



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF145.0M-C	45.00MHz IF SAW Filter 9.20 MHz Bandwidth

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
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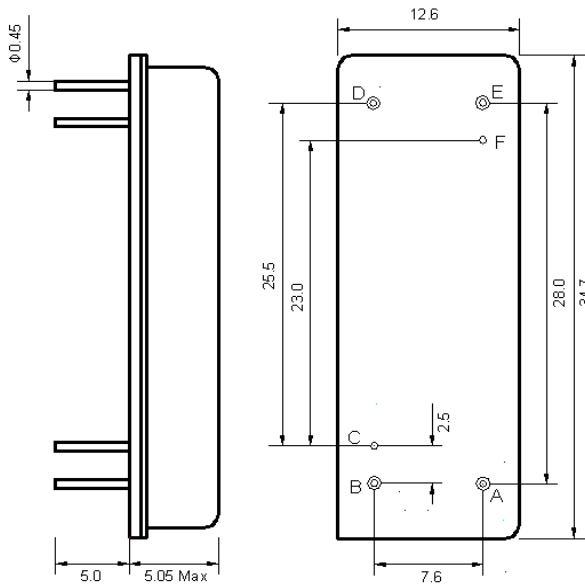
Notes

- 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)



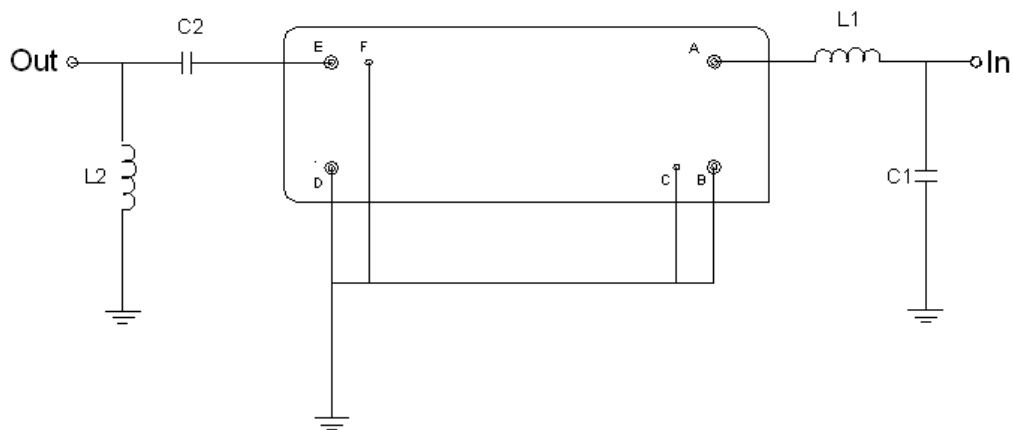


Mechanical Dimensions (mm)



Pin Description	
B, C, D, F	Ground
A	Input
E	Output

Test Circuit



Test Fixture & Values	
Input	L1=27 nH, C1=47 pF
Output	L2=22 nH, C2=68 pF
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.

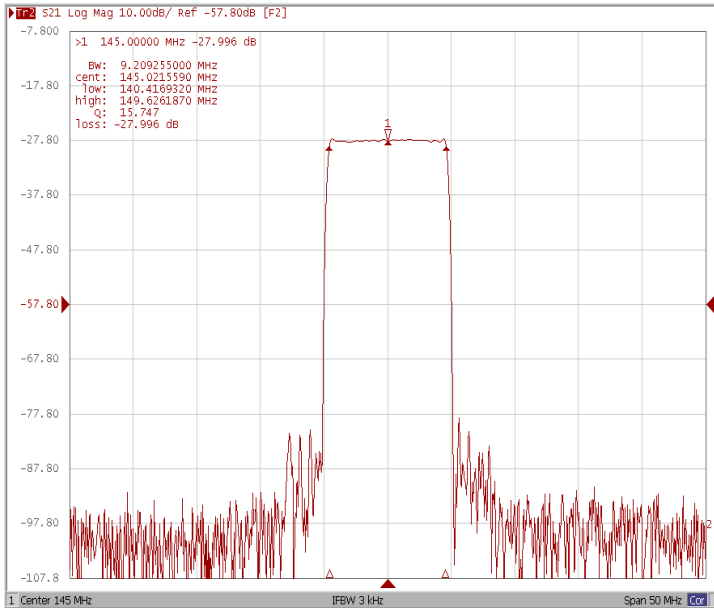
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	145.0	-
Insertion Loss at Fo	dB	-	27.9	30.0
Group Delay Variation (Fo±4.52MHz)	ns	-	146	200
Absolute Delay Time at Fo	us	-	3.96	-
Temperature Coefficient	ppm/°C	-	-18	-
Amplitude Ripple (Fo±4.52MHz)	dB	-	0.67	1.00
Bandwidth at -1dB	MHz	9.04	9.20	-
Bandwidth at -3dB	MHz	-	9.37	-
Bandwidth at -50dB	MHz	-	10.22	-
Relative Attenuation				
Fo ± 5.1MHz~ Fo ± 5.9MHz	dBc	24	45	-
Fo ± 5.9MHz~ Fo ± 9.9MHz	dBc	39	48	-
Fo ± 9.9MHz~ Fo ± 14.9MHz	dBc	39	50	-
Fo ± 14.9MHz~ Fo ± 20.0MHz	dBc	49	62	-
Ultimate Rejection	dB	-	50	-

