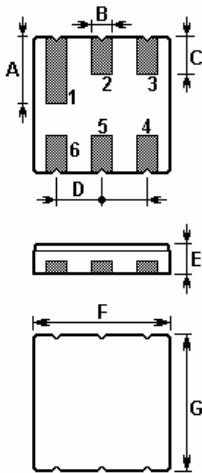


The **ACTF9007/903.650/DCC6** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) filter in a surface-mount ceramic **DCC6** case. It is designed as an RF filter for cordless telephone CT ISM. Centre frequency is 903.650 MHz.

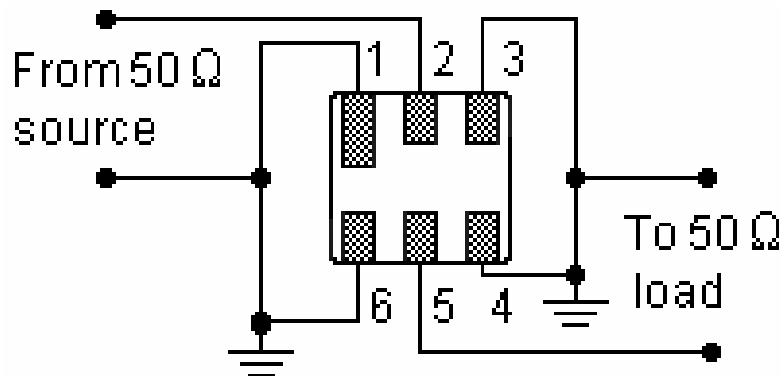
### 1.Package Dimension (DCC6)



| Pin     | Configuration |
|---------|---------------|
| 2       | Input         |
| 5       | Output        |
| 1,3,4,6 | Ground        |

| Sign | Data (unit: mm) | Sign | Data (unit: mm) |
|------|-----------------|------|-----------------|
| A    | 1.9             | E    | 1.2             |
| B    | 0.64            | F    | 3.8             |
| C    | 1.0             | G    | 3.8             |
| D    | 1.27            |      |                 |

### 3.Test Circuit



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

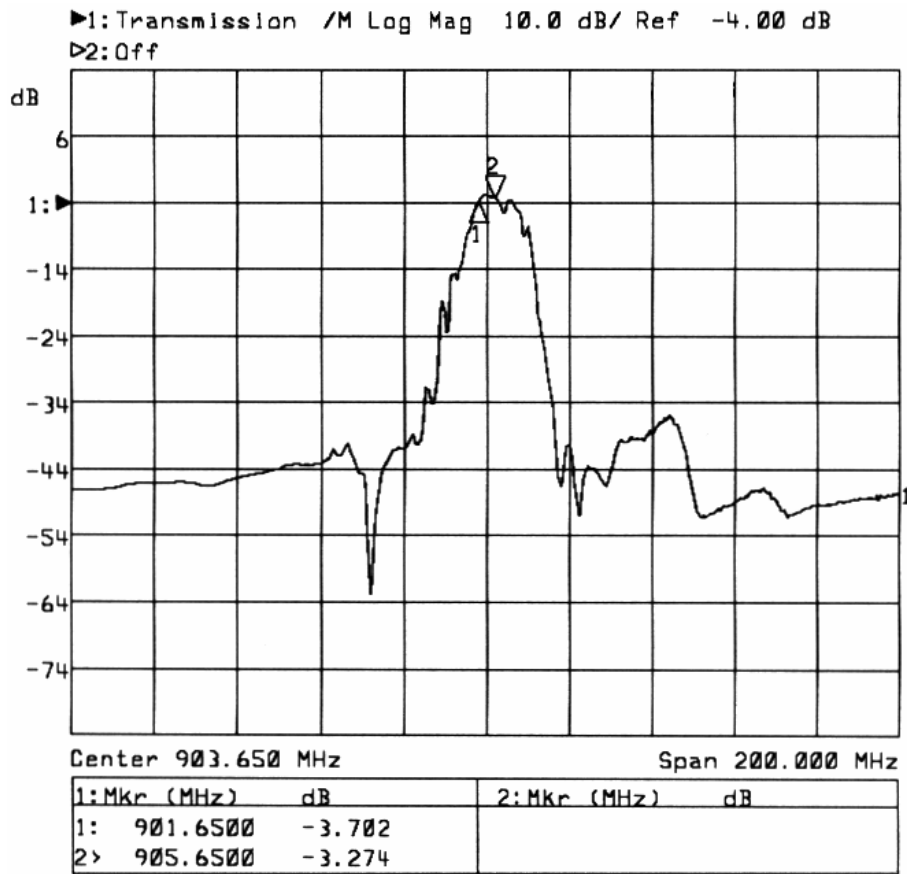
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<http://www.actcrystals.com>

## 4. Typical Frequency Response



## 5. Performance

### 5-1. Maximum Ratings

| Rating                          | Value      | Units |
|---------------------------------|------------|-------|
| CW RF Power Dissipation         | 0          | dBm   |
| DC Voltage Between Any Two Pins | 5          | V     |
| Operating Temperature           | -10 to +50 | °C    |
| Case Temperature                | -40 to +85 | °C    |
| Soldering Temperature           | +235       | °C    |

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## 5-2.Electronic Characteristics

Reference temperature:  $T_A = 25\text{ }^\circ\text{C}$

| Characteristic   | Min. | Typ.      | Max. | Units    |
|--|------|-----------|------|----------|
| Centre frequency $f_c$                                   | --   | 903.650   | --   | MHz      |
| Insertion Loss<br>within $f_c \pm 2.0\text{MHz}$         | --   | 4.0       | 5.5  | dB       |
| Pass band BW   | --   | $\pm 2.0$ | --   | MHz      |
| Amplitude ripple (p-p)<br>within $f_c \pm 2.0\text{MHz}$ | --   | 1.0       | 2.0  | dB       |
| Absolute attenuation                                     |      |           |      |          |
| within 803.65 MHz .... 878.65 MHz                        | 32   | 40        | --   | dB       |
| within 923.65 MHz .... 958.65 MHz                        | 25   | 35        | --   | dB       |
| within 958.65 MHz .... 1003.65 MHz                       | 35   | 45        | --   | dB       |
| Input / Output Impedance (Nominal)                       | --   | 50        | --   | $\Omega$ |

**ⓘ 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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