



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-IF133.5M-26A	133.5 MHz IF SAW Filter 26.2 MHz Bandwidth

## Specification Contents

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

## 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)



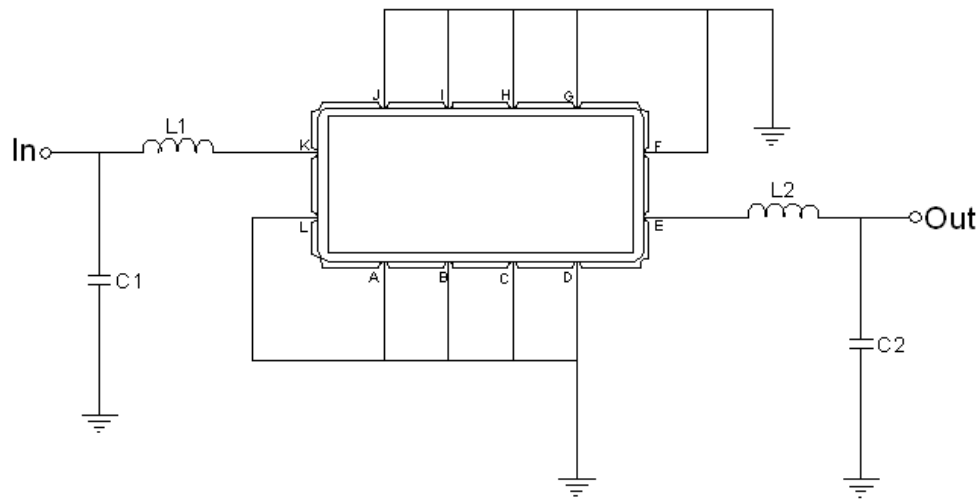


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=39 nH, C1=20 pF
Output	L2=100 nH, C2=24 pF
Source/Load Impedance	50 $\Omega$



## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	0		70
Storage Temperature Range	°C	-30	-	80
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.

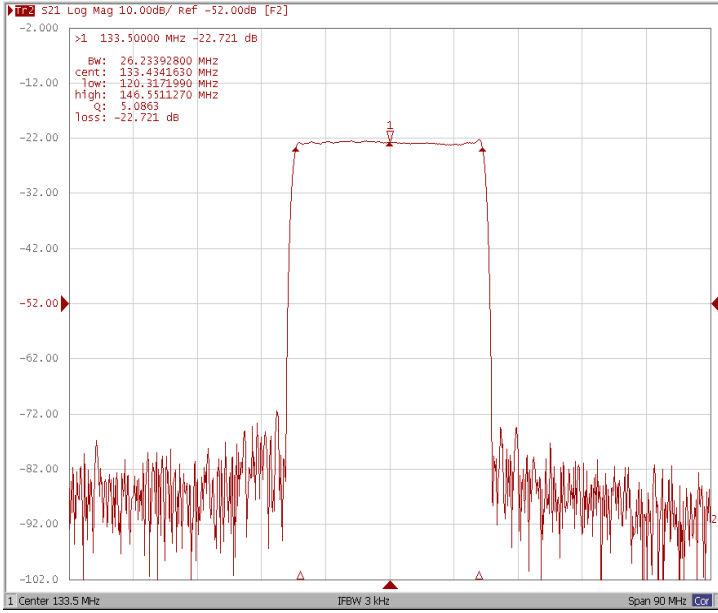
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	133.50	-
Insertion Loss at Fo	dB	-	22.7	25.0
Group Delay Variation (Fo±12.5MHz)	ns	-	40	80
Absolute Delay	us	-	1.42	-
Passband Ripple (Fo±12.5MHz)	dB	-	0.90	1.2
Bandwidth at -1dB	MHz	24.96	26.20	-
Bandwidth at -10dB	MHz	-	27.50	27.90
Bandwidth at -20dB	MHz	-	28.10	28.40
Bandwidth at -30dB	MHz	-	28.45	28.70
Bandwidth at -45dB	MHz	-	28.80	
Ultimate Rejection	dB	45	50	-
Temperature Coefficient	ppm/°C	-	-72	-

