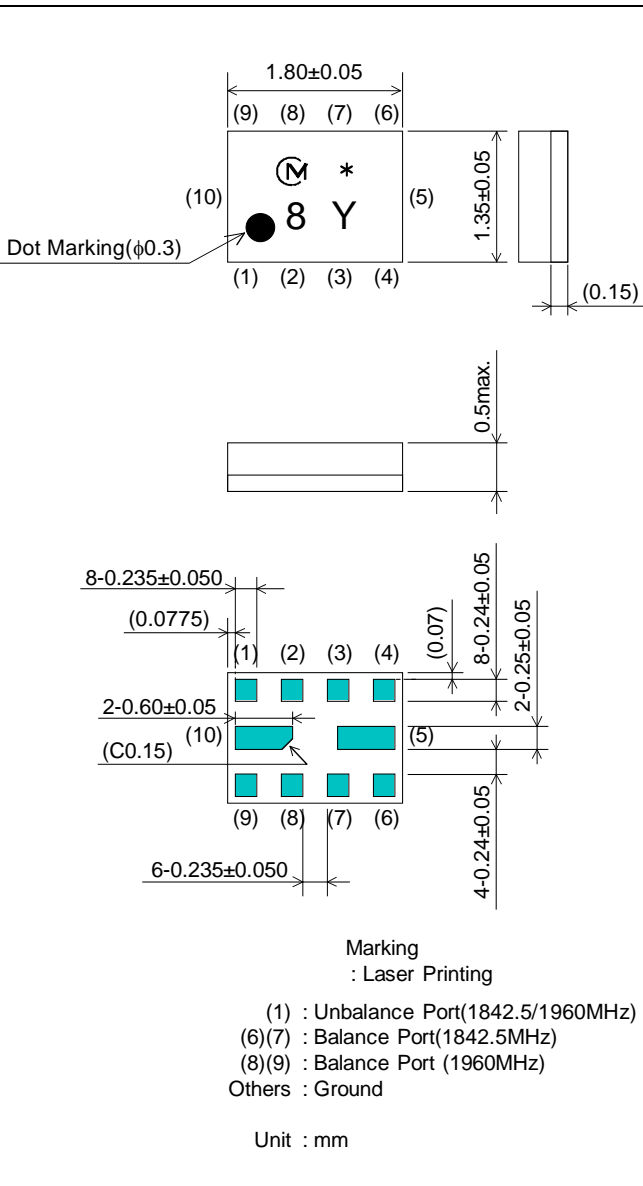


# SAW FILTER FOR GSM1800/GSM1900 (Rx)

Murata part number : SAWEN1G84CY0F00( $f_c=1842.5\text{MHz}$ )

