PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF145.0M-26C	45.0 MHz IF SAW Filter 26.35 MHz Bandwidth

Specification Contents

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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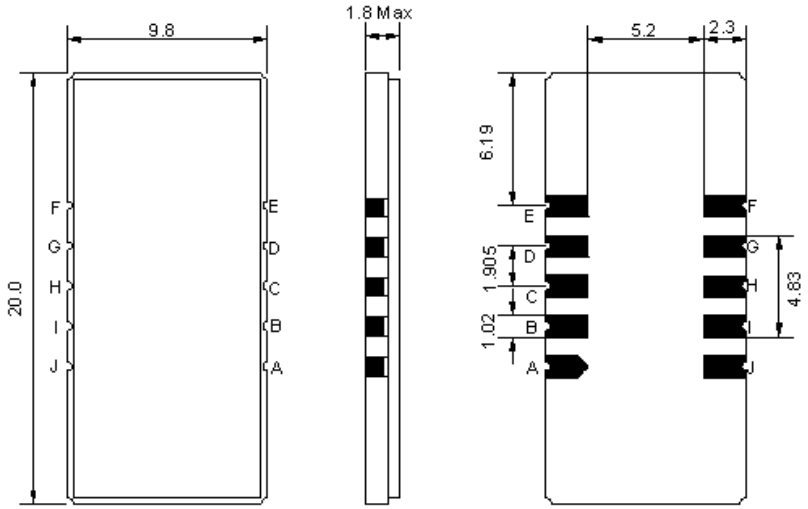
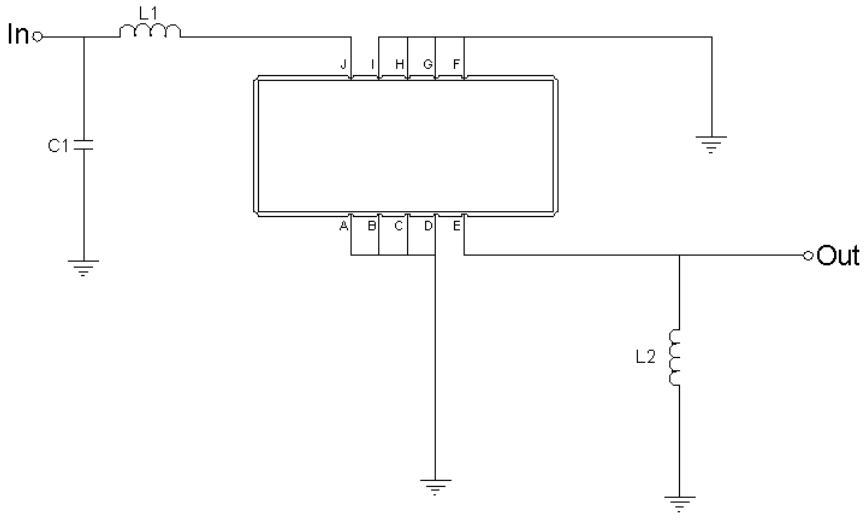
Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=39nH, C1=6pF
Output	L2=47nH
Source/Load Impedance	50 Ω

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-10	-	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	-

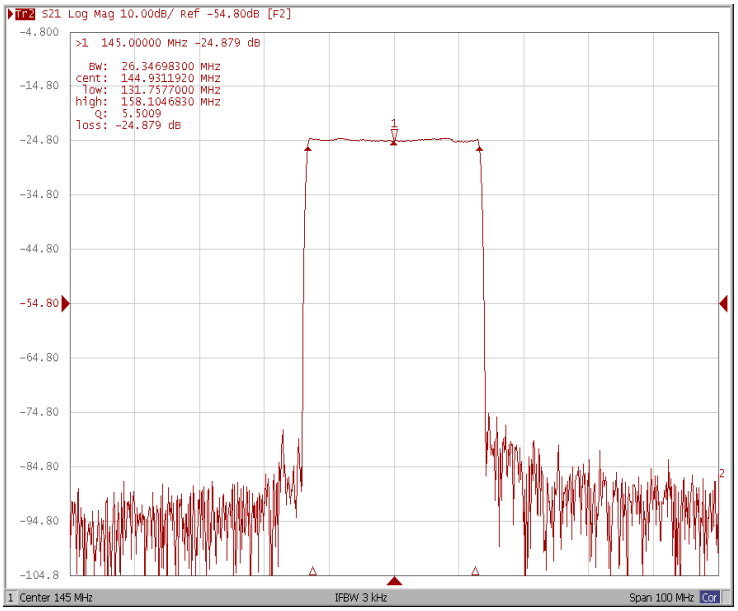
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

