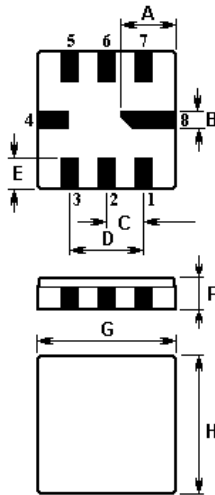The **ACTF0015/915.0/QCC8C** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) filter in a surface-mount ceramic **QCC8C** case designed to provide front-end selectivity in **915.000** MHz receivers. Receiver designs using this filter include superhet with 10.7 MHz or 500 kHz IF, direct conversion and superregen.
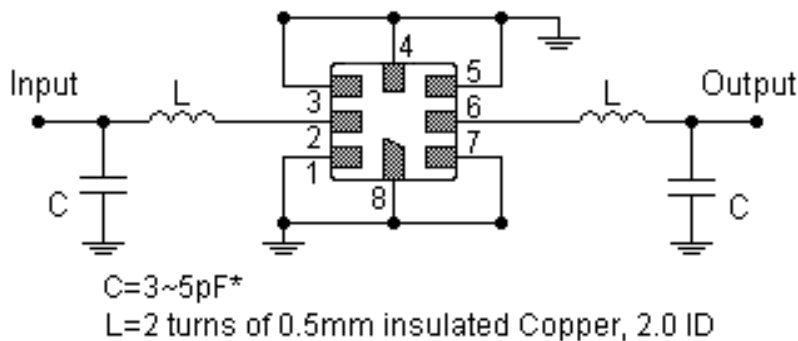
1.Package Dimension (QCC8C)   **2.**

Pin	Connection
1	Input / Output
5	Output / Input
2,3,6,7	To be Grounded
4,8	Case Ground

Sign	Data (unit: mm)	Sign	Data(unit:mm)
A	2.08	E	1.20
B	0.60	F	1.35
C	1.27	G	5.00
D	2.54	H	5.00

3.Test Circuit

C=3~5pF*
L=2 turns of 0.5mm insulated Copper, 2.0 ID

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

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 Rating

Rating		Value	Unit
Input Power Level	P_{in}	10	dBm
DC Voltage	V_{DC}	12	V
Storage Temperature Range	T_{stg}	-40 to +85	°C
Operating Temperature Range	T_A	-10 to +60	°C

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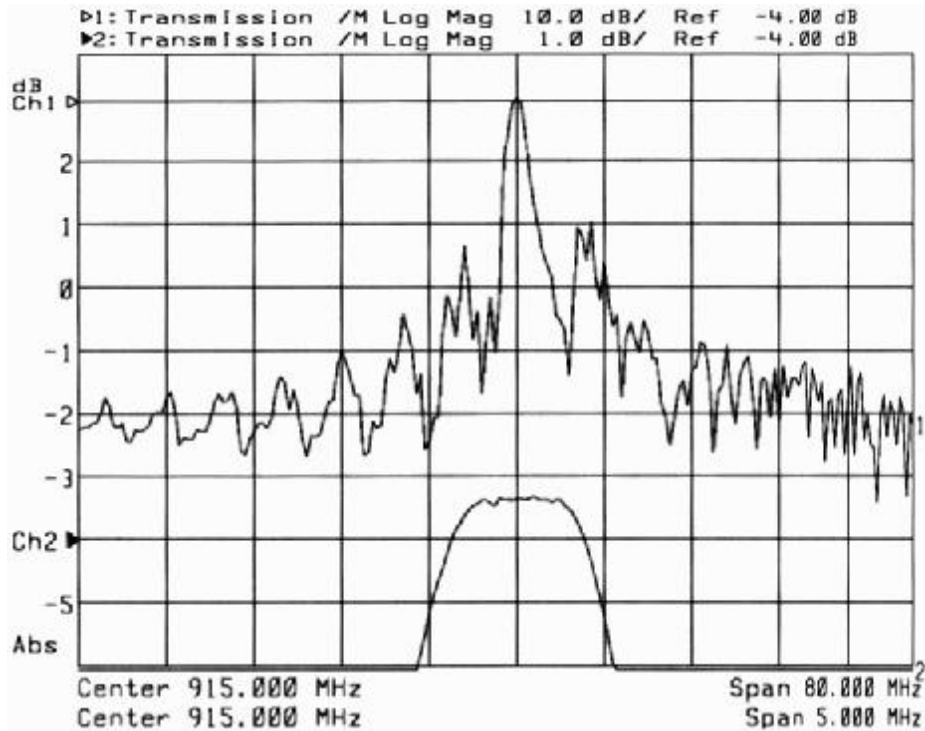**For quotations or further information please contact us at:**

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5-2.Electronic Characteristics

Characteristic		Minimum	Typical	Maximum	Unit
Centre Frequency (Centre frequency between 3dB points) f_C			915.000		MHz
Insertion Loss IL		--	4.0	5.5	dB
3dB Pass band BW_3			1,200		kHz
Rejection	at $f_C \bullet$ 21.4MHz (Image)	30	42	--	dB
	at $f_C \bullet$ 10.7MHz (LO)	20	35	--	
	Ultimate	--	60	--	
Temperature	Turnover Temperature T_O	25		55	°C
	Turnover Frequency f_O		f_C		MHz
	Frequency Temperature Coefficient FTC		0.032		ppm/°C^2
Frequency Aging Absolute Value during the First Year $|fA|$			10		ppm/yr

ℹ **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 50Ω test system with VSWR≤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. Frequency aging is the change in f_C with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temperatures above +65°C. Typically, aging is greatest the first year after manufacture, decreasing in subsequent years.
5. Turnover temperature, T_0, is the temperature of maximum (or turnover) frequency, f_0. The nominal frequency at any case temperature, T_C, may be calculated from: $f = f_0 [1 - FTC (T_0 - T_C)^2]$.
6. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
7. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
8. 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.

Issue : 1.1 C1

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