PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-SL128.0625M-04B	29.57MHz IF SAW Filter 4.37 MHz Bandwidth

Specification Contents

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

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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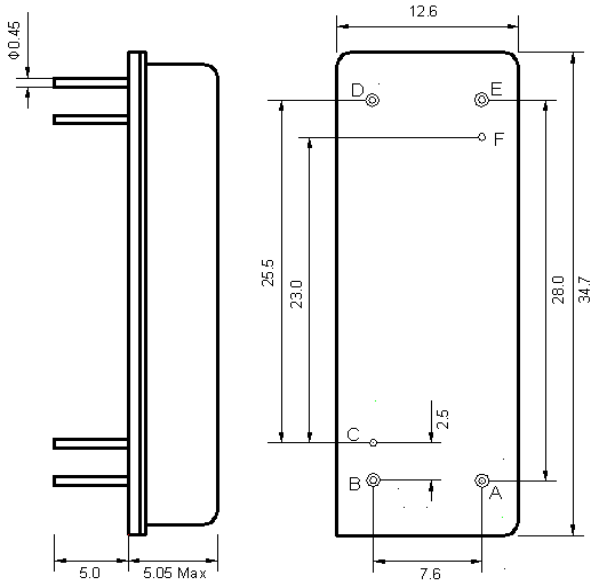
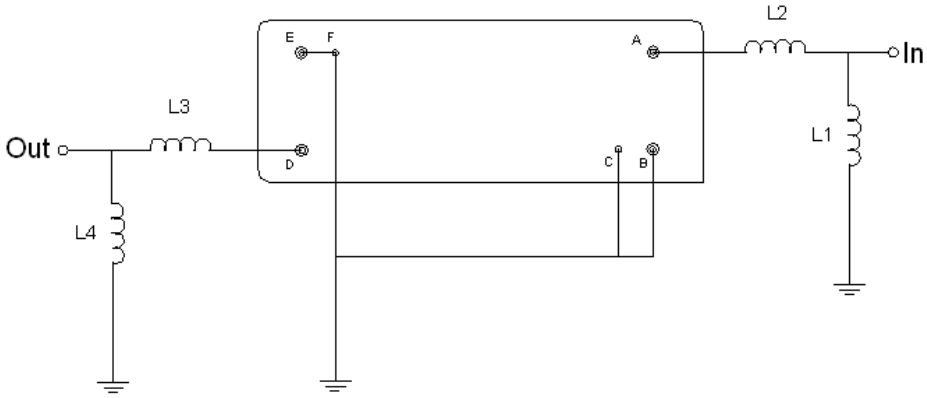
Mechanical Dimensions (mm)



Pin Description	
B, C, E, F	Ground
A	In
D	Out

Test Circuit



Test Fixture & Values	
Input	L1=22 nH, L2=22 nH
Output	L3=27 nH, L4=18 nH
Source/Load Impedance	50 Ω

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	0	45	85
Storage Temperature Range	°C	-20	-	70
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	28
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-

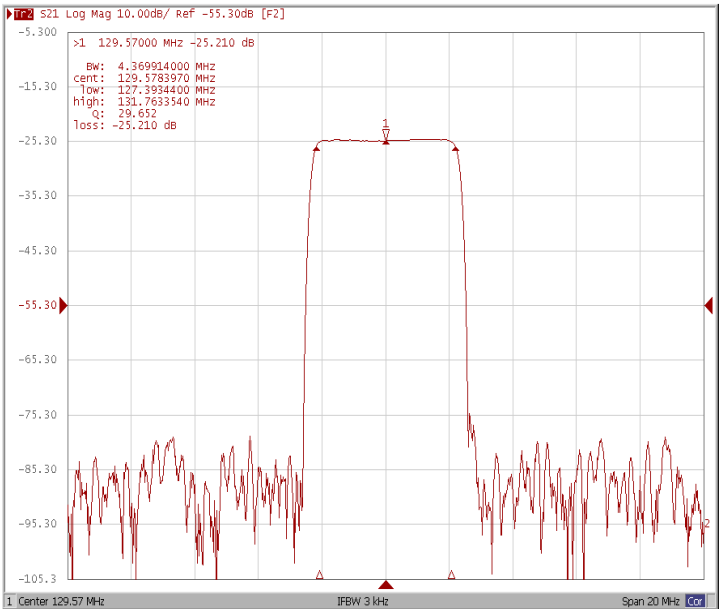
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

