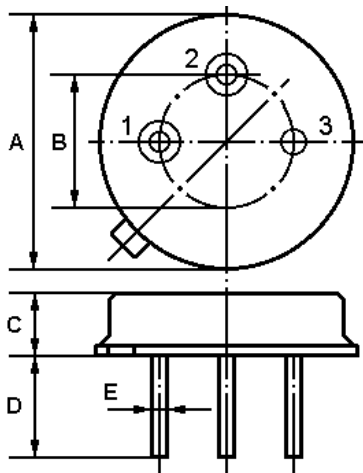


The **ACTF433E/433.92/TO39** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) filter in a low-profile metal **TO-39** case designed to provide front-end selectivity in **433.920** MHz receivers. Receiver designs using this filter include superhet with 10.7 MHz or 500 kHz IF, direct conversion and superregen.

1. Package Dimension (TO-39)

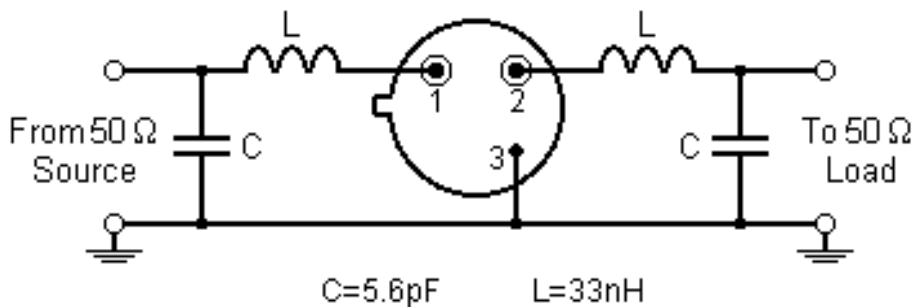


2.

Pin	Configuration
1	Input / Output
2	Output / Input
3	Case Ground

Dimension	Data (unit: mm)
A	9.30±0.20
B	5.08±0.10
C	3.40±0.20
D	3±0.20/5±0.20
E	0.45±0.20

3. Test Circuit



In keeping with our ongoing policy of product evolution and improvement, the above specification is subject to change without notice.

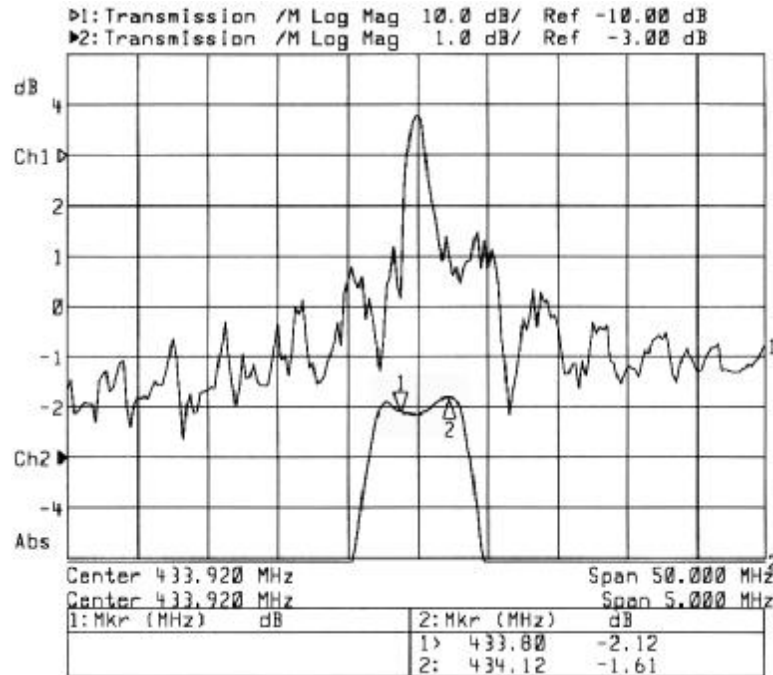
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For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK

<http://www.actcrystals.com>

4. Typical Frequency Response



5. Performance

5-1. Maximum Ratings

Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	0	VDC
Operating Temperature	-45 to +120	°C
Storage Temperature	-45 to +120	°C

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5-2.Electronic Characteristics

Reference temperature: $T_A = -45 \dots +95 \text{ }^\circ\text{C}$

Characteristic	Minimum	Typical	Maximum	Units	
Centre Frequency (Centre frequency between 3dB points)	f_C	433.920		MHz	
Minimum insertion Loss 433.80 434.12 MHz	IL_{min}	--	2.0	4.0	dB
3dB Pass bandwidth (relative to IL_{min})	BW_3	670	730	790	kHz
Pass band (relative to IL_{min})					
433.76 434.08 MHz	--	1.0	2.0	dB	
433.74 434.10 MHz	--	1.0	3.0	dB	
433.68 434.16 MHz	--	1.5	6.0	dB	
Relative attenuation (relative to IL_{min})					
10.00 414.00 MHz	45	50	--	dB	
414.00 428.00 MHz	35	40	--	dB	
428.00 432.84 MHz	15	20	--	dB	
434.92 442.00 MHz	10	15	--	dB	
442.00 550.00 MHz	35	40	--	dB	
550.00....1000.00 MHz	45	50	--	dB	

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!

1. The frequency f_C is defined as the midpoint between the 3dB frequencies.
2. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50 Ω test system with $VSWR \leq 1.2:1$. The test fixture L and C are adjusted for minimum insertion loss at the filter centre frequency, f_C . Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.
3. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
4. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
5. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
6. Our liability is only assumed for the Surface Acoustic Wave (SAW) component(s) per se, not for applications, processes and circuits implemented within components or assemblies.

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