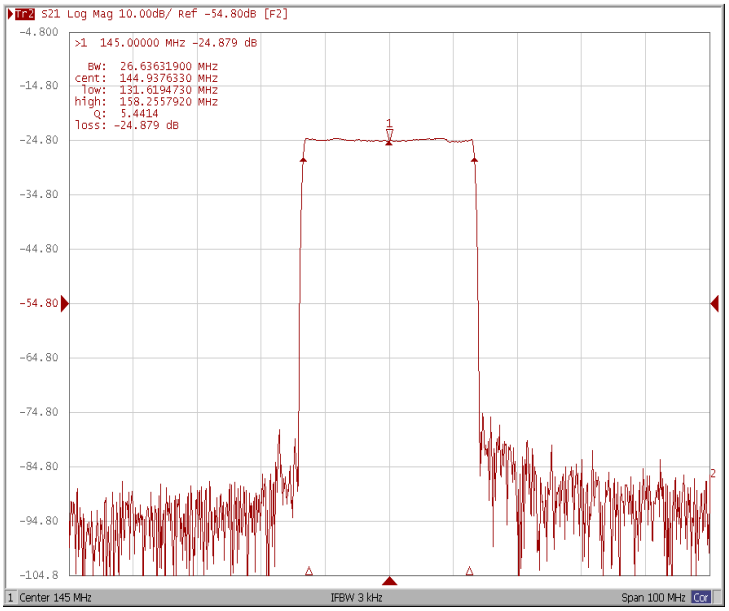
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	145.0	-
Insertion Loss at Fo	dB	-	24.90	27.00
Group Delay Variation (Fo±12.5MHz)	nsec	-	45	80
Absolute Delay	usec	-	2.33	-
Passband Ripple (Fo±12.5MHz)	dB	-	0.65	1.00
Bandwidth at -1dB	MHz	26.10	26.35	-
Bandwidth at -3dB	MHz	-	26.65	-
Bandwidth at -40dB	MHz	-	27.95	28.10
Bandwidth at -50dB	MHz	-	28.07	-
Ultimate Rejection	dB	48	50	-
Temperature coefficient	ppm/°C	-	-72	-

