



# PRODUCT SPECIFICATION

REV A January 2010

Oscilent Controlled Document

| Ordering Code / Part Number | Product Description     |
|-----------------------------|-------------------------|
| 864-RF2140.0M-F             | WCDMA, RF/Rx SAW Filter |

## Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Performance

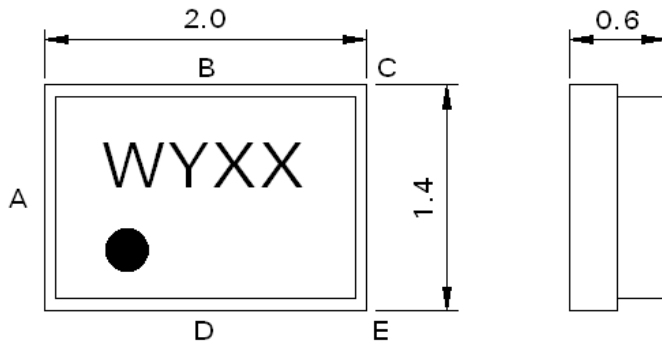
## Notes

- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)

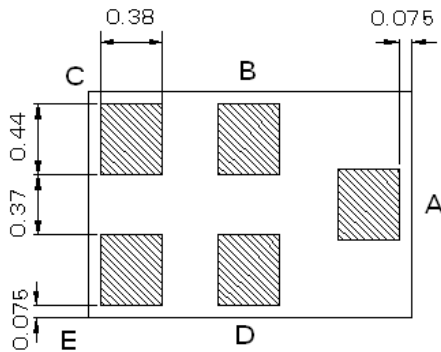




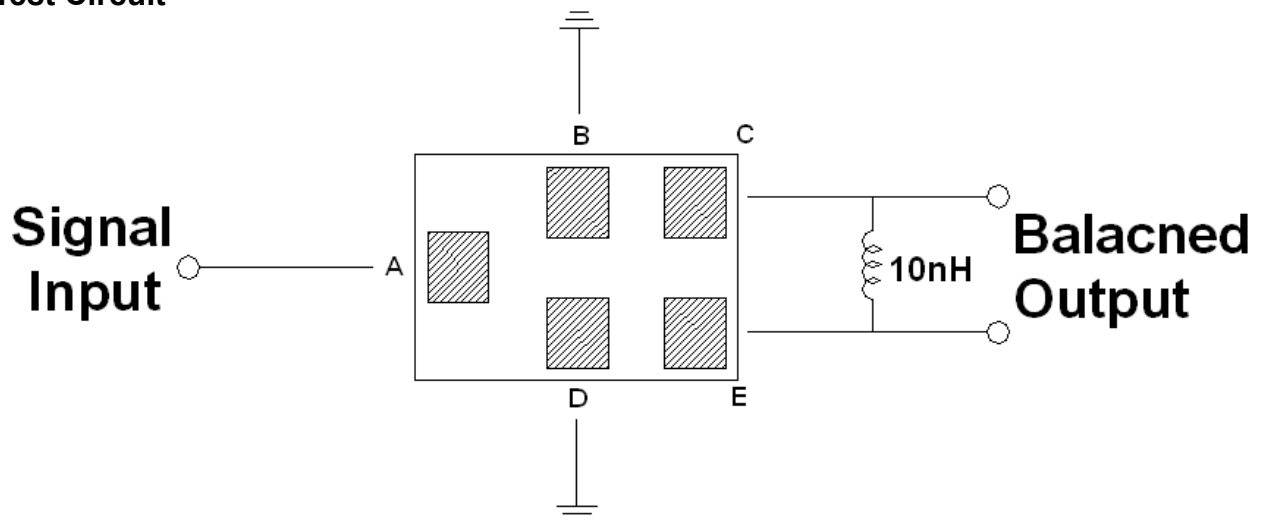
**Mechanical Dimensions (mm)**



| Pin Description |                 |
|-----------------|-----------------|
| B, D            | Ground          |
| A               | Input           |
| C               | Balance Out (1) |
| E               | Balance Out (2) |



**Test Circuit**





## Maximum Ratings

| Parameters Description      | Unit | Minimum                  | Typical | Maximum |
|-----------------------------|------|--------------------------|---------|---------|
| Operating Temperature Range | °C   | -30                      | -       | +85     |
| Storage Temperature Range   | °C   | -40                      | -       | +85     |
| Maximum DC Voltage          | V    | -                        | -       | 4       |
| Maximum Input Power         | dBm  | -                        | -       | 10      |
| Source Impedance            | Ω    | 50 Ohm                   |         |         |
| Load Impedance              | Ω    | Balanced 100 Ohm // 10nH |         |         |

Notes: Matching Network (Ref. Testing Environment Circuit as shown above).

## Electrical Specification

| Parameters Description                        | Unit              | Minimum | Typical     | Maximum |
|---|-------------------|---------|-------------|---------|
| Center Frequency (Fo)                         | MHz               | -       | 2140        | -       |
| Insertion Loss within 2110.0 ~ 2170.0 MHz     | dB                | -       | 1.7         | 2.3     |
| Amplitude Ripple within 2110.0 ~ 2170.0 MHz   | dB <sub>p-p</sub> | -       | 0.6         | 1.5     |
| Return Loss Input within 2110.0 ~ 2170.0 MHz  | dB                | 8       | 12          | -       |
| Return Loss Output within 2110.0 ~ 2170.0 MHz | dB                | 8       | 12          | -       |
| Amplitude Balance within 2110.0 ~ 2170.0 MHz  | dB                | -2.0    | -0.7 ~ +0.9 | 2.0     |
| Phase Balance within 2110.0 ~ 2170.0 MHz      | dB                | -8      | -3 ~ 0      | 8       |
| Attenuation:                                  |                   |         |             |         |
| D.C. ~ 849.0 MHz                              | dB                | 45      | 55          | -       |
| 849.0 ~ 1350.0 MHz                            | dB                | 40      | 47          | -       |
| 1350.0 ~ 1980.0 MHz                           | dB                | 30      | 34          | -       |
| 1980.0 ~ 2025.0 MHz                           | dB                | 25      | 28          | -       |
| 2215.0 ~ 2255.0 MHz                           | dB                | 15      | 21          | -       |
| 2255.0 ~ 2270.0 MHz                           | dB                | 20      | 23          | -       |
| 2275.0 ~ 2400.0 MHz                           | dB                | 22      | 24          | -       |
| 2400.0 ~ 3910.0 MHz                           | dB                | 30      | 36          | -       |
| 3910.0 ~ 6000.0 MHz                           | dB                | 40      | 52          | -       |



### Frequency Performance