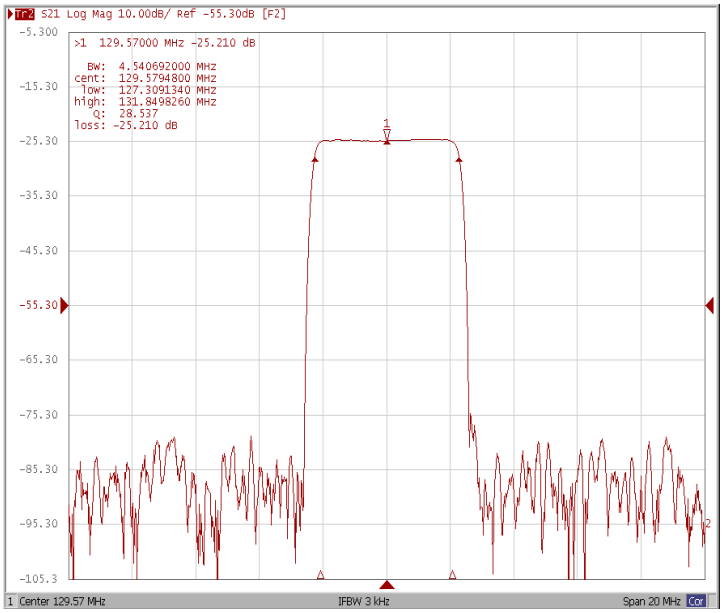
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	129.47	129.57	129.67
Insertion Loss at Fo	dB	-	25.2	26.0
Group Delay Variation (Fo±2.07MHz)	ns	-	93	150
Phase Linearity (Fo±2.07MHz)	deg	-	3.4	10.0
Absolute Delay Time at Fo	us	-	3.96	4.20
Temperature Coefficient	ppm/°C	-	-0.03	-
Amplitude Ripple (Fo±2.07MHz)	dB	-	0.54	1.10
Bandwidth at -1dB	MHz	4.25	4.37	-
Bandwidth at -45dB	MHz	-	5.12	5.30
Input &Output Return Loss	dB	6	8	-
Triple transit attenuation	dBc	35	-	-
Relative Attenuation				
10MHz~122.0MHz	dBc	40	62	-
@126.93 MHz	dBc	40	65	-
@127.03 MHz	dBc	20	40	-
@132.11 MHz	dBc	20	35	-
@132.21 MHz	dBc	40	50	-
137.0MHz ~300.0MHz	dBc	40	64	-

