



REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF75.0M-30C	75.0MHz IF SAW Filter 29.1 MHz Bandwidth

### Specification Contents

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

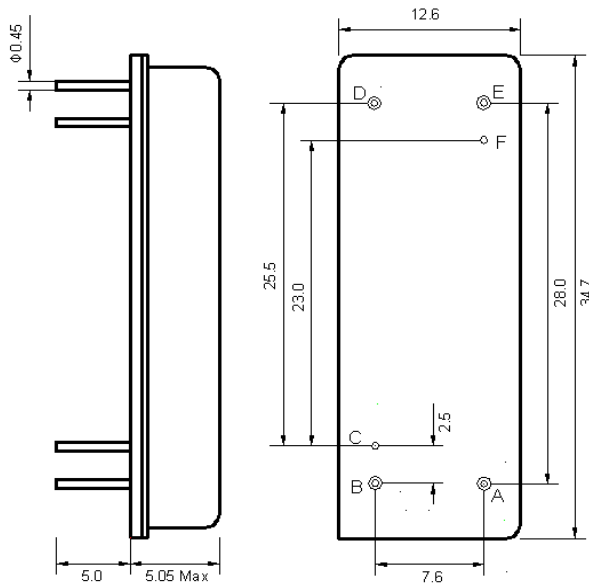
### Notes

- 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)



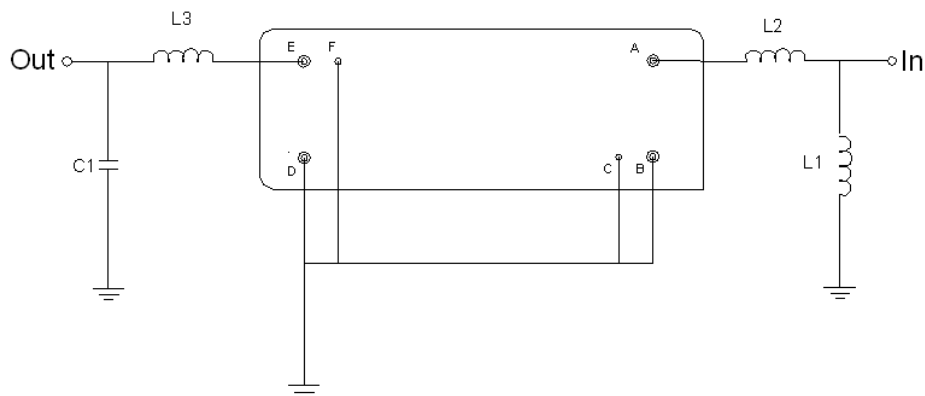


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=150 nH, L2=82 nH
Output	L2=180 nH, C1=8 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) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	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.

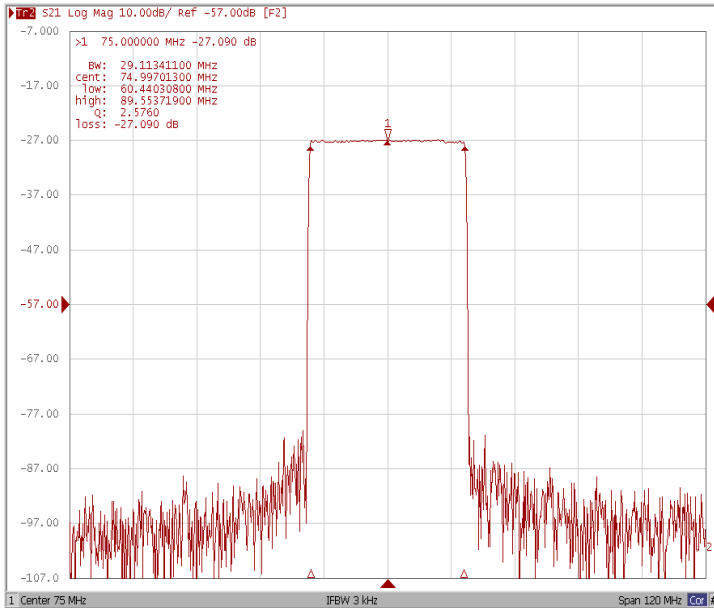
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	27.0	29.0
Group Delay Variation (Fo±14.52MHz)	ns	-	48	80
Absolute Delay Time at Fo	us	-	3.35	-
Temperature Coefficient	ppm/°C	-	-72	-
Amplitude Ripple (Fo±14.52MHz)	dB	-	0.89	-
Bandwidth at -1dB	MHz	29.00	29.11	-
Bandwidth at -3dB	MHz	-	29.32	-
Bandwidth at -40dB	MHz	-	30.26	30.35
Relative Attenuation				
@Fo ±15.1MHz	dBc	-	35	-
Ultimate Rejection	dB	-	50	-