## Package Dimensions

## Specification

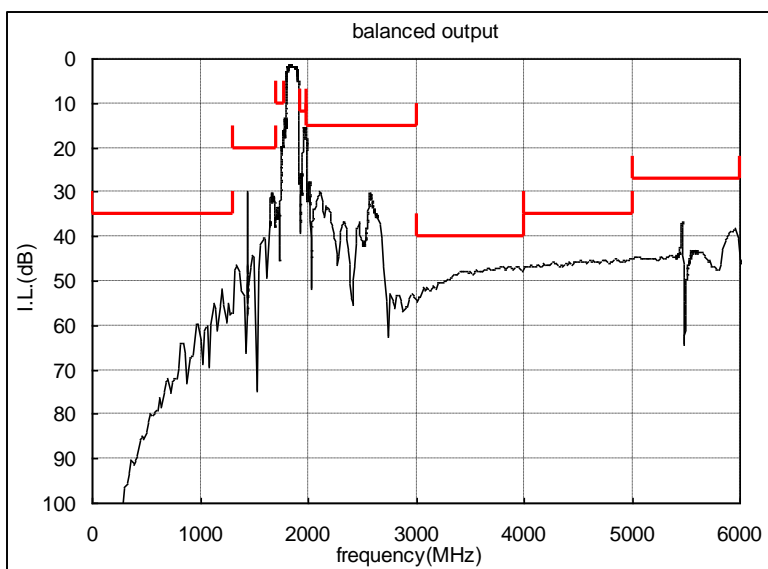
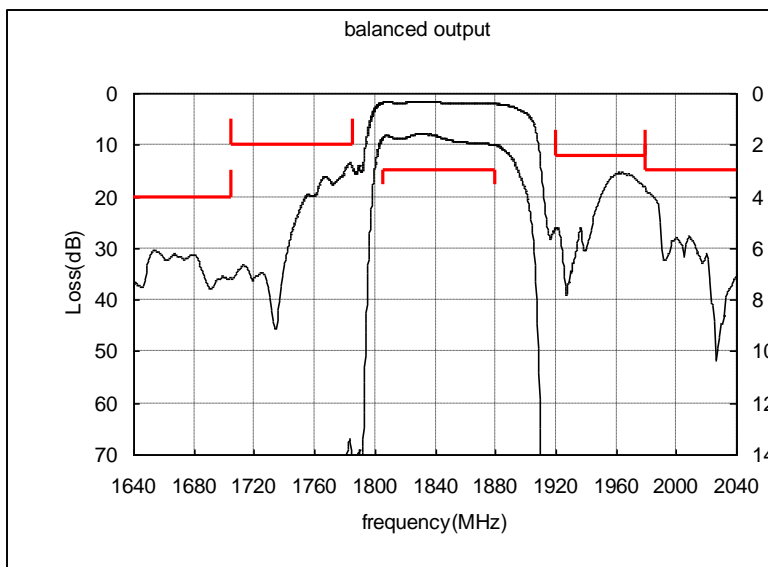


| Item   | Specification             |                    |           |
|--|---------------------------|--------------------|-----------|
|  | -30 to 85°C               | 25±2°C             | typ.      |
| Nominal Center Frequency( $f_c$ )              | 1842.5MHz                 |                    |           |
| Insertion Loss<br>(1805 to 1880MHz)            | 3.0 dB max.               | 2.3 dB max.        | 2.0 dB    |
| Absolute Attenuation                           |                           |                    |           |
| 1) 0.1 to 1300 MHz                             | 35 dB min.                | 35 dB min.         | 52 dB     |
| 2) 1300 to 1705 MHz                            | 20 dB min.                | 20 dB min.         | 30 dB     |
| 3) 1705 to 1785 MHz                            | 10 dB min.                | 11 dB min.         | 13 dB     |
| 4) 1920 to 1980 MHz                            | 12 dB min.                | 13 dB min.         | 15 dB     |
| 5) 1980 to 3000 MHz                            | 15 dB min.                | 15 dB min.         | 19 dB     |
| 6) 3000 to 4000 MHz                            | 40 dB min.                | 40 dB min.         | 47 dB     |
| 7) 4000 to 5000 MHz                            | 35 dB min.                | 35 dB min.         | 45 dB     |
| 8) 5000 to 6000 MHz                            | 27 dB min.                | 27 dB min.         | 37 dB     |
| Ripple Deviation<br>(1805 to 1880MHz)          | 1.8dB max.                | 1.0dB max.         | 0.5 dB    |
| VSWR<br>(1805 to 1880MHz)                      | 2.4 max.                  | 2.1 max.           | 1.7       |
| Amplitude Balance<br>(1805 to 1880MHz)         | ±1.5dB max.               | ±1.2dB max.        | 0.5dB     |
| Phase Balance<br>(1805 to 1880MHz)             | 180±12deg.<br>max.        | 180±10deg.<br>max. | 180+3deg. |
| Unbalance Port Matching Impedance<br>(nominal) | 50Ω//3.3nH                |                    |           |
| Balance Port Matching Impedance<br>(nominal)   | 150Ω//15nH                |                    |           |
| Input Signal Level                             | 20mW (+13dBm), 2000 hours |                    |           |