Frequency Response

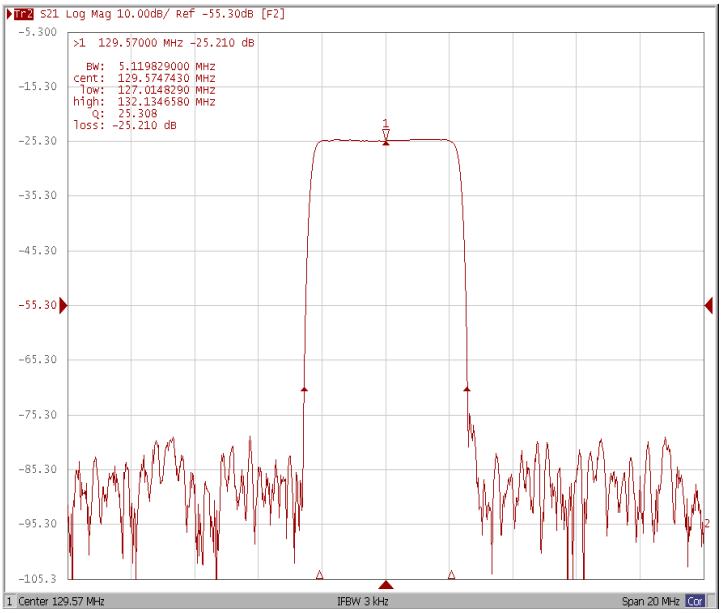
Bandwidth at –1.0 dB



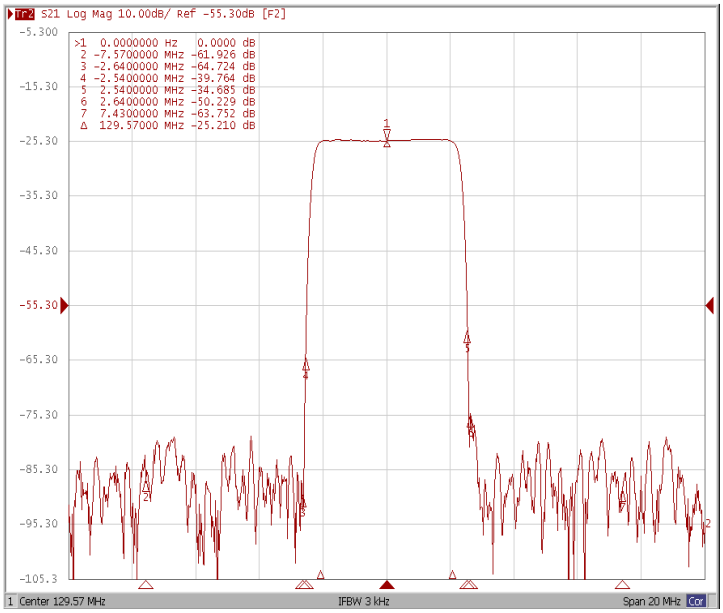
Bandwidth at –3.0 dB



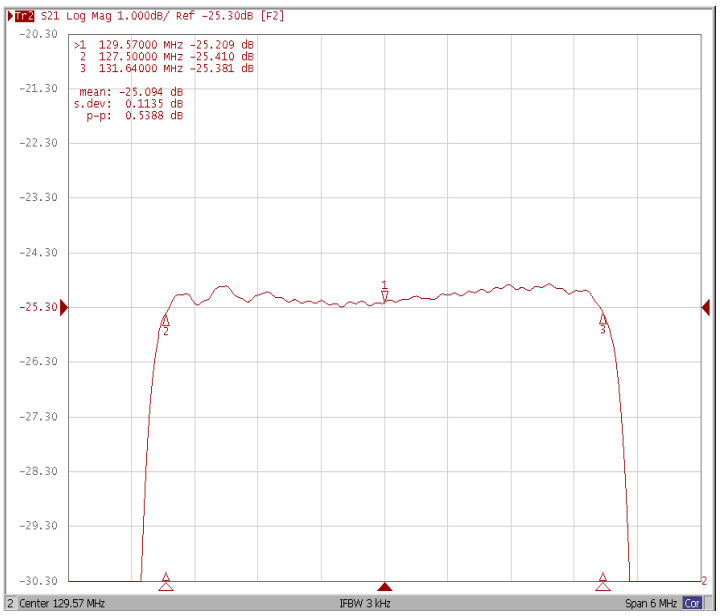
Bandwidth at –45.0 dB



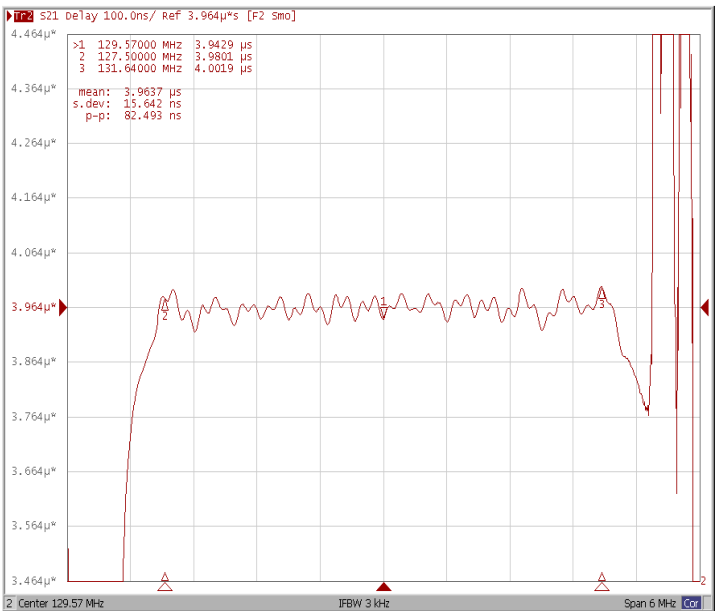
Relative Attenuation



