



# Data Sheet of SAW Components



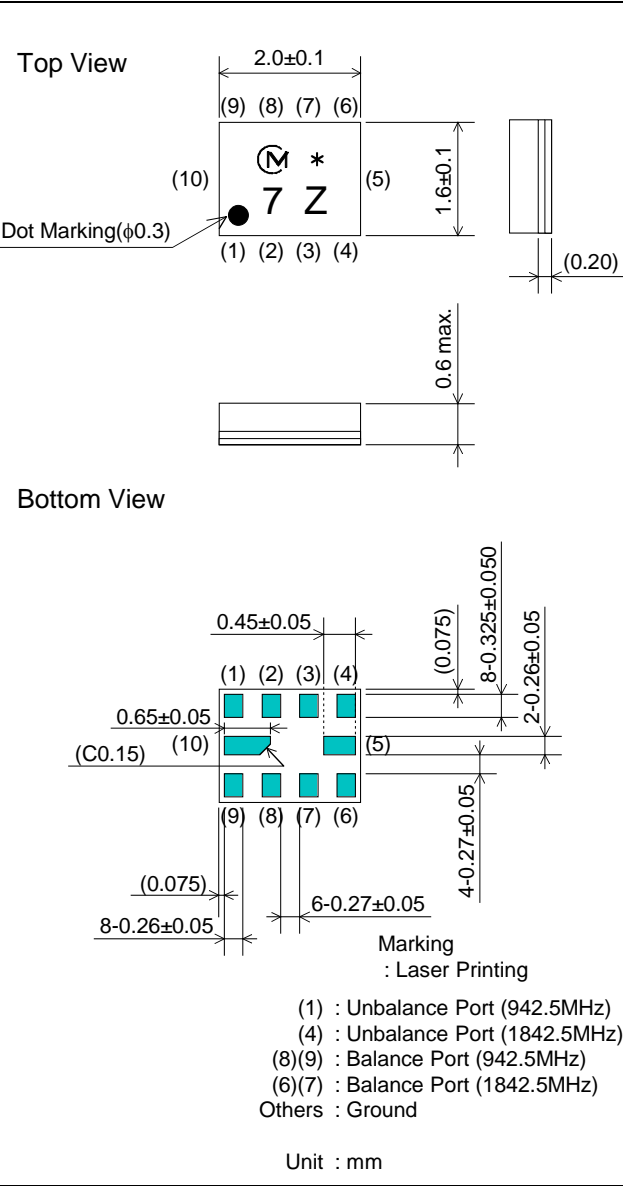
Note : Murata SAW Component is applicable for Cellular /Cordless phone (Terminal) relevant market only.

Please also read caution at the end of this document.

# SAW FILTER FOR GSM900/GSM1800 (Rx)

Murata part number : SAWEP942MCM0F00 (fc=942.5MHz)