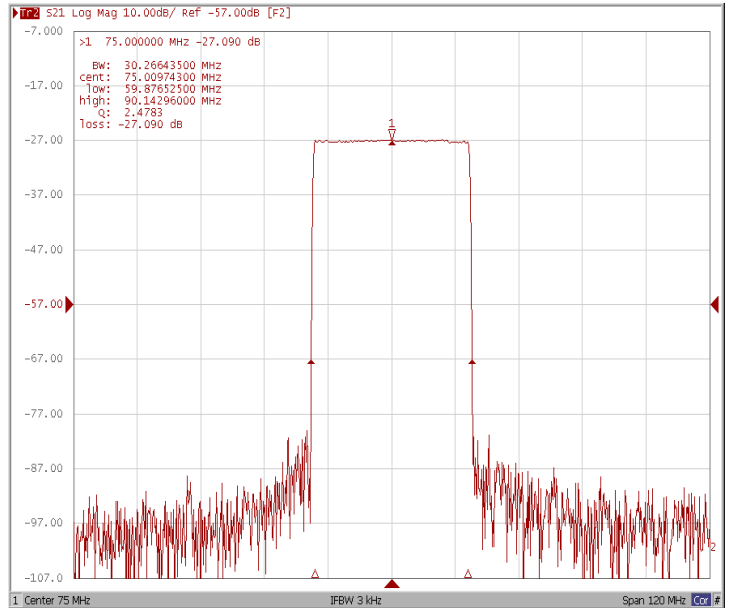


### Frequency Response

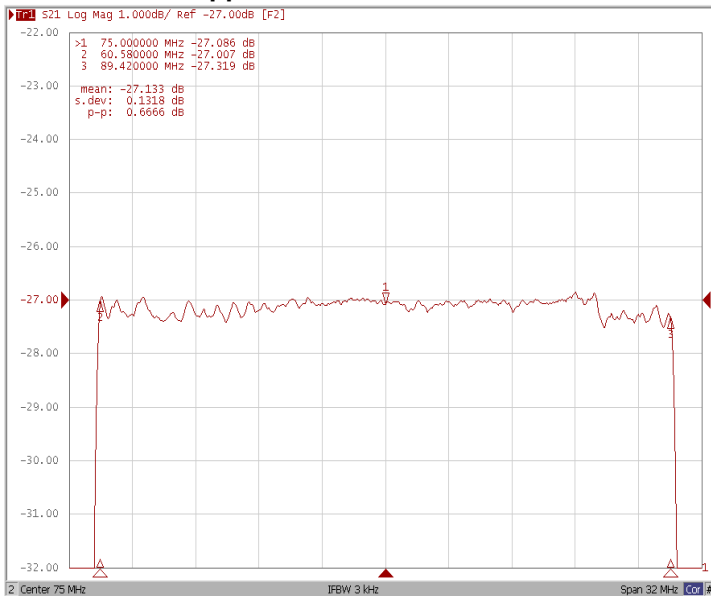
Bandwidth at -1.0 dB



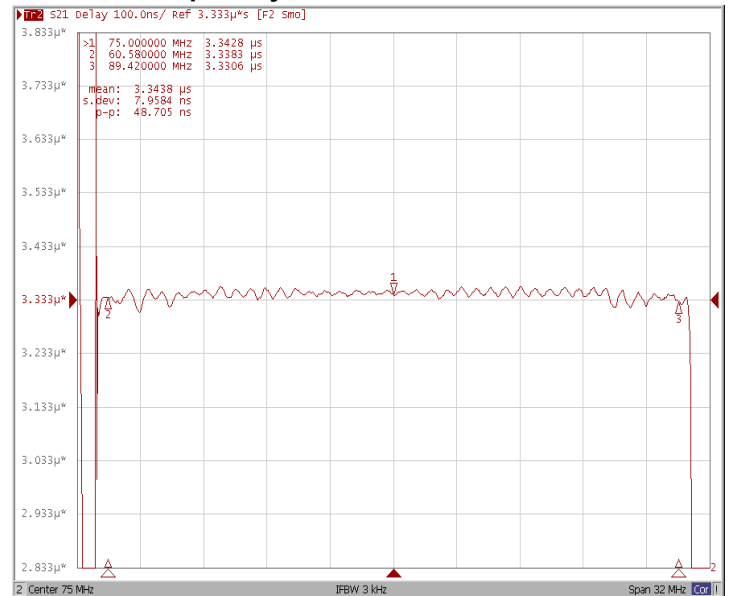
Bandwidth at -40.0 dB



Ripple Variation Fo±14.42MHz

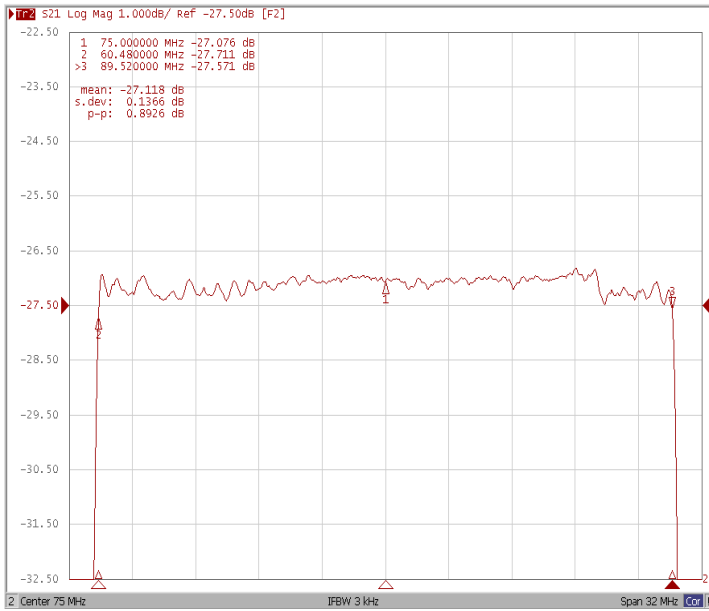