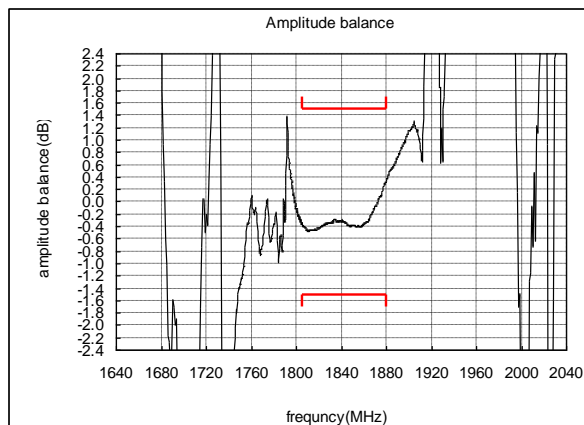
# SAW FILTER FOR GSM1800/GSM1900 (Rx)

Murata part number : SAWEN1G84CY0F00( $f_c=1842.5\text{MHz}$ )

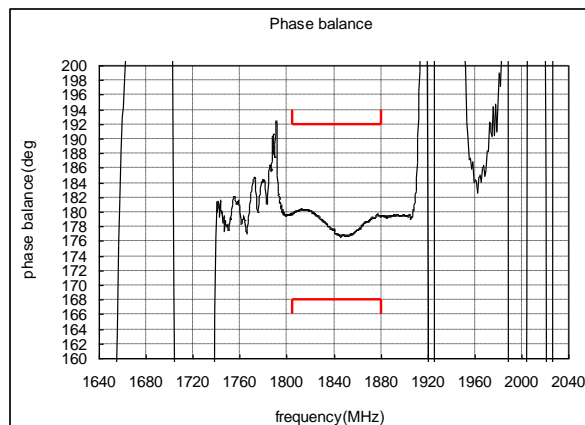
## Frequency Performance



### Amplitude balance



### Phase balance

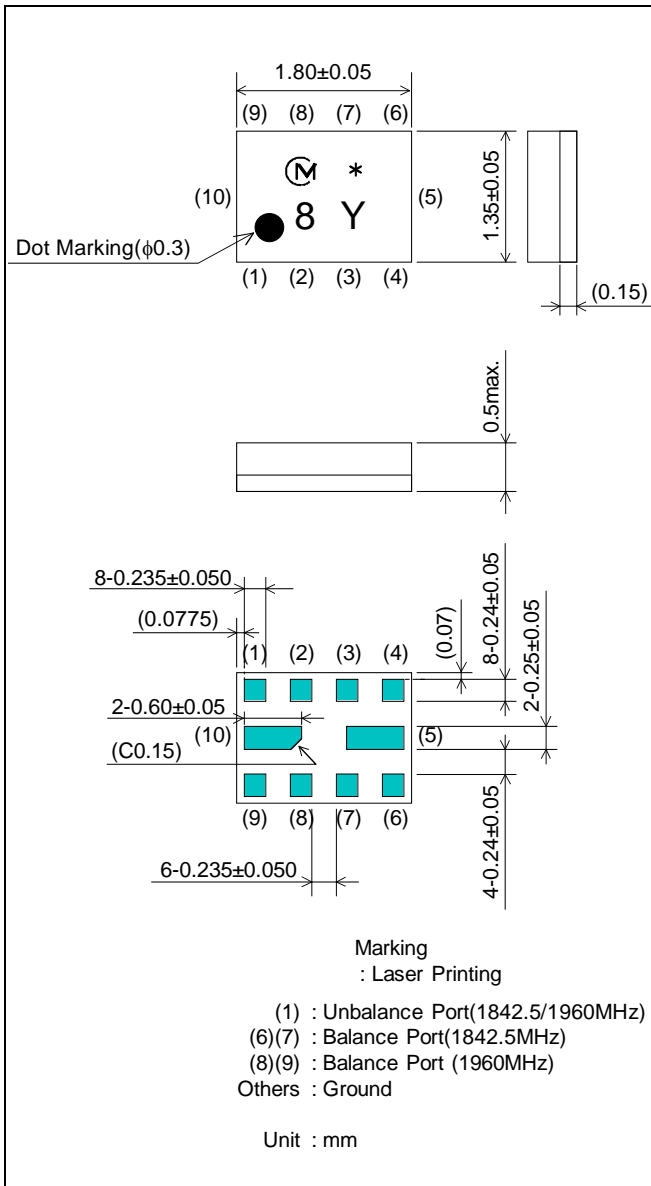


# SAW FILTER FOR GSM1800/GSM1900 (Rx)

Murata part number : SAWEN1G84CY0F00( $f_c=1960\text{MHz}$ )

