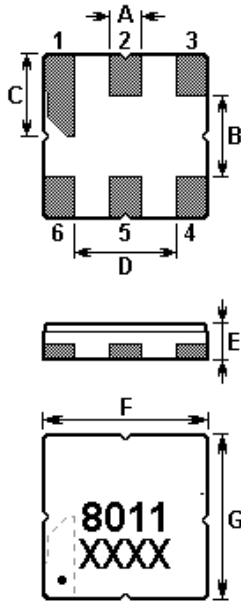


The **ACTF8011/881.5/DCC6C** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) RF filter in a surface-mount ceramic **DCC6C** case, for AMPS, CDMA and TDMA applications.

### 1. Package Dimensions (DCC6C)



### 2.

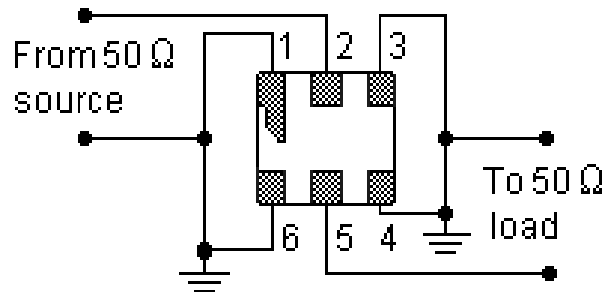
| Pin    | Configuration  |
|--------|----------------|
| 2      | Input / Output |
| 5      | Output / Input |
| others | Case Ground    |

| Sign | Data (unit: mm) | Sign | Data (unit: mm) |
|------|-----------------|------|-----------------|
| A    | 0.6             | E    | 1.1             |
| B    | 1.5             | F    | 3.0             |
| C    | 1.5             | G    | 3.0             |
| D    | 1.8             |      |                 |

2-4. .

- The dot indicates terminal 1

### • 3. Test Circuit



No impedance matching required for operation at 50  $\Omega$ .

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

**ISO9001: 2000 Registered**

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

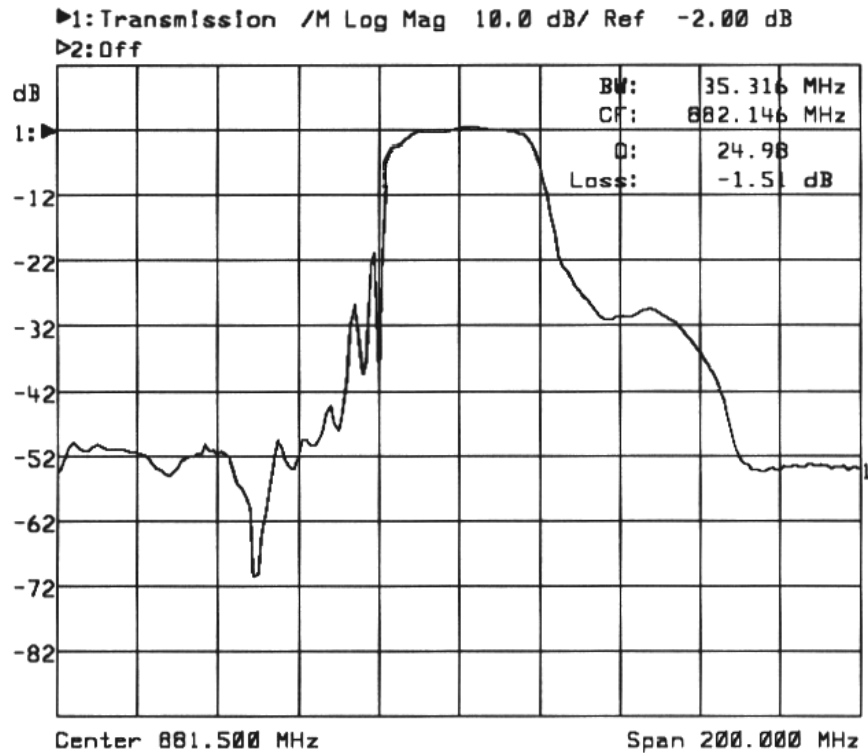
**3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK**

<http://www.actcrystals.com>

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Date : March 2010

#### 4. Frequency Characteristics



#### 5. Performance

##### 5-1. Maximum Ratings

| Rating                | Value      | Units |
|-----------------------|------------|-------|
| Input Power Level     | 10         | dBm   |
| DC Voltage            | 12         | V     |
| Storage Temperature   | -40 to +85 | °C    |
| Soldering Temperature | +235       | °C    |

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## 5-2. Electronic Characteristics

| Parameter   | Minimum                    | Typical                    | Maximum                    | Unit        |
|---|----------------------------|----------------------------|----------------------------|-------------|
| Centre Frequency<br>$f_c$   | --                         | 881.500                    | --                         | MHz         |
| 3dB Bandwidth<br>$BW_3$   | --                         | $\pm 17.6$                 | --                         | MHz         |
| Usable Bandwidth<br>$BW_{UES}$  | --                         | $\pm 12.5$                 | --                         | MHz         |
| Insertion Loss<br>869.00 MHz .... 894.00 MHz<br>$IL$  | --                         | 2.7                        | 3.5                        | dB          |
| Amplitude Variation (p-p)<br>869.00 MHz .... 894.00 MHz<br>$\Delta \alpha$  | --                         | 0.8                        | 1.5                        | dB          |
| Absolute Attenuation<br>10.00 MHz .... 779.00 MHz<br>779.00 MHz .... 849.00 MHz<br>914.00 MHz .... 970.00 MHz<br>970.00 MHz .... 1049.0 MHz<br>1049.0 MHz .... 2000.0 MHz<br>$\alpha$ | 45<br>40<br>20<br>45<br>40 | 50<br>45<br>28<br>55<br>50 | --<br>--<br>--<br>--<br>-- | dB          |
| Input / Output Impedance  | 50                         |                            |                            | $\Omega$    |
| Operating Temperature Range<br>$T_{OP}$   | -30                        | 25                         | +80                        | $^{\circ}C$ |

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

1. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50  $\Omega$  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.
2. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
3. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
4. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
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.

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

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