



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
816-IF43.75M-A	43.75 MHz IF SAW Filter 6.0 MHz Bandwidth

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)





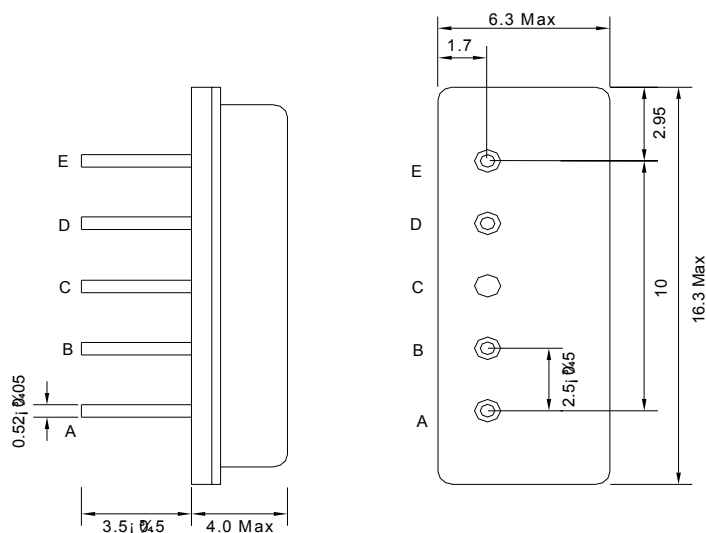
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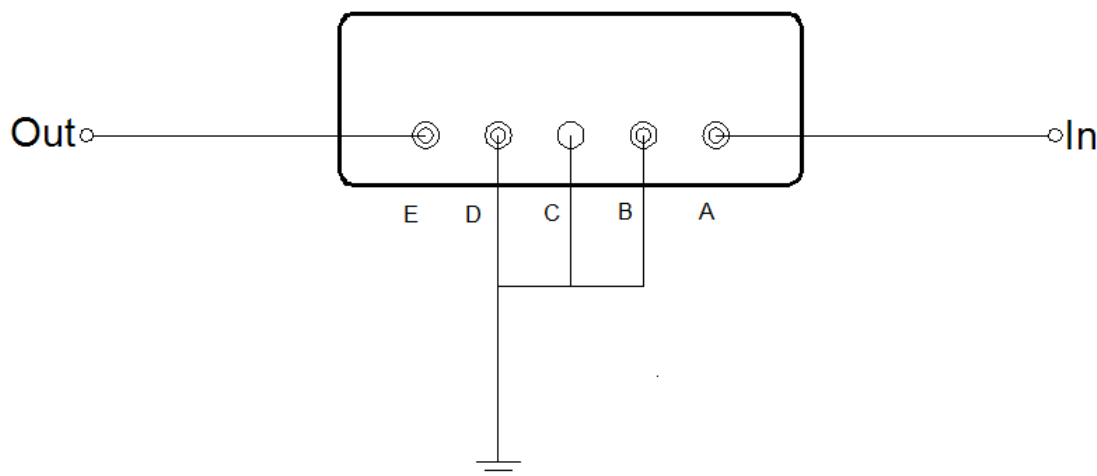
Mechanical Dimensions (mm)



Pin Description

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

Test Circuit



Nominal Source Impedance = 50Ω

Nominal Load Impedance = 2kΩ/3pF

**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	-	2kΩ/3pF	-

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	43.75	-
Insertion Loss at Fo	dB	-	15.0	17.0
Group Delay Variation	nsec	-	40	-
Temperature Coefficient	ppm/°C	-	-72	-
Bandwidth at -3.0 dB	MHz	-	6.0	-
Bandwidth at -30.0 dB	MHz	-	7.6	-
Attenuation: (Ref.; 43.75MHz)				
41.22 MHz	dB	-0.7	0.3	1.3
46.28 MHz	dB	-0.8	0.2	1.2
40.75 MHz	dB	1.5	2.5	3.5
43.75 MHz (Reference frequency)	dB	-	0	-
46.75 MHz	dB	1.5	2.5	3.5
39.75 MHz	dB	38	43	-
47.75 MHz	dB	38	42	-
Relative Attenuation:				
35.0 ~ 39.0 MHz	dB	42	45	-
39.0 ~ 39.75 MHz	dB	37	41	-
47.75 ~ 50.0 MHz	dB	37	40	-
50.0 ~ 55.0 MHz	dB	42	45	-



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