## Package Dimensions

## Specification

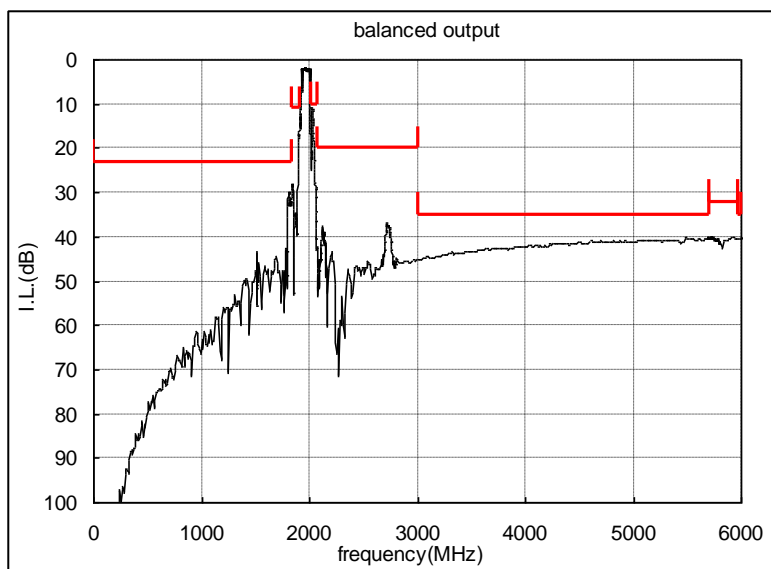
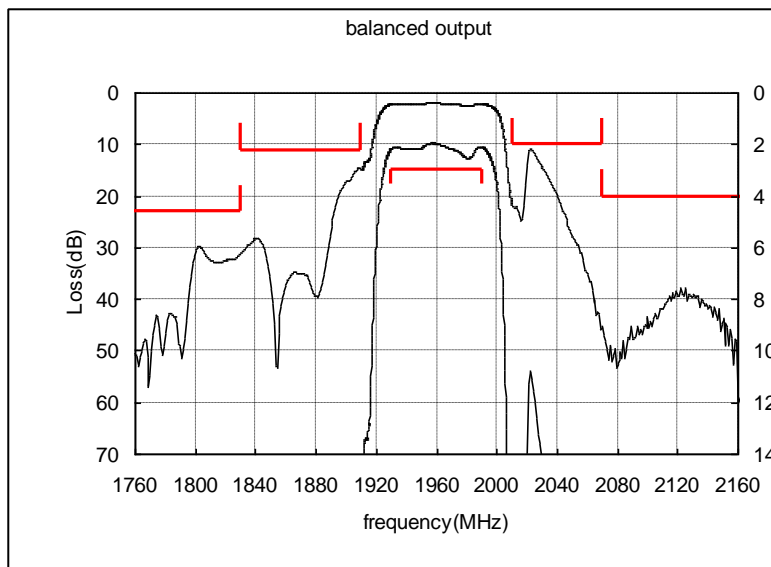