## Package Dimensions



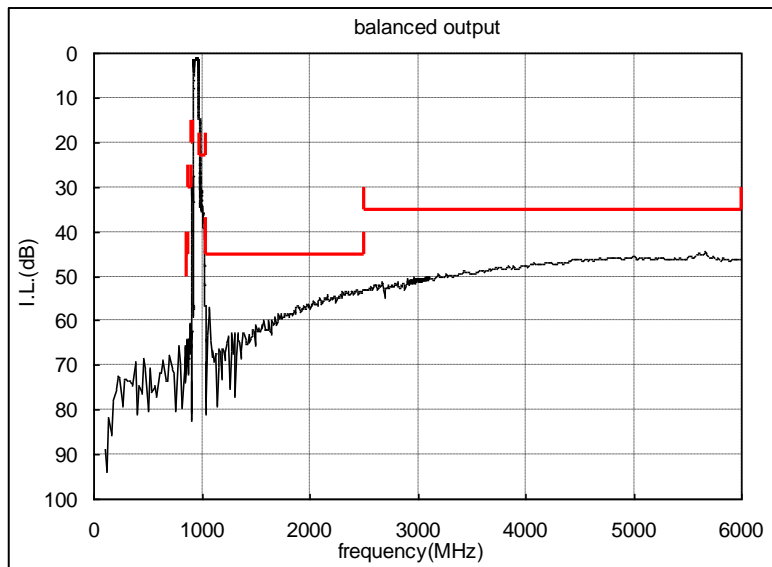
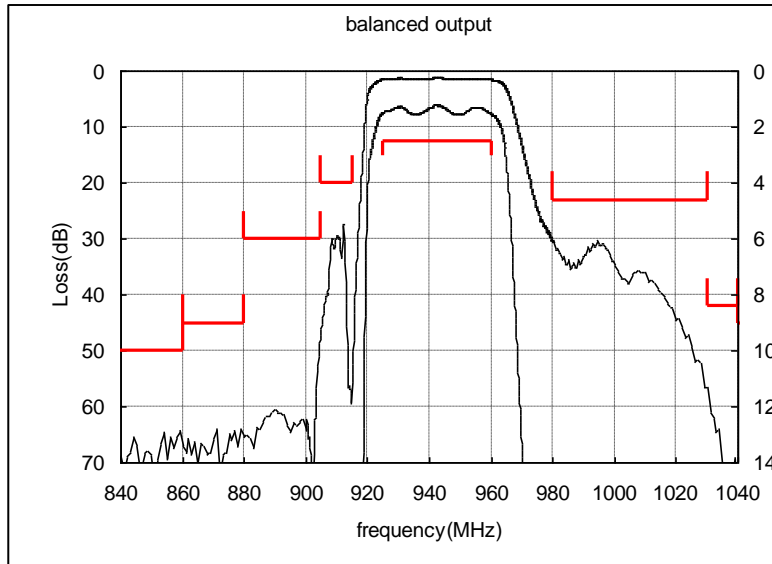
## Specification

Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency (fc)	942.5MHz		
Insertion Loss (925 to 960MHz)	2.5dB max.	2.1dB max.	1.6 dB
Absolute Attenuation			
1) 0.1 to 860 MHz	50 dB min.	50 dB min.	66 dB
2) 860 to 880 MHz	45 dB min.	45 dB min.	66 dB
3) 880 to 905 MHz	30 dB min.	30 dB min.	46 dB
4) 905 to 915 MHz	20 dB min.	20 dB min.	28 dB
5) 980 to 1030 MHz	23 dB min.	23 dB min.	29 dB
6) 1030 to 1040 MHz	42 dB min.	42 dB min.	57 dB
7) 1040 to 2500 MHz	45 dB min.	45 dB min.	53 dB
8) 2500 to 6000 MHz	35 dB min.	35 dB min.	43 dB
Ripple Deviation (925 to 960MHz)	1.7dB max.	1.1dB max.	0.4 dB
VSWR (925 to 960MHz)	2.2 max.	2.0 max.	1.8
Amplitude Balance (925 to 960MHz)	±1.0dB max.	±1.0dB max.	-0.3dB
Phase Balance (925 to 960MHz)	180±10deg. max.	180±10deg. max.	180+1deg.
Unbalance Port Matching Impedance (nominal)	50Ω		
Balance Port Matching Impedance (nominal)	150Ω//82nH		
Input Signal Level	31.6mW (+15dBm), 2000 hours		

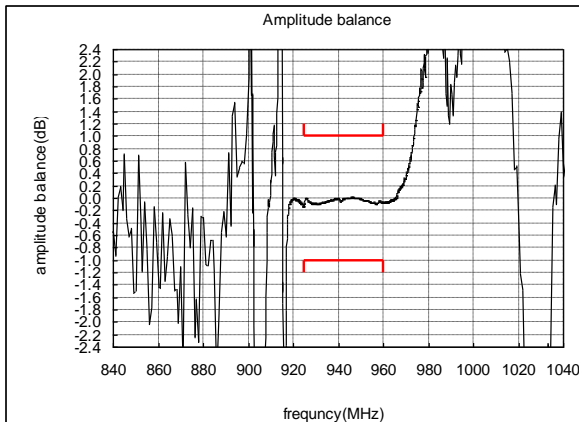
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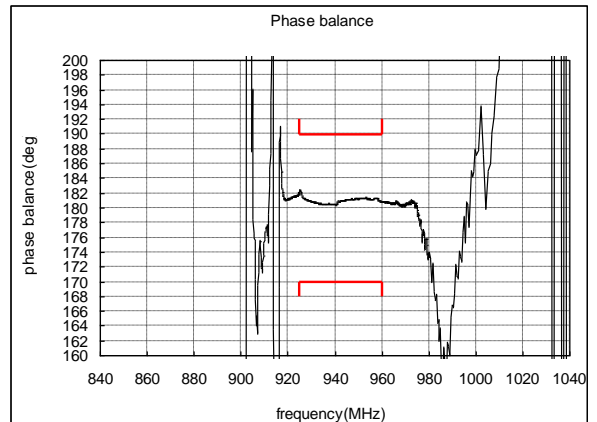
## Frequency Performance



