



Data Sheet of SAW Components



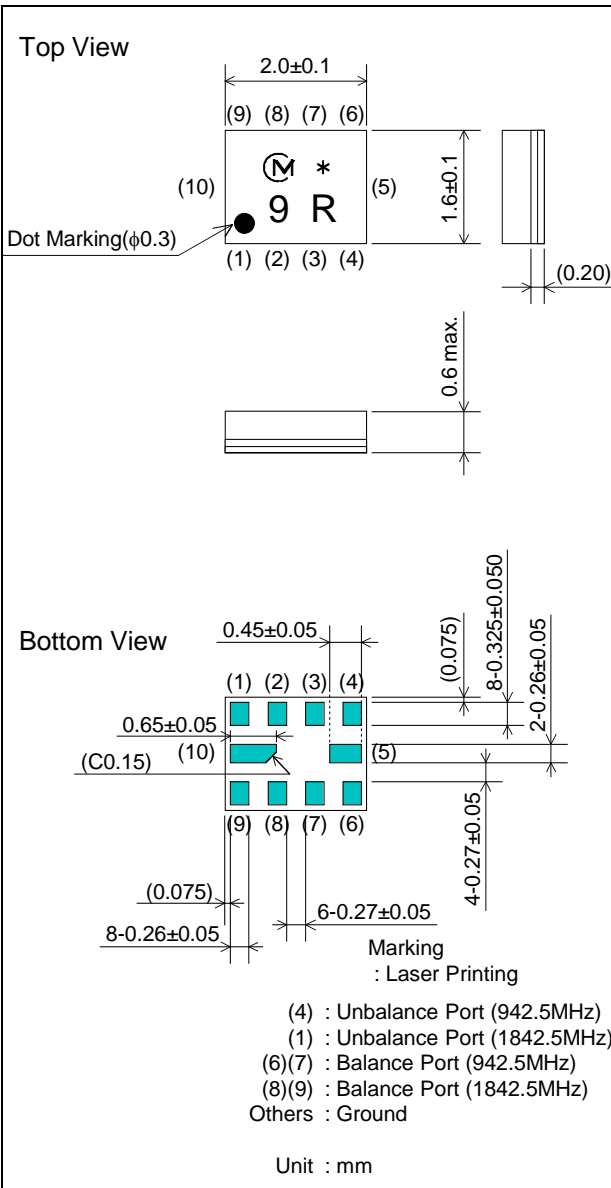
Note : Murata SAW Component is applicable for Cellular /Cordless phone (Terminal) relevant market only.

Please also read caution at the end of this document.

SAW FILTER FOR GSM900/GSM1800 (Rx)

Murata part number : SAWEP942MCN0F00 (fc=942.5MHz)

Package Dimensions



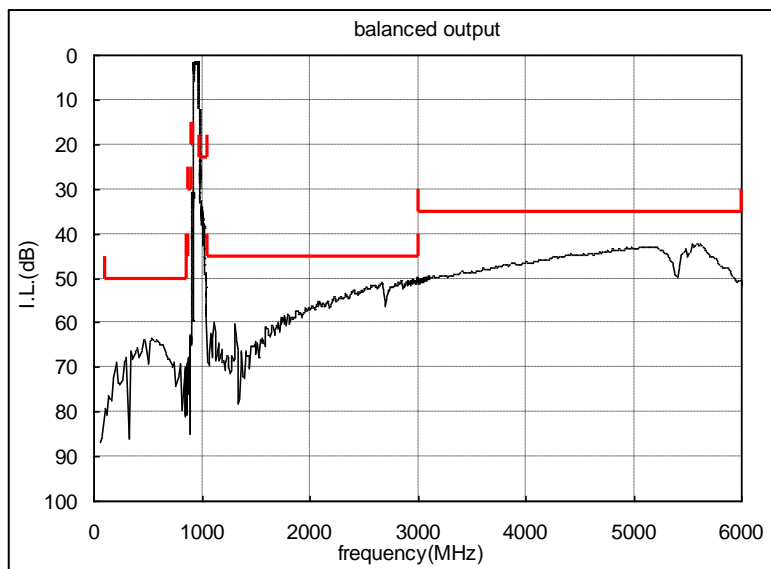
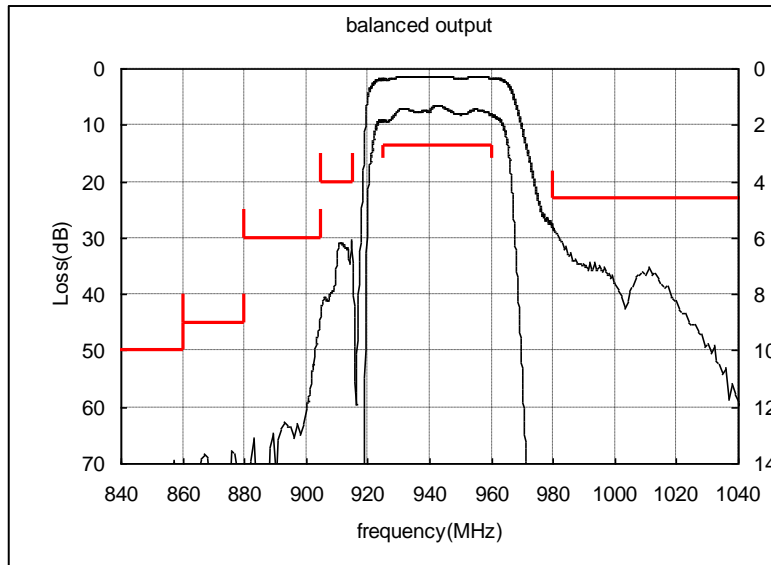
Specification