| Item   | Specification             |                    |             |
|--|---------------------------|--------------------|-------------|
|  | -30 to 85°C               | 25±2°C             | typ.        |
| Nominal Center Frequency( $f_c$ )              | 1960MHz                   |                    |             |
| Insertion Loss<br>(1930 to 1990MHz)            | 3.0 dB max.               | 2.8 dB max.        | 2.5 dB      |
| Absolute Attenuation                           |                           |                    |             |
| 1) 0.1 to 1830 MHz                             | 23 dB min.                | 23 dB min.         | 30 dB       |
| 2) 1830 to 1910 MHz                            | 11 dB min.                | 11 dB min.         | 14 dB       |
| 3) 2010 to 2070 MHz                            | 5 dB min.                 | 9 dB min.          | 10 dB       |
| 4) 2070 to 3000 MHz                            | 20 dB min.                | 20 dB min.         | 37 dB       |
| 5) 3000 to 5700 MHz                            | 35 dB min.                | 35 dB min.         | 40 dB       |
| 6) 5700 to 5970 MHz                            | 32 dB min.                | 32 dB min.         | 40 dB       |
| 7) 5970 to 6000 MHz                            | 35 dB min.                | 35 dB min.         | 40 dB       |
| Ripple Deviation<br>(1930 to 1990MHz)          | 1.8dB max.                | 1.1dB max.         | 0.6 dB      |
| VSWR<br>(1930 to 1990MHz)                      | 2.3 max.                  | 1.9 max.           | 1.5         |
| Amplitude Balance<br>(1930 to 1990MHz)         | ±2.0dB max.               | ±1.8dB max.        | 1.0dB       |
| Phase Balance<br>(1930 to 1990MHz)             | 180±12deg.<br>max.        | 180±10deg.<br>max. | 180+6.4deg. |
| Unbalance Port Matching Impedance<br>(nominal) | 50Ω//3.3nH                |                    |             |
| Balance Port Matching Impedance<br>(nominal)   | 150Ω//22nH                |                    |             |
| Input Signal Level                             | 20mW (+13dBm), 2000 hours |                    |             |

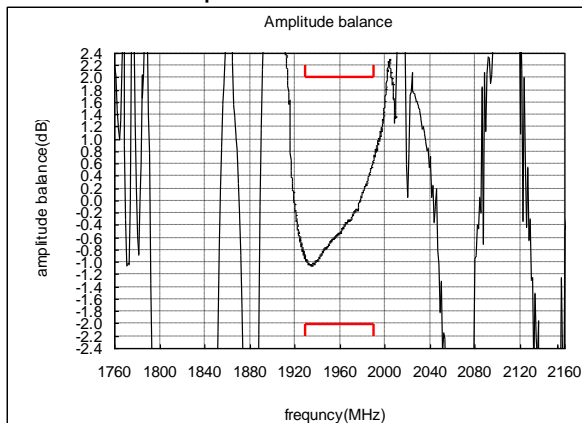
# SAW FILTER FOR GSM1800/GSM1900 (Rx)

Murata part number : SAWEN1G84CY0F00( $f_c=1960\text{MHz}$ )