## Amplitude balance



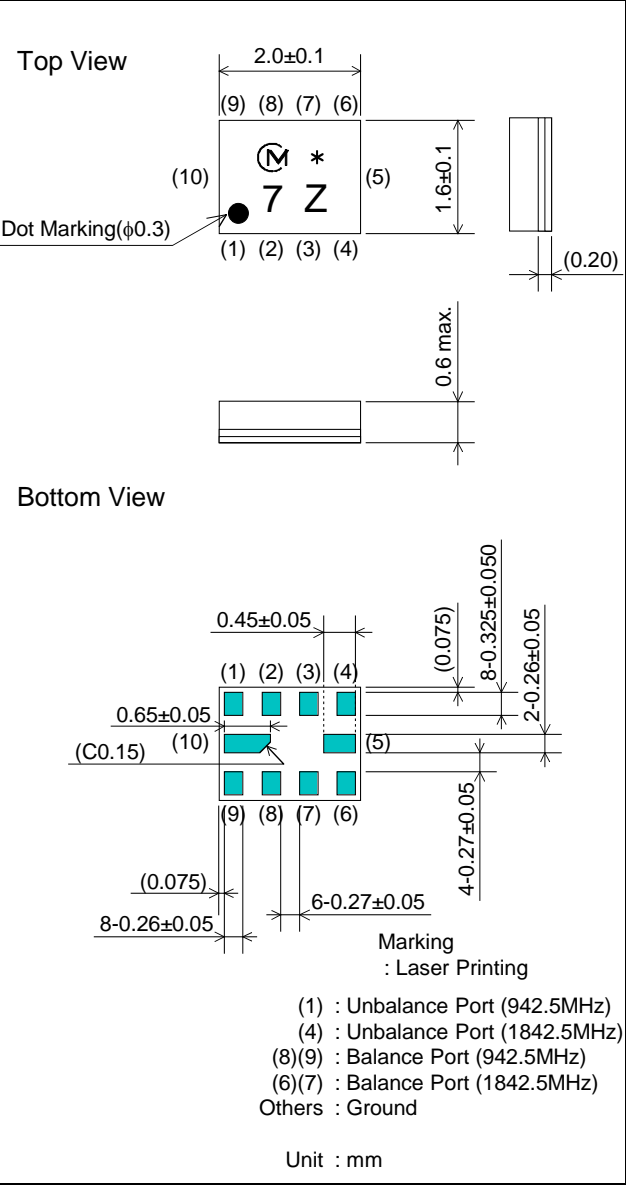
## Phase balance



# SAW FILTER FOR GSM900/GSM1800 (Rx)

Murata part number : SAWEP942MCM0F00 ( $f_c=1842.5\text{MHz}$ )