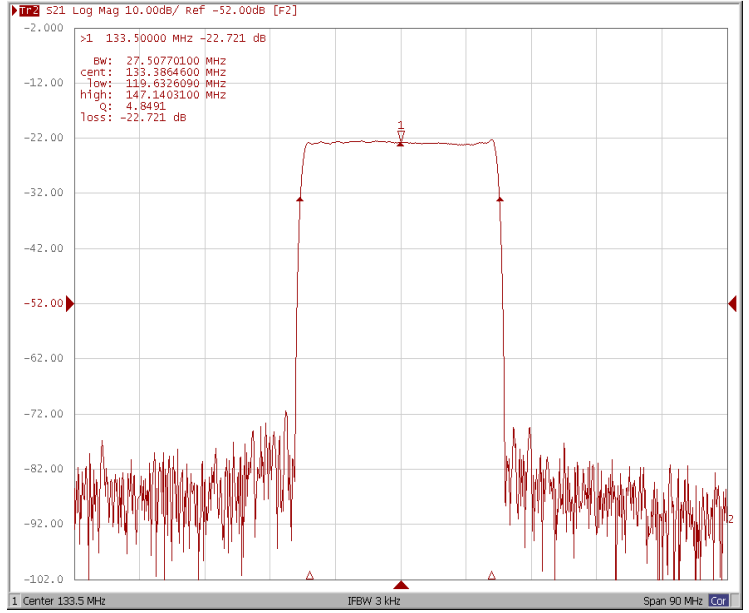


## Frequency Response

### Bandwidth at -1.0 dB



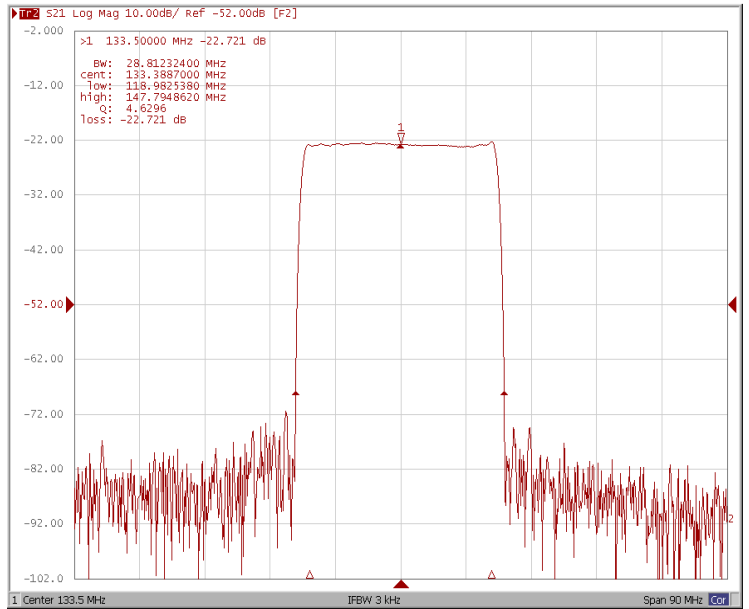
### Bandwidth at -10.0 dB



### Bandwidth at -20.0 dB

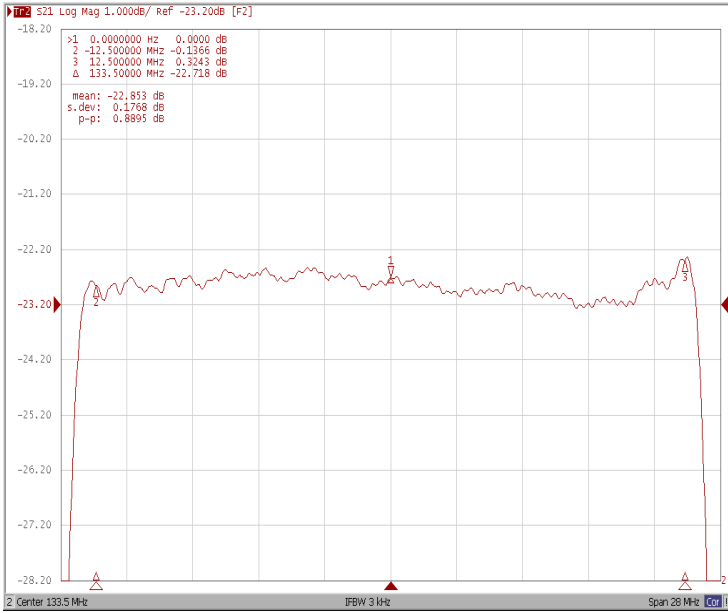