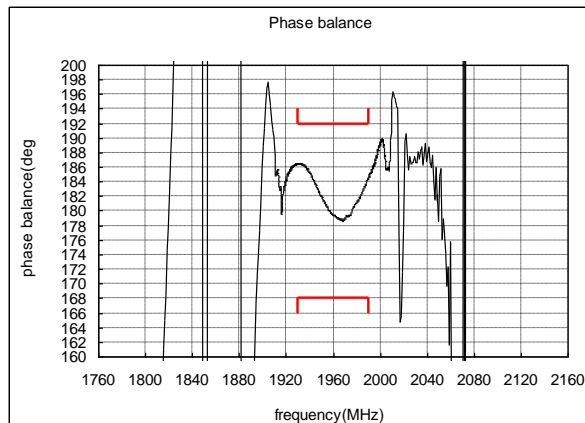
## Frequency Performance



### Amplitude balance



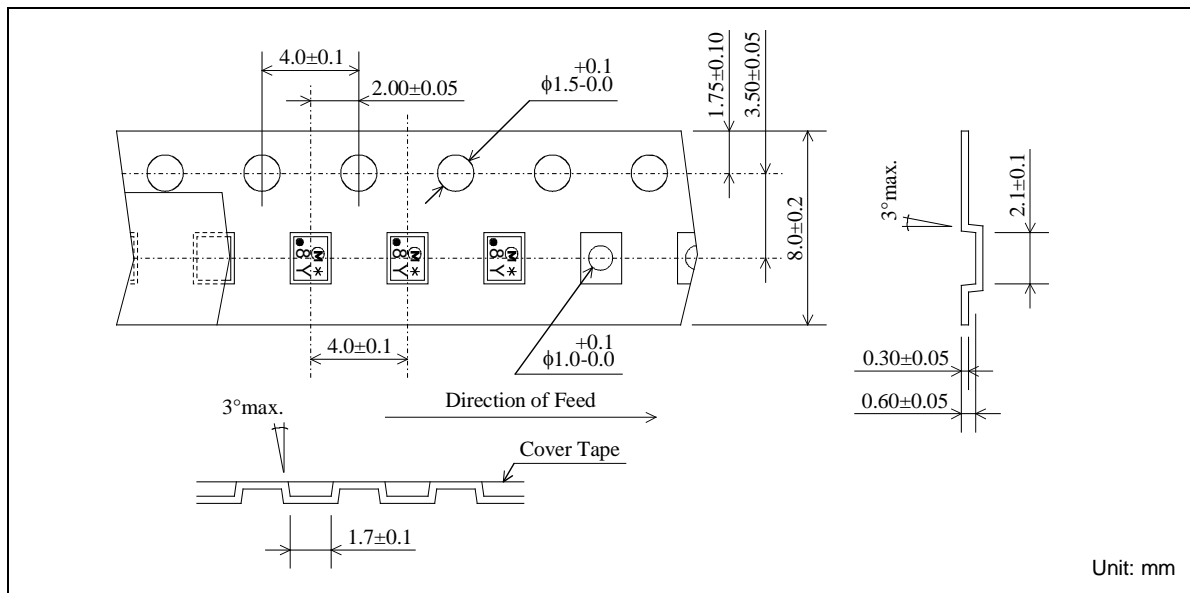
### Phase balance



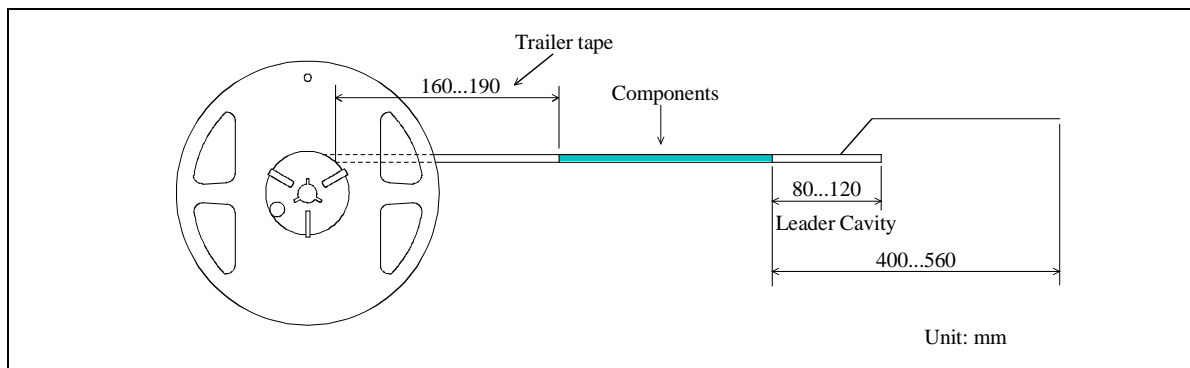
# SAW FILTER FOR GSM1800/GSM1900 (Rx)