## Package Dimensions



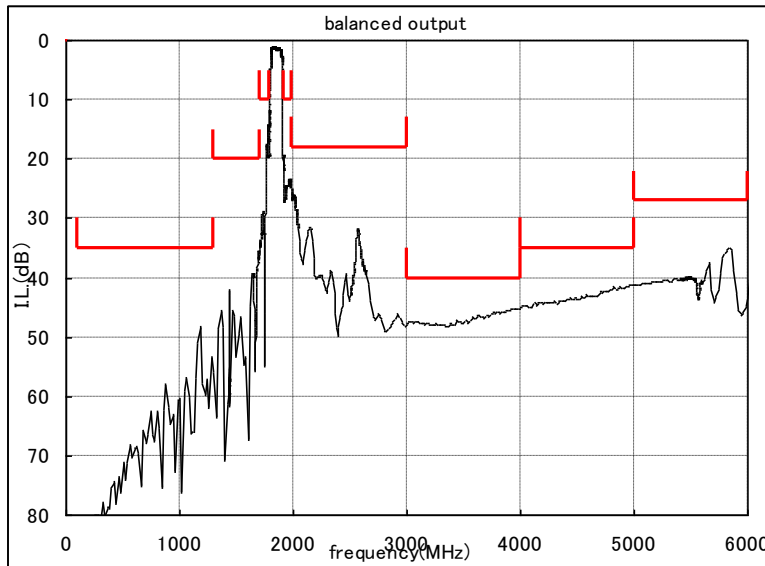
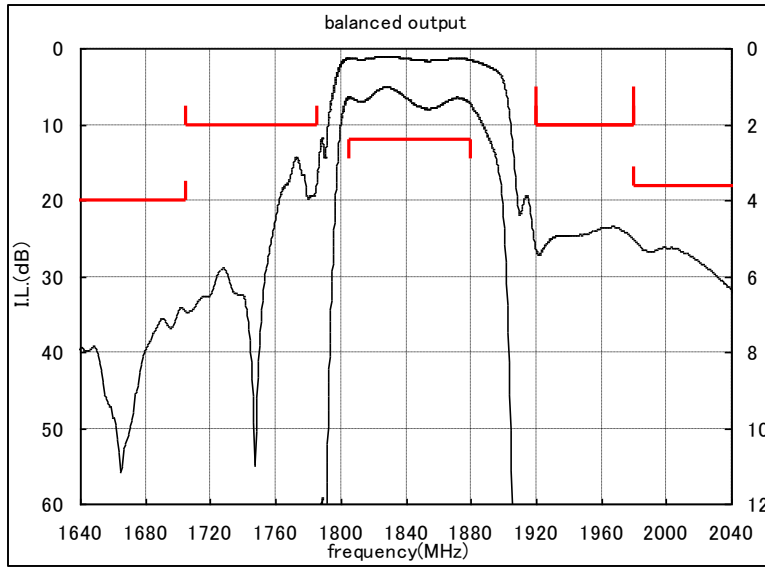
## Specification

Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency( $f_c$ )	1842.5MHz		
Insertion Loss (1805 to 1880MHz)	2.4dB max.	2.1dB max.	1.6 dB
Absolute Attenuation			
1) 100 to 1300 MHz	35 dB min.	35 dB min.	47 dB
2) 1300 to 1705 MHz	20 dB min.	20 dB min.	33 dB
3) 1705 to 1785 MHz	10 dB min.	10 dB min.	15 dB
4) 1920 to 1980 MHz	10 dB min.	15 dB min.	23 dB
5) 1980 to 3000 MHz	18 dB min.	20 dB min.	25 dB
6) 3000 to 4000 MHz	40 dB min.	40 dB min.	45 dB
7) 4000 to 5000 MHz	35 dB min.	35 dB min.	41 dB
8) 5000 to 6000 MHz	27 dB min.	27 dB min.	35 dB
Ripple Deviation (1805 to 1880MHz)	2.0dB max.	1.0dB max.	0.6 dB
VSWR (1805 to 1880MHz)	2.1 max.	2.1 max.	1.9
Amplitude Balance (1805 to 1880MHz)	±1.2dB max.	±1.2dB max.	+0.6dB
Phase Balance (1805 to 1880MHz)	180±15deg. max.	180±10deg. max.	180+5deg.
Unbalance Port Matching Impedance (nominal)	50Ω		
Balance Port Matching Impedance (nominal)	150Ω//18nH		
Input Signal Level	20mW (+13dBm), 2000 hours		