Group Delay Variation Fo±14.42MHz

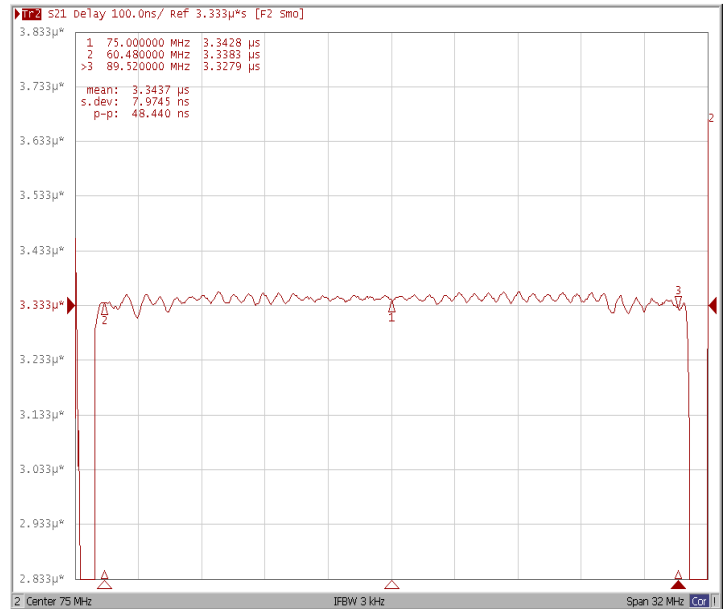




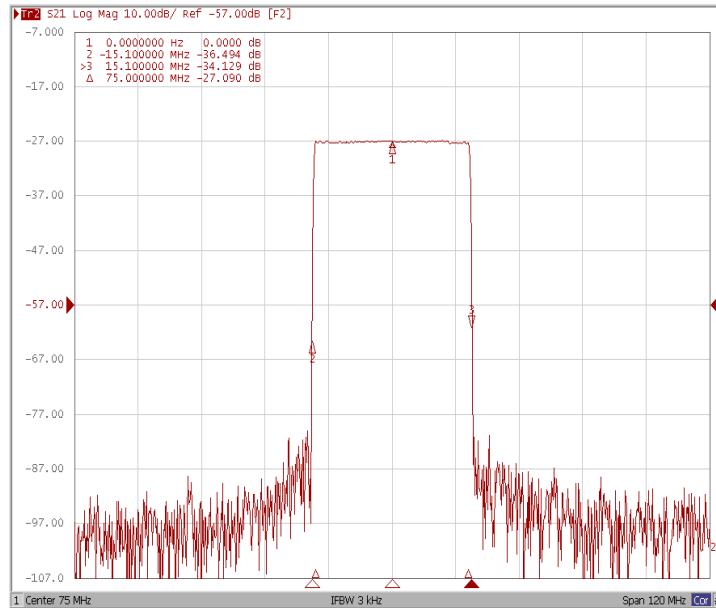
**Ripple Variation Fo±14.52MHz**



**Group Delay Variation Fo±14.52MHz**



**Relative Attenuation**





### Smith Chart