Frequency Response

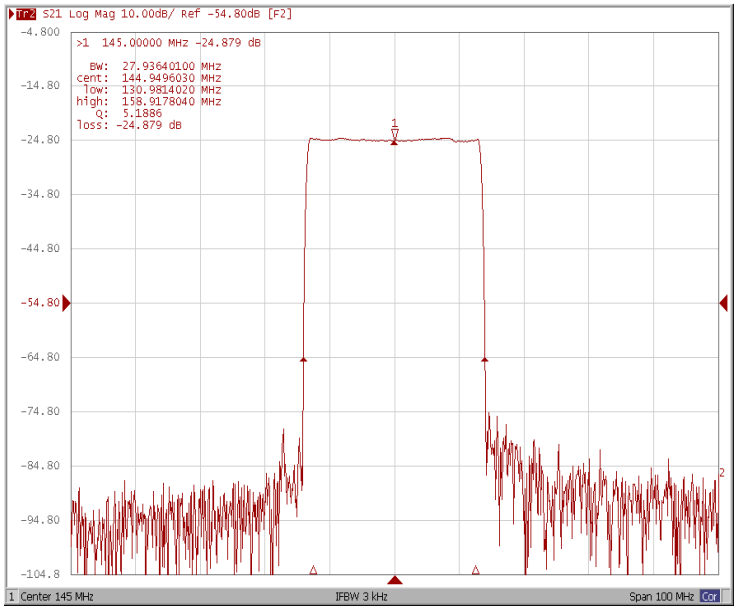
Bandwidth at –1.0 dB



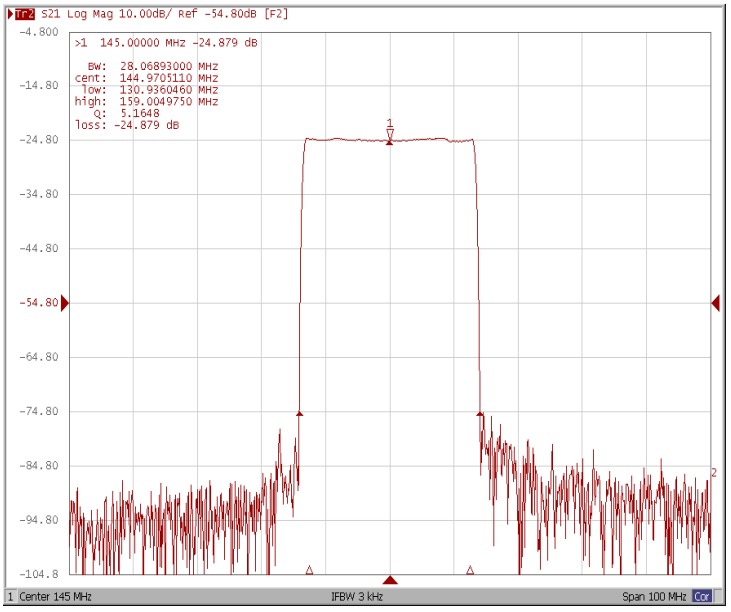
Bandwidth at –3.0 dB



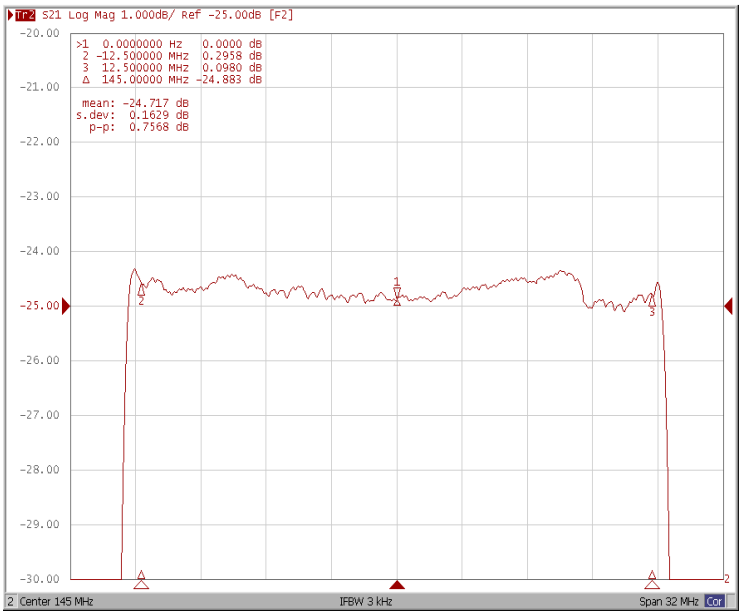
Bandwidth at –40.0 dB



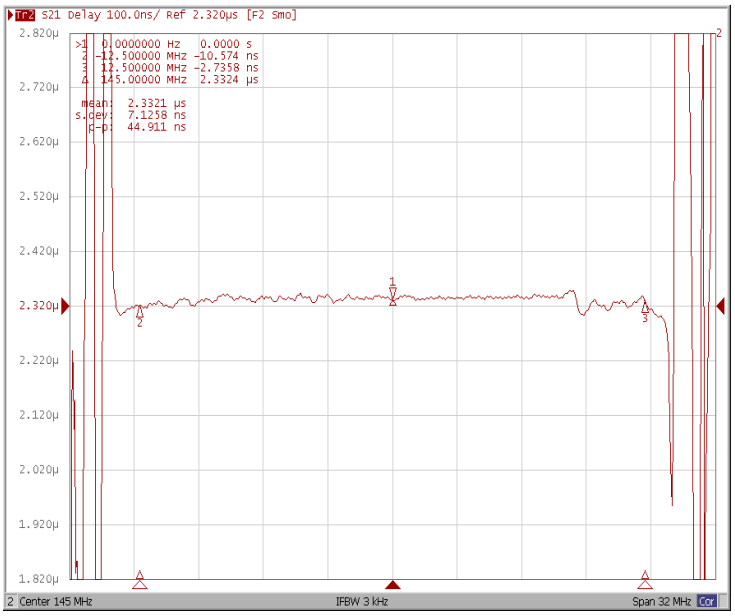
Bandwidth at –50.0 dB



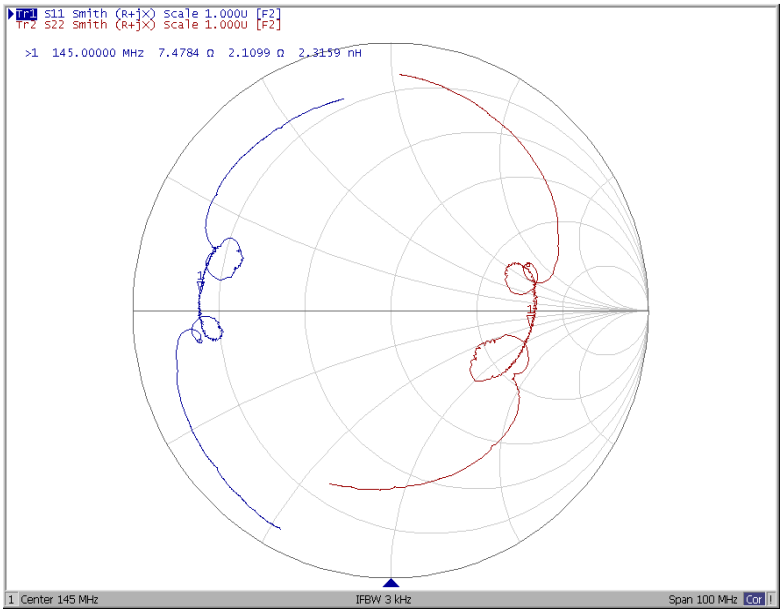