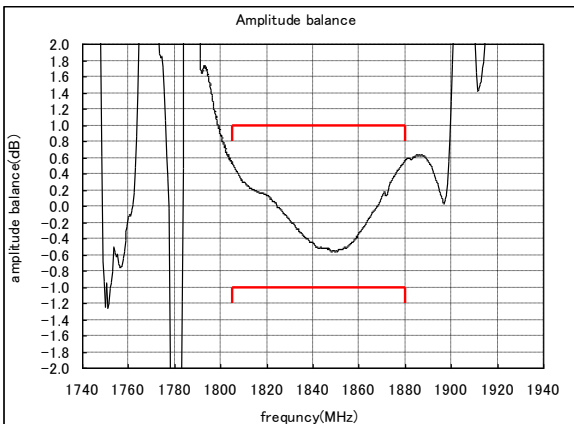
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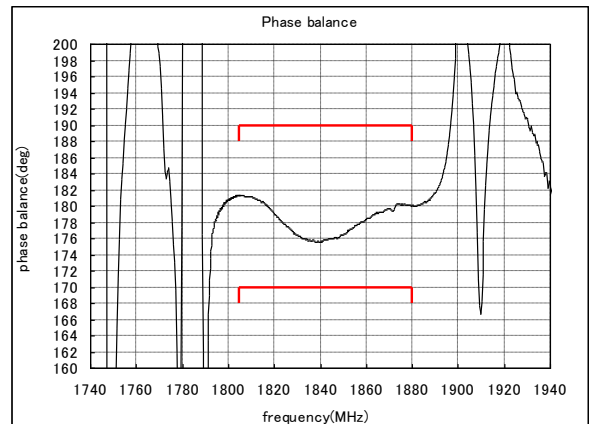
## Frequency Performance



