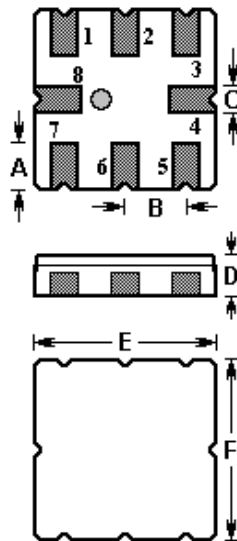


The **ACTF9019/1090/QCC8B** is a low-loss, compact and economical “surface acoustic wave” (SAW) RF filter in an **SMD QCC8B** package for Digital Set Top Box applications.

1. Package Dimension (QCC8B)

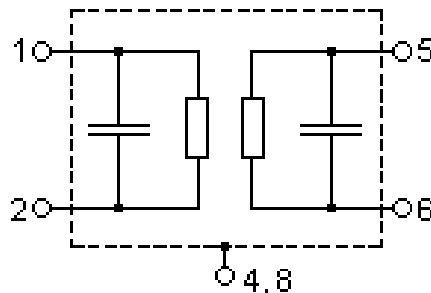


2.

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

Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	1.00	D	1.50
B	1.27	E	3.80
C	0.60	F	3.80

3. Equivalent LC Model



In keeping with our ongoing policy of product evolution 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:

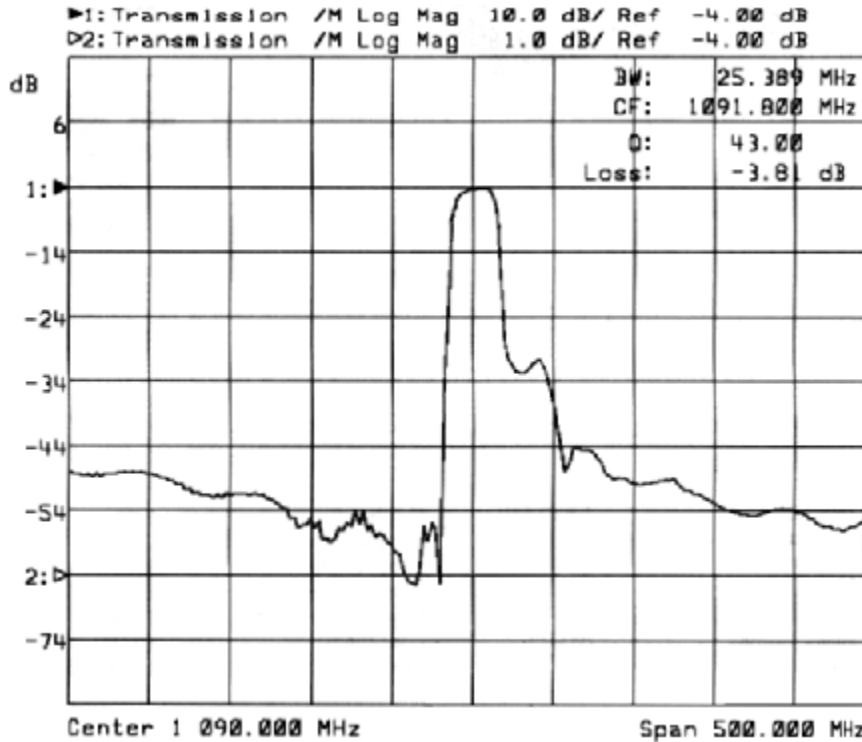
3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK

<http://www.actcrystals.com>

Issue : 1 C1

Date : SEPT 04

4. Typical Frequency Response



5. Performance

5-1. Maximum ratings

Rating	Value	Units
Input Power Level	0	dBm
DC Voltage	0	V
Operable temperature range	-40 to +85	°C
Storage temperature range	-40 to +85	°C

In keeping with our ongoing policy of product evolution 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

<http://www.actcrystals.com>

5-2.Electronic characteristics

Characteristic	Min.	Typ.	Max.	Units
Centre Frequency f_c		1090.0		MHz
Minimum Insertion Loss 1084.00 1096.00 MHz IL_{min}	3.5	4.0	5.5	dB
Ripple in passband 1084.00 1096.00 MHz $\Delta \alpha$		1.0	3.0	dB
Relative attenuation (relative to IL_{min}) α_{rel}				dB
840.00 $f_c - 75.00$ MHz	36.0	42.0		
$f_c - 75.00$ $f_c - 30.00$ MHz	44.0	50.0		
$f_c + 30.00$ $f_c + 60.00$ MHz	22.0	27.0		
$f_c + 60.00$ $f_c + 175.00$ MHz	35.0	40.0		
$f_c + 175.00$. 1340.00 MHz	42.0	50.0		
Input / Output Impedance (Nominal)	--	50	--	Ω

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 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.

In keeping with our ongoing policy of product evolution 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

<http://www.actcrystals.com>