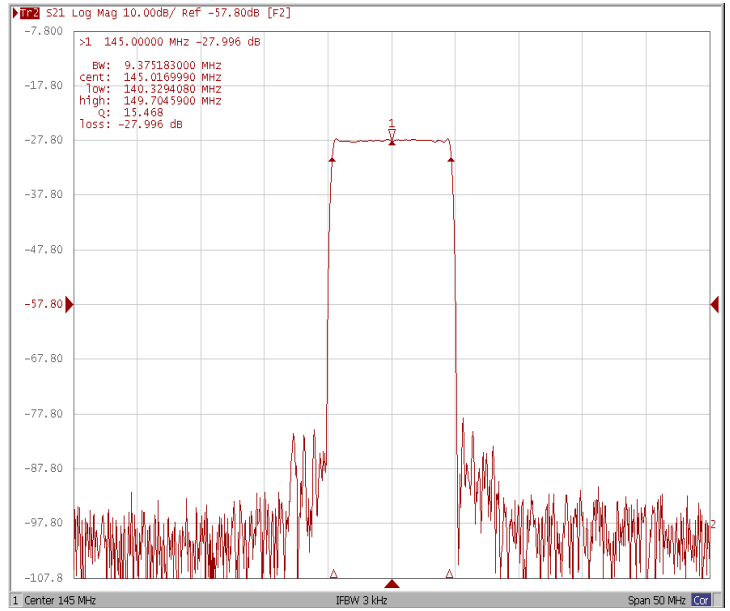


Frequency Response

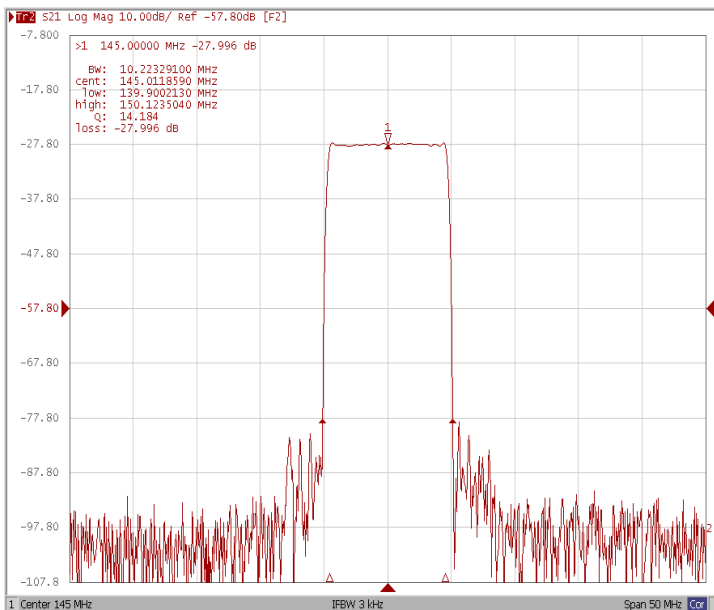
Bandwidth at -1.0 dB



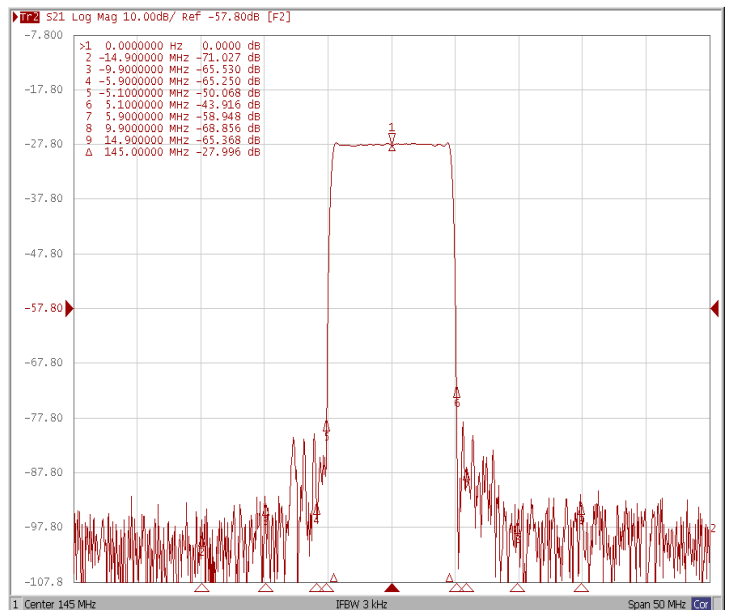
Bandwidth at -3.0 dB



Bandwidth at -50.0 dB