## Amplitude balance



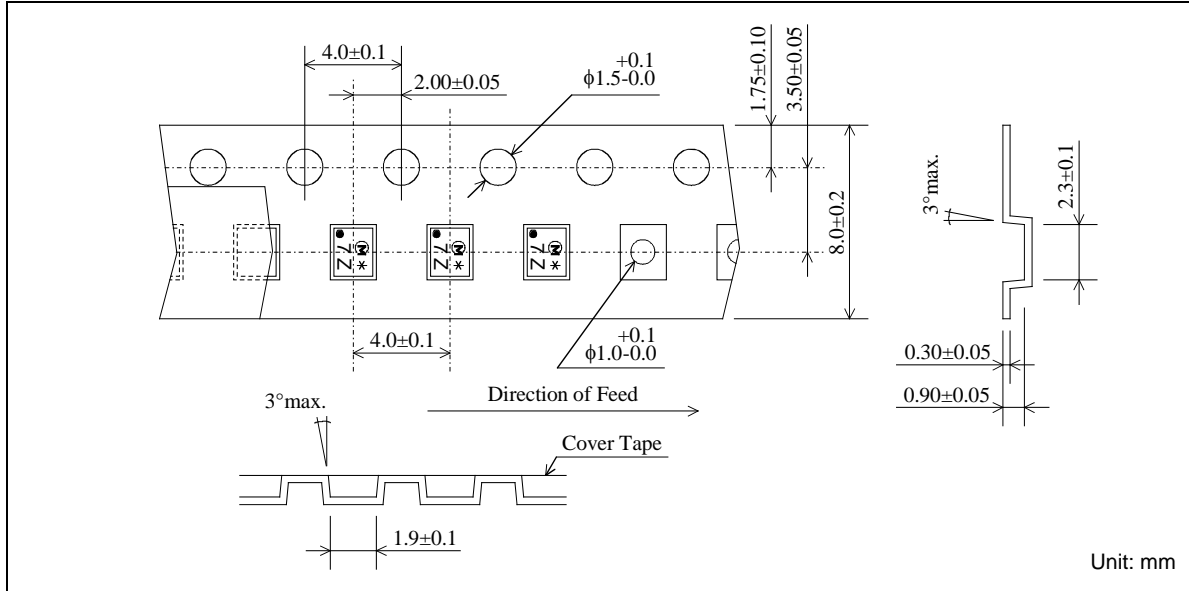
## Phase balance



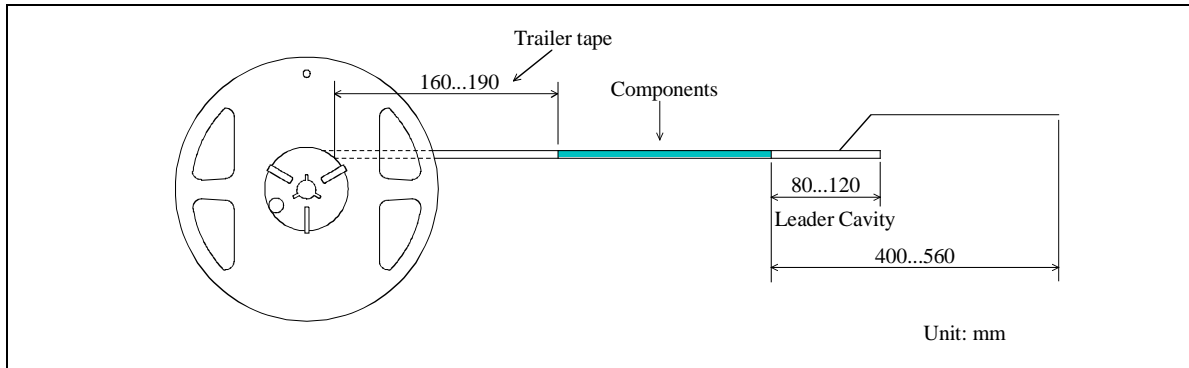
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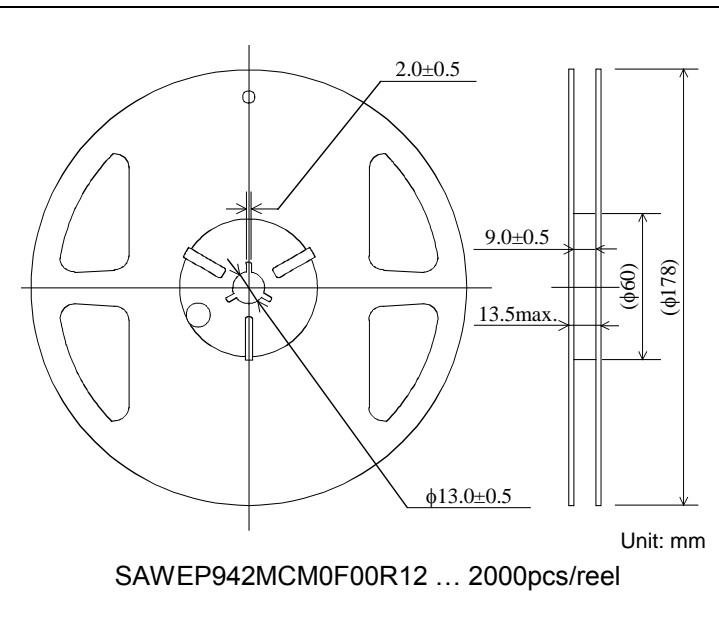
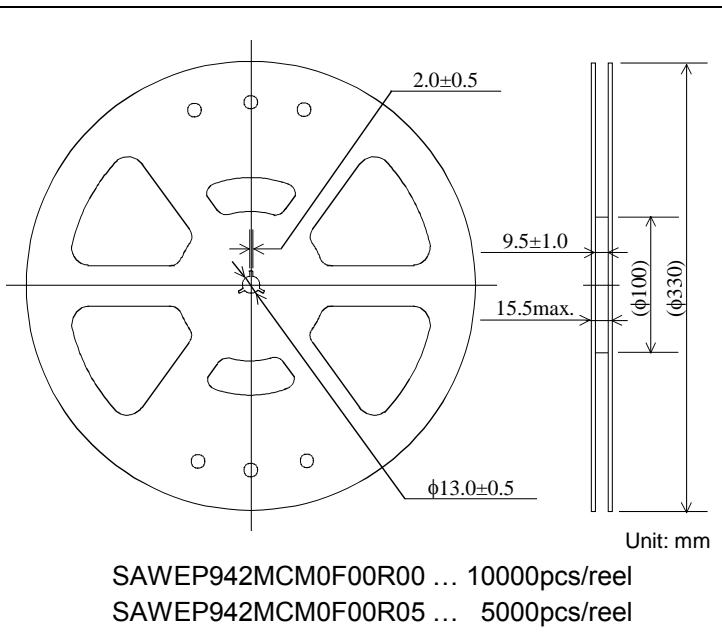
## Dimensions of Carrier Tape



