB	MHz	29.05	29.19	-
Bandwidth at -3dB	MHz	-	29.68	-
Bandwidth at -40dB	MHz	-	31.96	32.10
Ultimate Rejection	dB	40	43	-
Temperature Coefficient	ppm/°C	-	-72	-

Frequency Response (Room Temp 25°)

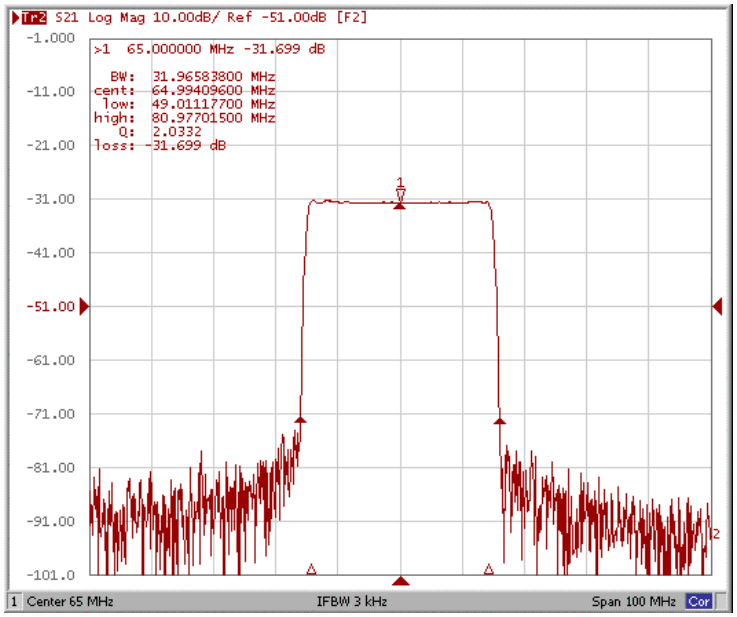
Bandwidth at –1.0 dB



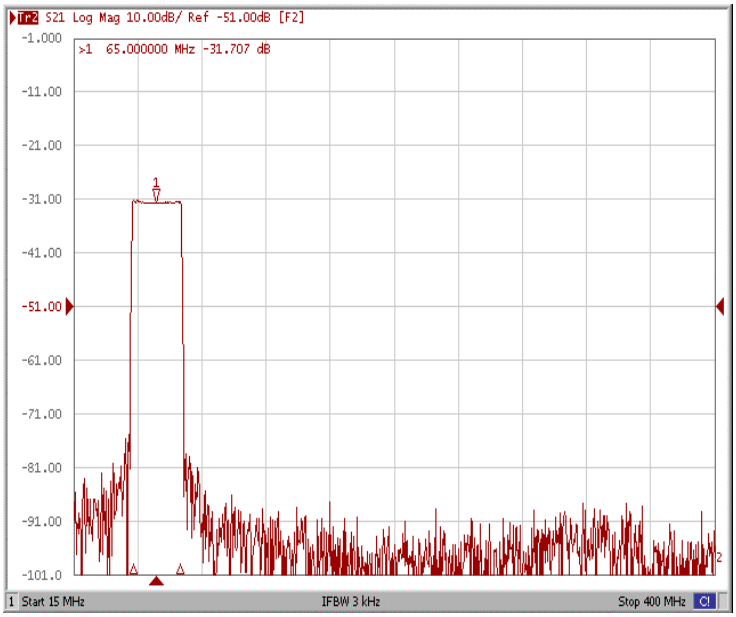
Bandwidth at –3.0 dB



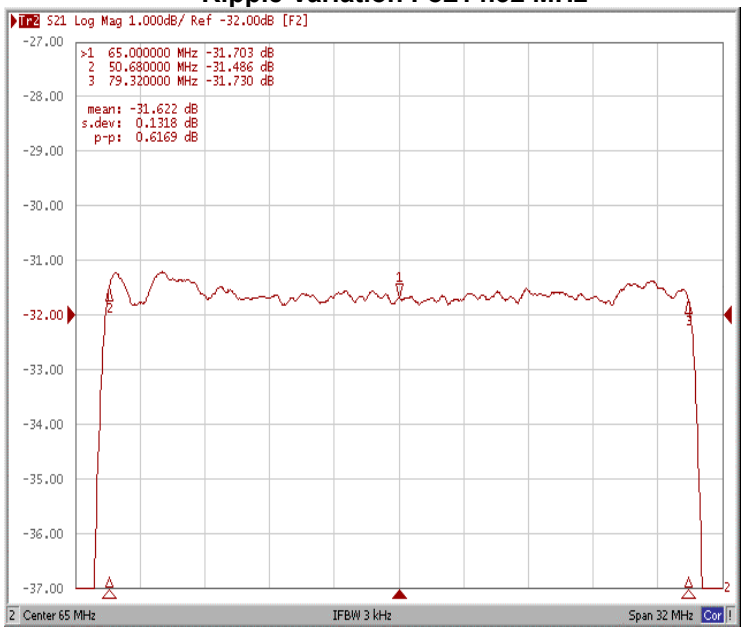
Bandwidth at –40 dB