Murata part number : SAWEN1G84CY0F00

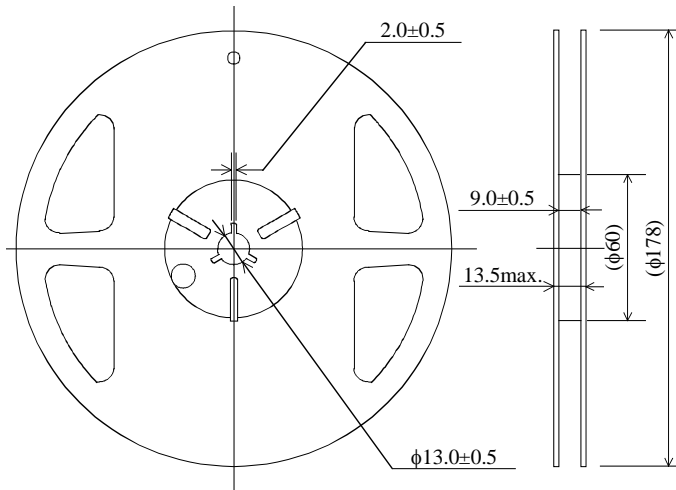
## Dimensions of Carrier Tape



## Dimensions of Tape



## Dimensions of Reel



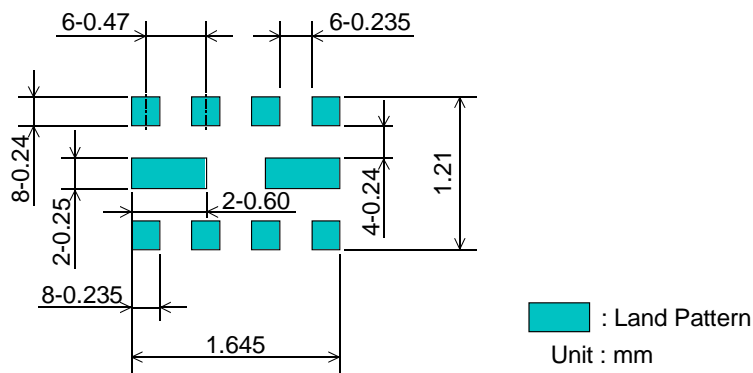
SAWEN1G84CY0F00R14 ... 4000pcs/reel  
SAWEN1G84CY0F00R12 ... 2000pcs/reel

Unit: mm

# SAW FILTER FOR GSM1800/GSM1900 (Rx)

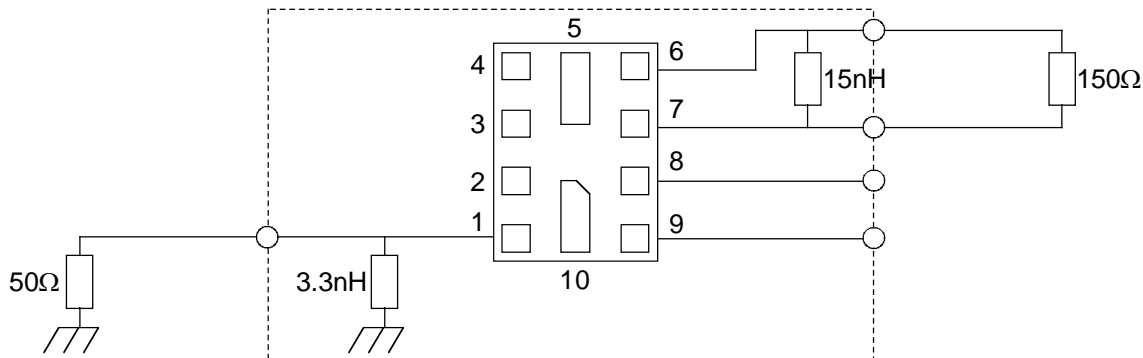
Murata part number : SAWEN1G84CY0F00

## Recommended Land Pattern

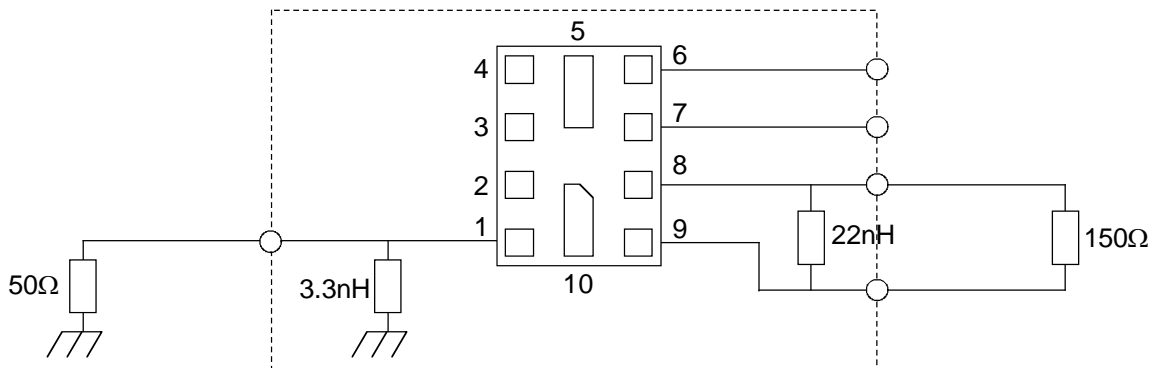


## Test Circuit

1842.5MHz



1960MHz



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