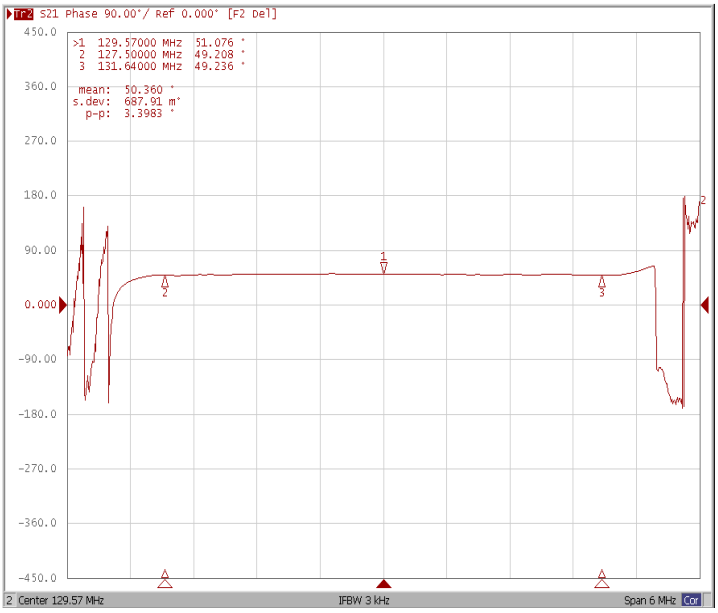
Ripple Variation Fo±2.07MHz



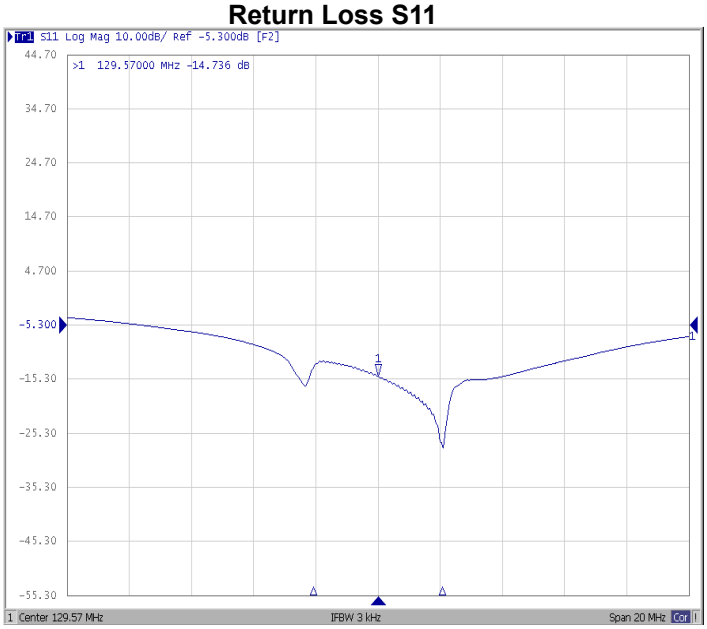
Group Delay Variation Fo±2.07MHz



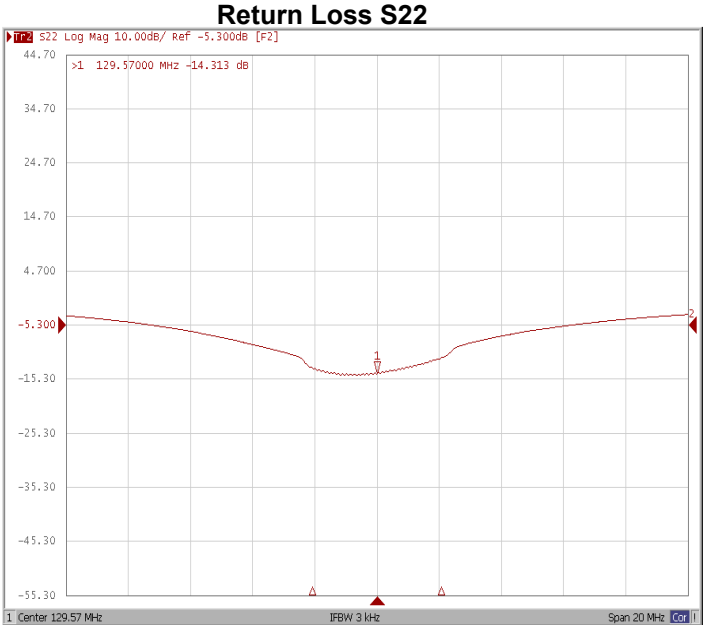
Phase Linearity Fo±2.07MHz



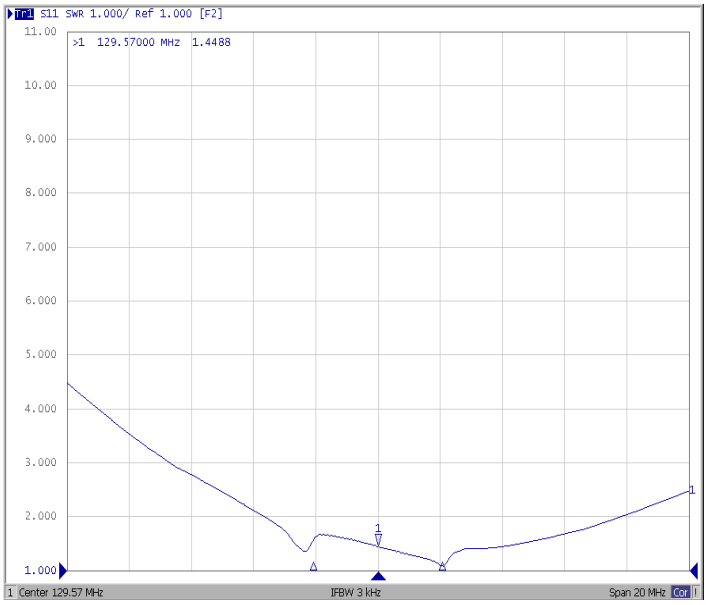
Return Loss S11