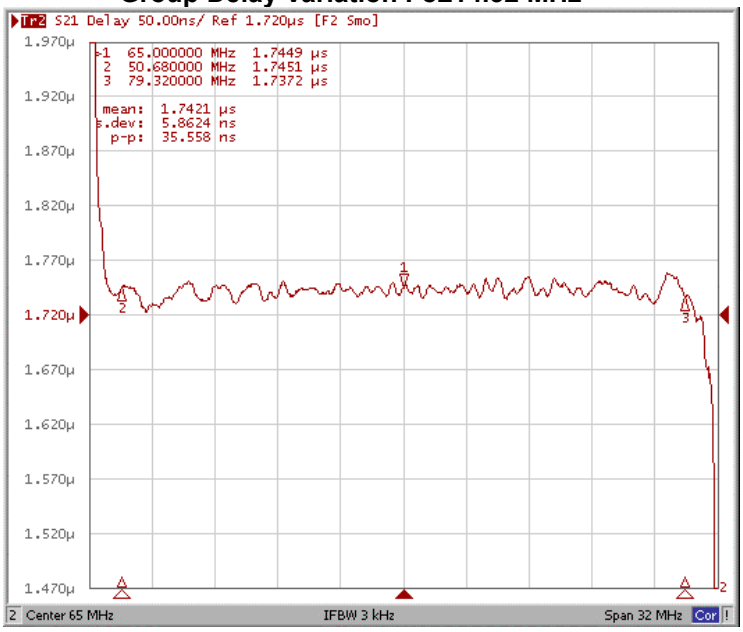
Wide Band



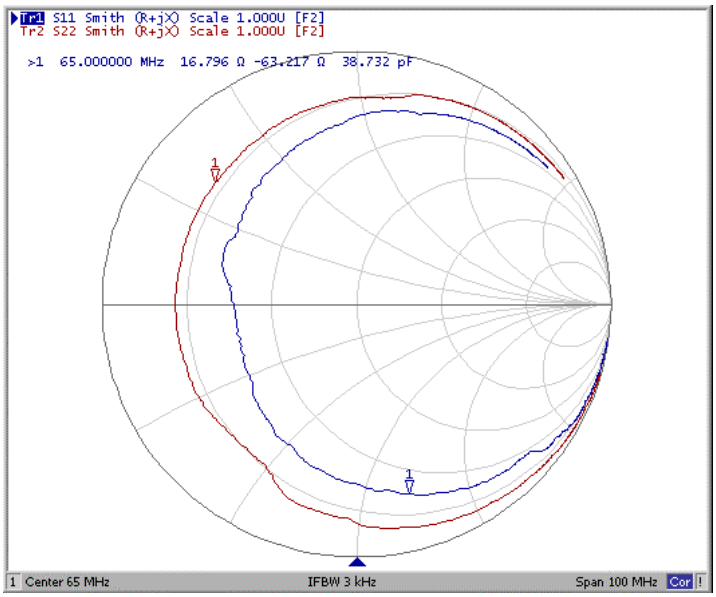
Ripple Variation Fo±14.32 MHz



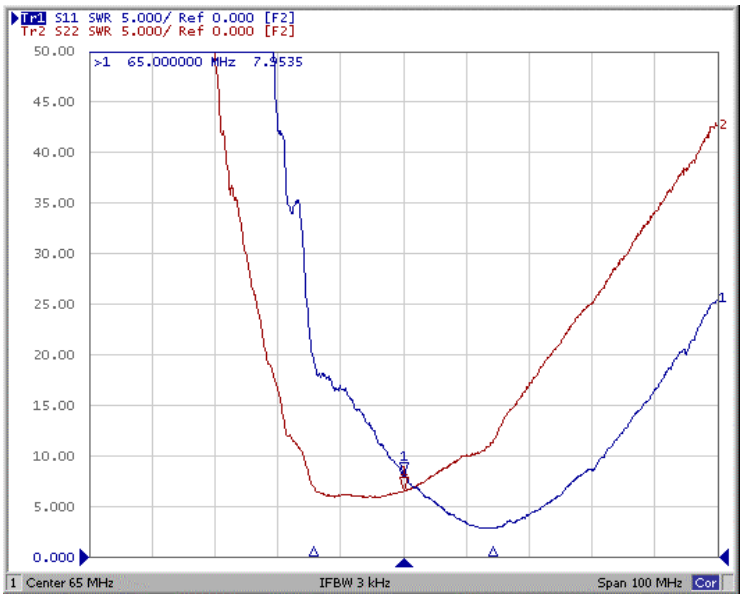
Group Delay Variation Fo±14.32 MHz



Smith Chart



VSWR


Tr1 S11 SWR 5.000/ Ref 0.000 [F2]
Tr2 S22 SWR 5.000/ Ref 0.000 [F2]
>1 65.000000 MHz 7.9535
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.000
0.000
1 Center 65 MHz
IFBW 3 kHz
Span 100 MHz
Cor