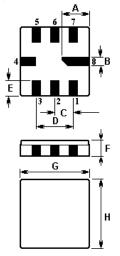


The ACTF0015/915.0/QCC8C is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter in a surface-mount ceramic QCC8C case designed to provide front-end selectivity in 915.000 MHz receivers. Receiver designs using this filter include superhet with 10.7 MHz or 500 kHz IF, direct conversion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

1.Package Dimension (QCC8C)

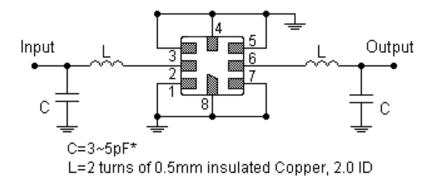


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Pin	Connection		
1	Input / Output		
5	Output / Input		
2,3,6,7	To be Grounded		
4,8	Case Ground		

Sign	Data (unit: mm)	Sign	Data(unit:mm)		
А	2.08	ш	1.20		
В	0.60	F	1.35		
С	1.27	G	5.00		
D	2.54	Н	5.00		

3.Test Circuit



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

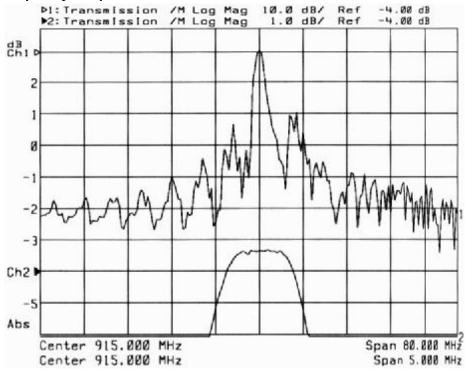
ISO9001: 2000 Registered - Registration number 6830/2 For quotations or further information please contact us at: 3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK <u>http://www.actcrystals.com</u>

Issue : 1 C1 Date : SEPT 04



Tel : +44 118 979 1238 Fax : +44 118 979 1283 Email: <u>info@actcrystals.com</u>

4.Typical Frequency Response



5.Performance

5-1.Maximum Rating

Rating		Value	Unit
Input Power Level	$P_{\sf in}$	10	dBm
DC Voltage	V _{DC}	12	V
Storage Temperature Range	$T_{\rm stg}$	-40 to +85	°C
Operating Temperature Range	T _A	-10 to +60	°C

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5-2. Electronic Characteristics

Characteristic		Minimum	Typical	Maximum	Unit	
Centre Frequen (Centre frequen	cy cy 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 • 21.4MHz (Image)		30	42		dB
	at f _C • 10.7MHz (LO)		20	35		
	Ultimate			60		
	Turnover Temperature	To	25		55	°C
	Turnover Frequency	f _O		fc		MHz
	Frequency Temperature Coefficient	FTC		0.032		ppm/°C ²
Frequency Aging Absolute Value during the First Year fA		ır <i>fA</i>		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.

Date : SEPT 04

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