### Bandwidth at -45.0 dB

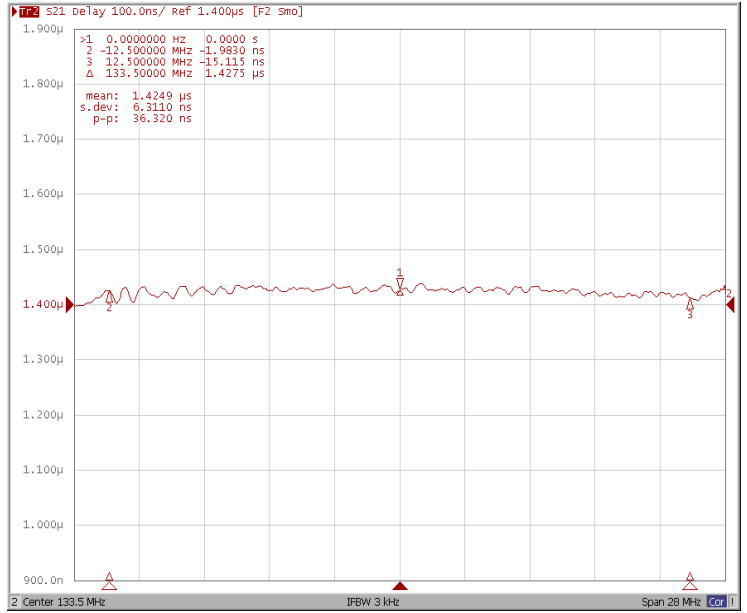




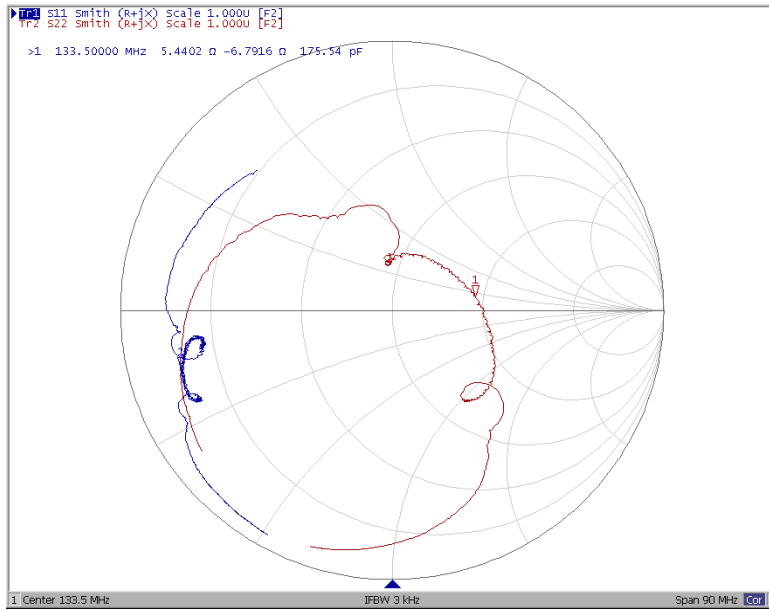
### Ripple Variation Fo±12.5MHz



### Group Delay Variation Fo±12.5MHz



### Smith Chart





### VSWR