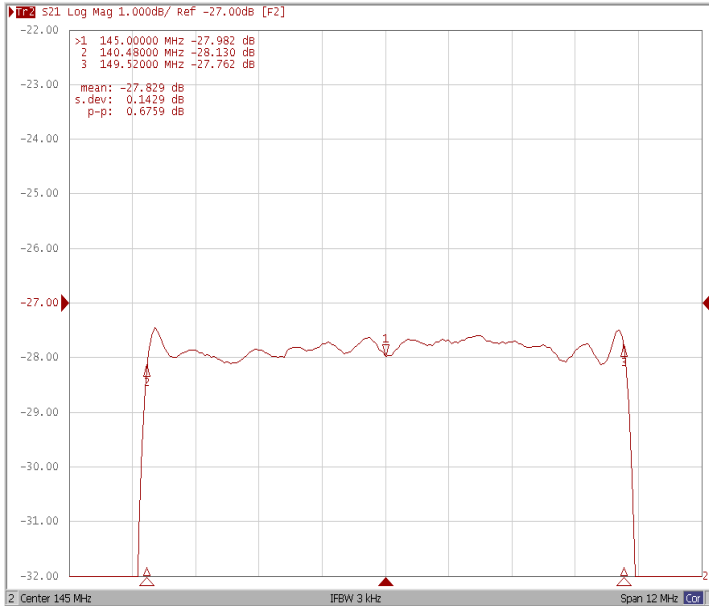


Relative Attenuation

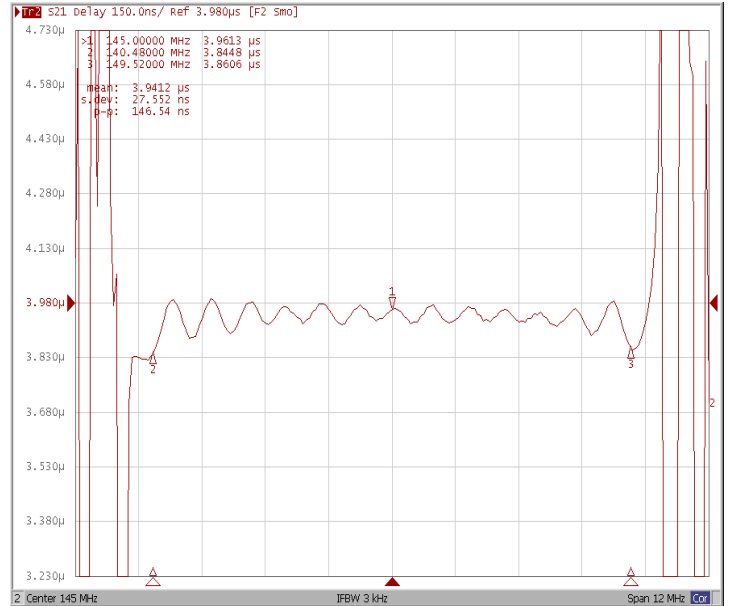




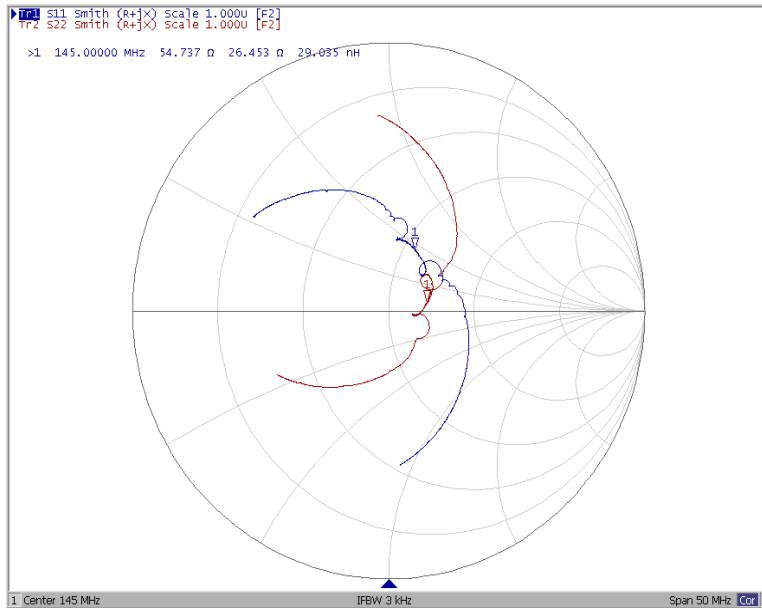
Ripple Variation Fo±4.52MHz



Group Delay Variation Fo±4.52MHz



Smith Chart





VSWR

