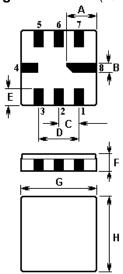


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The ACTF552B/446.0/QCC8C is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter in a surface-mount ceramic QCC8C case for FRS & PMR mobile radio applications with centre frequency 446.000 MHz.

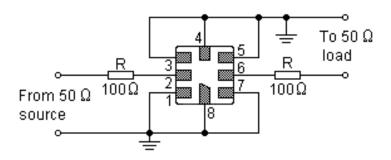
## 1. Package Dimension (QCC8C)



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

Sign	Data (unit: mm)	Sign	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		

#### 3. Test Circuit



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

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For quotations or further information please contact us at:

 ${\bf 3}\ {\bf The}\ {\bf Business}\ {\bf Centre}, \ {\bf Molly}\ {\bf Millars}\ {\bf Lane},\ {\bf Wokingham},\ {\bf Berks},\ {\bf RG41}\ {\bf 2EY},\ {\bf UK}$ 

Date : SEPT 04

Issue: 1 C1



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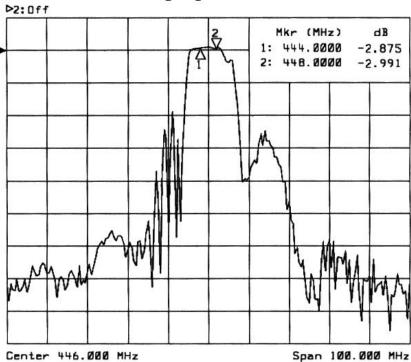
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## 4. Typical Frequency Response

▶1:Transmission /M Log Mag 10.0 dB/ Ref -3.50 dB



### 5. Performance

5-1. Maximum Ratings

Rating	Value	Unit	
Input Power Level	Р	0	dBm
DC Voltage	$V_{ m DC}$	10	V
Operable Temperature Range	$T_{A}$	-10 to +65	°C
Storage Temperature Range	$T_{ m stg}$	-40 to +85	°C

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#### 5-2. Electronic Characteristics

Characteristic		Minimum	Typical	Maximum	Unit
Centre Frequency	f <sub>C</sub>		446.000		MHz
User Signal Band	BW		±2.0		MHz
Insertion Loss f <sub>C</sub> ±2.0MHz	IL		3.0	4.5	dB
Absolute Attenuation $ \begin{array}{cccc} DC & to & f_C & -20.0M \\ f_C & +25.0MHz & to & fc +200.0M \end{array} $		42 48	54 60	 	dB
Pass Band Ripple f <sub>C</sub> ±2.0MHz	Δα			2.0	dB
Input / Output Impedance (Nominal)		150Ω // 0pF			

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

- 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 50 Ω 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<sub>C</sub>. 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.

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

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