Ripple Variation Fo±12.5MHz



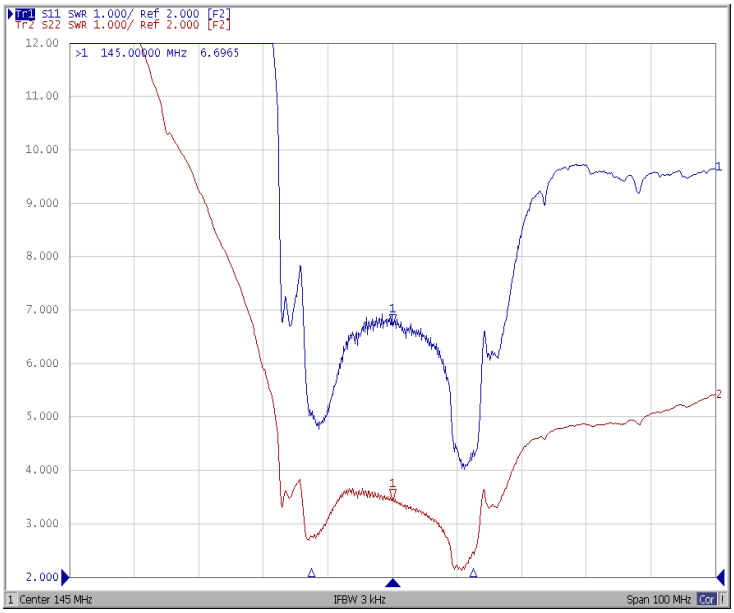
Group Delay Variation Fo±12.5MHz



Smith Chart



VSWR


Tr1 S11 SWR 1.000/ Ref 2.000 [F2]
Tr2 S22 SWR 1.000/ Ref 2.000 [F2]
>1 145.00000 MHz 6.6965
12.00
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1 Center 145 MHz
IFBW 3 kHz
Span 100 MHz