## Dimensions of Tape



## Dimensions of Reel

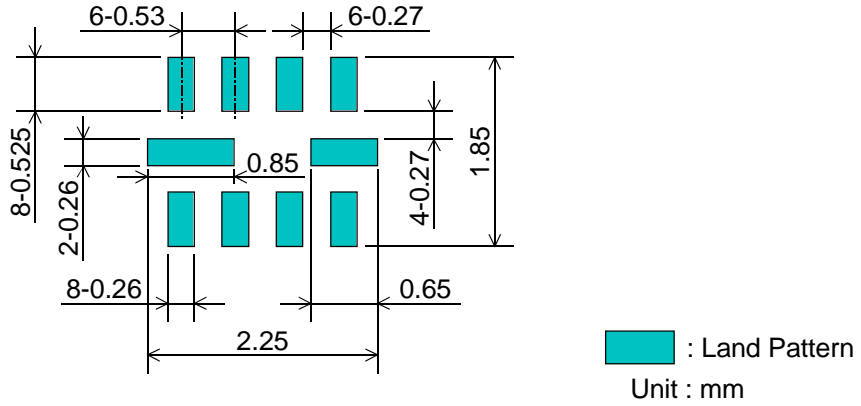


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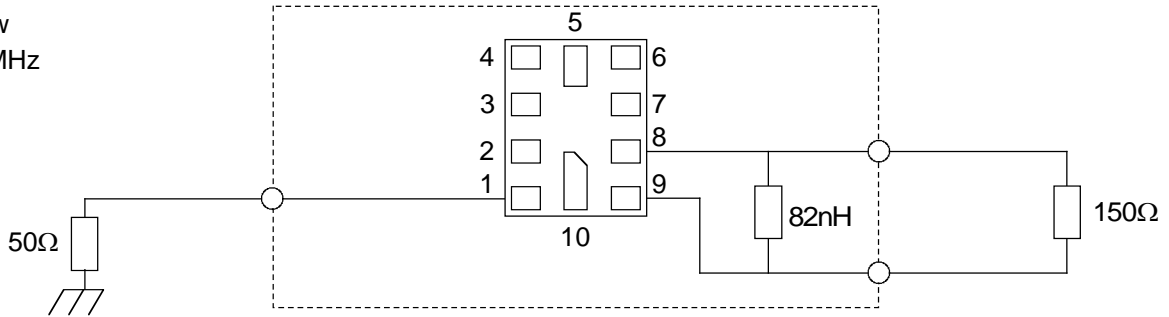
## Recommended Land Pattern

Top View

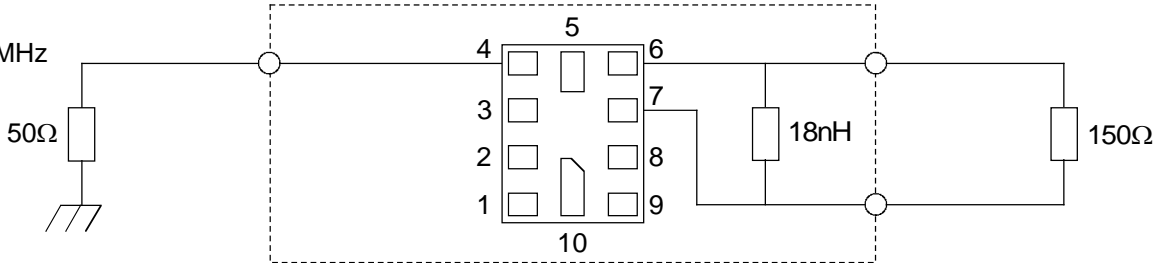


## Test Circuit

Bottom View  
942.5MHz



1842.5MHz



# SAW FILTER FOR GSM900/GSM1800 (Rx)

Murata part number : SAWEP942MCM0F00

## ■ RoHS Compliance

This component is compliant with RoHS directive.

This component was always RoHS compliant from the first date of manufacture.

### • Caution - Limitation of Applications

This product is intended for the following applications only; however, please do not use this product in these applications where defects might directly cause damage to a third party's life, body or property.

- a. Mobile Telephone
- b. Cordless phone (except for Automotive use)
- c. PC (Including Notebook PC, Netbook PC, Tablet)
- d. Game
- e. Camera (except for Business/security use)
- f. Set Top Box
- g. Electronic dictionary
- h. Digital audio equipment

• This catalog is for reference only and not an official product specification document, therefore, please review and approve our official product specification before ordering this product.