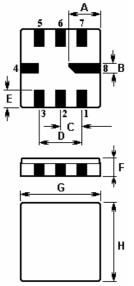


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The **ACTF3031/315.0/QCC8C** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) RF filter in a surface-mount ceramic **QCC8C** case for domestic wireless receivers.

# 1. Package Dimension (QCC8C)

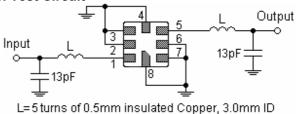


Pin	Connection			
1	Input			
2	Input Ground			
5	Output			
6	Output Ground			
3, 7	to be Grounded			
4, 8	Case Ground			

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

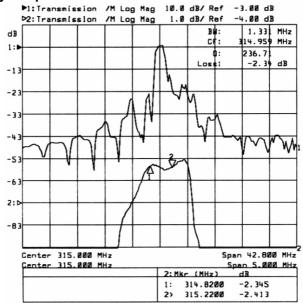
# 2. Marking

### 3. Test Circuit



Laser Marking

# 4. Typical Frequency Response



#### Please note that all parameters can not necessarily be specified in the same device

In line with our ongoing policy of product evolvement and improvement, the above specification may subject to change without notice. For quotations or further information please contact us at: 3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG412EY, UK.

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#### 5. Performance

### 5-1. Maximum Ratings

Rating	Value	Unit	
Input Power Level	P	10	dBm
DC Voltage	$V_{ m DC}$	12	V
Storage Temperature Range	$\mathcal{T}_{stg}$	-40 to +125	
Operable Temperature Range	T <sub>A</sub>	-40 to +125	

### 5-2. Electronic Characteristics

Characteristic		Minimum	Typical	Maximum	Unit
Center Frequency @ 25	$f_{\mathbb{C}}$		315		MHz
Insertion Loss (314.82 315.22 MHz)	IL		2.5	4.5	dB
3dB Bandwidth	BW <sub>3</sub>	1.0	1.3		MHz
Relative Attenuation (relative to <i>IL</i> )  10 270 MHz  270 309 MHz  309 314 MHz  316 335 MHz  335 400 MHz  400 1000 MHz	$lpha_{ m rel}$	45 30 15 10 35 45	55 35 20 15 42 60	   	dB dB dB dB dB
Passband Ripple (314.82 315.22 MHz)	IL			2.0	dB
Frequency Aging Absolute Value during the First Year	fA		≤10		ppm/yr

(i) CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!

## NOTE:

- 1. The frequency  $f_{\mathbb{C}}$  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.
- 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. 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.