



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2012


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
815-IF43.5M-C	43.5 MHz IF SAW Filter

Specification Contents

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

Notes

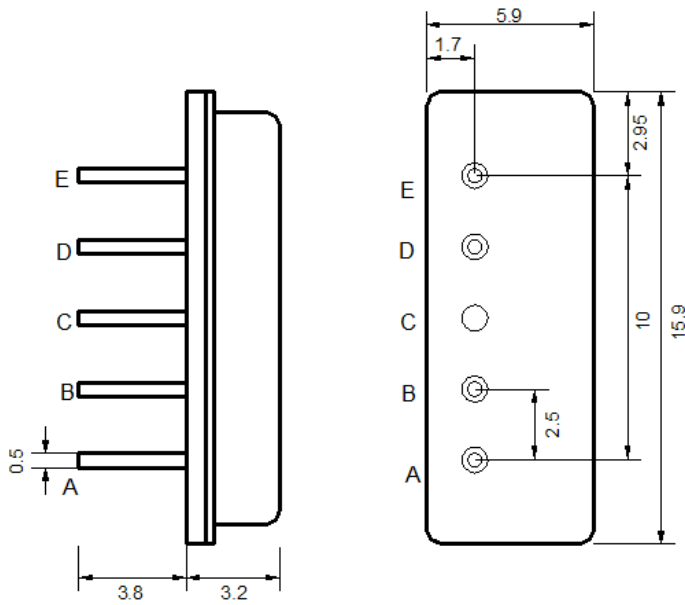
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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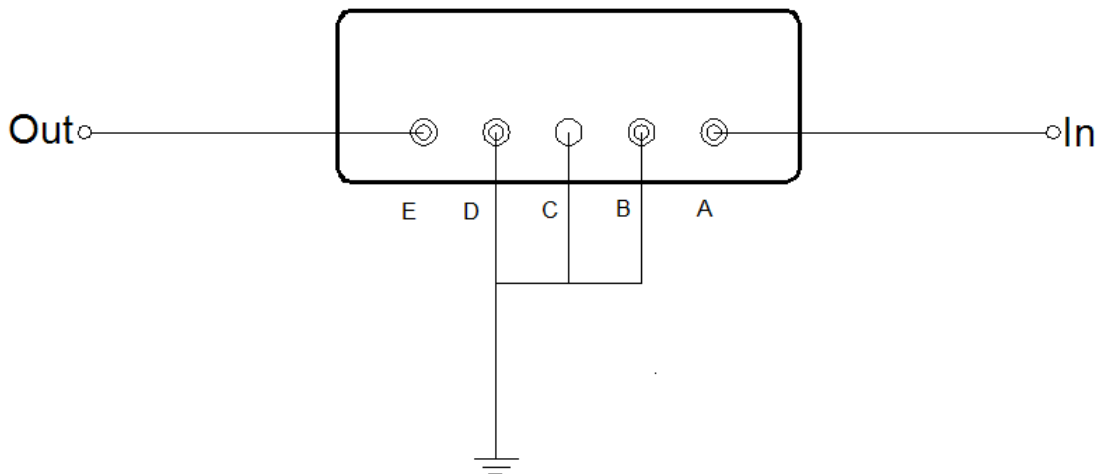


Mechanical Dimensions (mm)



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

Test Circuit



Nominal Source Impedance = 50Ω

Nominal Load Impedance = 50Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	80
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	-

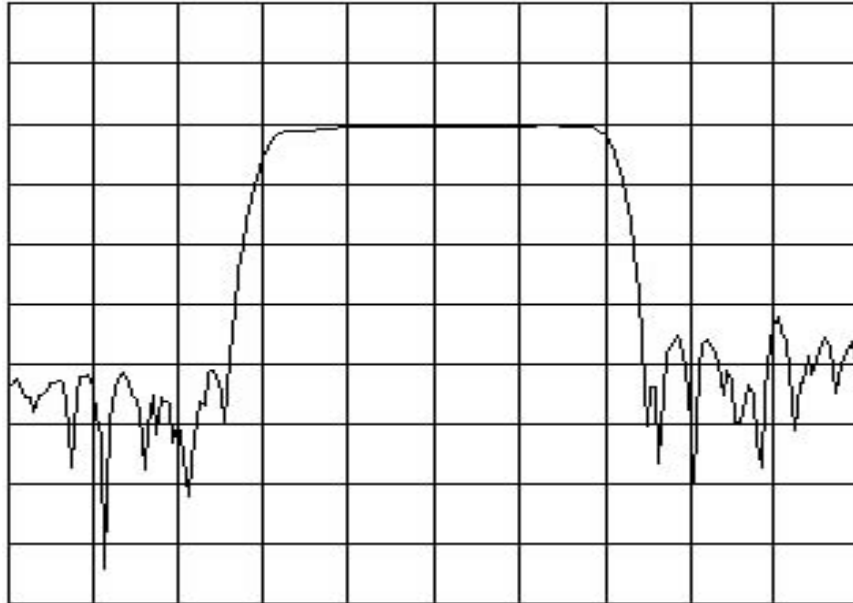
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).
 Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum	
Reference Level Frequency (Fo)	MHz	-	43.5	-	
Insertion Loss at Fo	dB	-	23.5	26.0	
Group Delay Variation	nsec	-	80	-	
PassBand Ripple Variation	dB	-	0.6	1.0	
Relative Attenuation					
Picture carrier	45.75MHz	dB	-1.3	-0.3	0.7
	46.50MHz	dB	0.6	1.4	2.6
Sound carrier	41.25MHz	dB	-1.2	0.4	0.8
Adjacent picture carrier	39.75MHz	dB	30.0	38.0	-
Adjacent sound carrier	47.25MHz	dB	30.0	38.0	-
Lower sidelobe	35.00~ 39.25MHz	dB	30.0	36.0	-
Upper sidelobe	47.75~ 55.00MHz	dB	30.0	31.5	-
Reflected wave signal suppression(2.0~6.0 us aftermain)	dB	40	48		
Feedthrough signal suppression(2.0~6.0 us aftermain)	dB		43		
Temperature Coefficient	ppm/K	-	-72	-	



Frequency Response



Horizontal: 1.5 MHz/Div

Vertical: 10 dB/Div



Horizontal: 0.8 MHz/Div

Vertical: 1 dB/Div

Vertical: 100 ns/Div