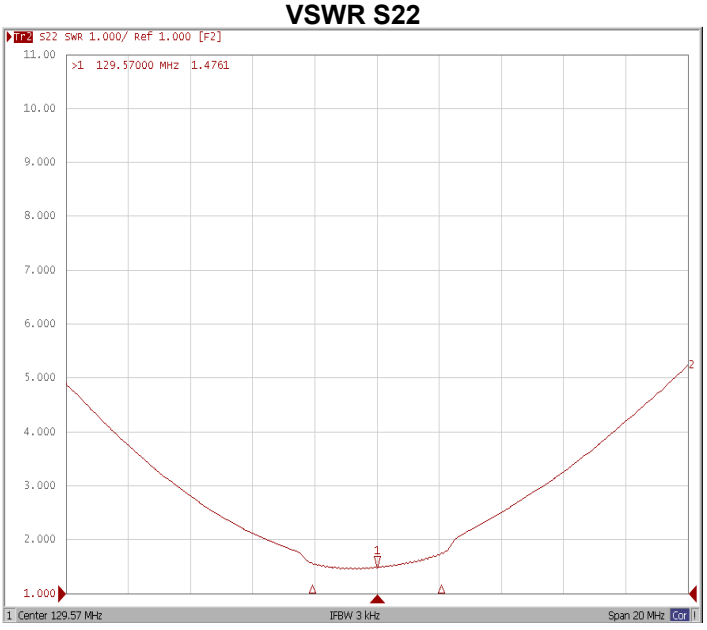
Return Loss S22



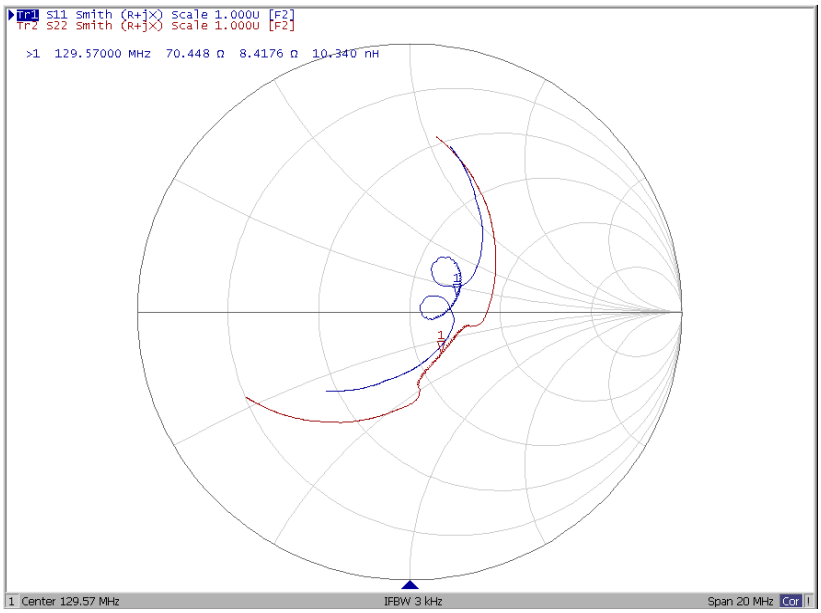
VSWR S11



VSWR S22



Smith Chart


Tr1 S11 Smith (R+jX) Scale 1.000U [F2]
Tr2 S22 Smith (R+jX) Scale 1.000U [F2]
>1 129.57000 MHz 70.448 Ω 8.4176 Ω 10.340 nH
1 Center 129.57 MHz
IFBW 3 kHz
Span 20 MHz
Cor