Item	Specification			
	-30 to 85°C	-10 to 80°C	25±2°C	typ.
Nominal Center Frequency(fc)	942.5 MHz			
Insertion Loss (925 to 960MHz)	2.7 dB max.	2.3 dB max.	2.1 dB max.	1.9 dB
Absolute Attenuation				
1) 100 to 860 MHz	50 dB min.	50 dB min.	50 dB min.	63 dB
2) 860 to 880 MHz	45 dB min.	45 dB min.	45 dB min.	66 dB
3) 880 to 905 MHz	30 dB min.	30 dB min.	30 dB min.	41 dB
4) 905 to 915 MHz	20 dB min.	20 dB min.	22 dB min.	31 dB
5) 980 to 1050 MHz	23 dB min.	23 dB min.	23 dB min.	29 dB
6) 1050 to 3000 MHz	45 dB min.	45 dB min.	45 dB min.	51 dB
7) 3000 to 6000 MHz	35 dB min.	35 dB min.	35 dB min.	43 dB
Ripple Deviation (925 to 960MHz)	1.7 dB max.	1.3 dB max.	1.1 dB max.	0.6 dB
VSWR (925 to 960MHz)	2.1 max.	2.1 max.	2.0 max.	1.7
Amplitude Balance (925 to 960MHz)	±1.0dB max.	±0.8dB max.	±0.6dB max.	±0.2dB
Phase Balance (925 to 960MHz)	180±10deg. max.	180±7deg. max.	180±5deg. max.	180±1.2deg
Unbalance Port Matching Impedance (nominal)	50Ω			
Balance Port Matching Impedance (nominal)	150Ω//82nH			
Input Signal Level	31.6mW (+15dBm), 2000 hours			

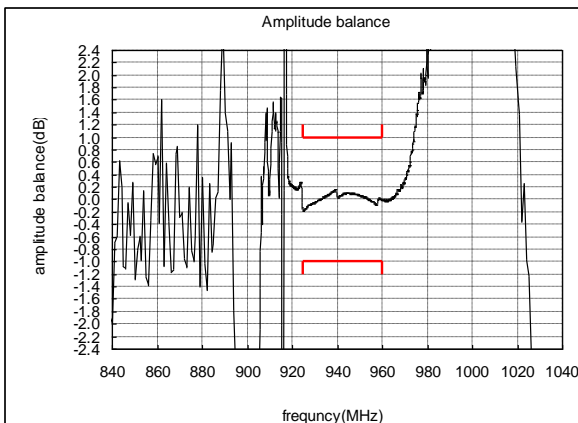
SAW FILTER FOR GSM900/GSM1800 (Rx)

Murata part number : SAWEP942MCN0F00 ($f_c=942.5\text{MHz}$)

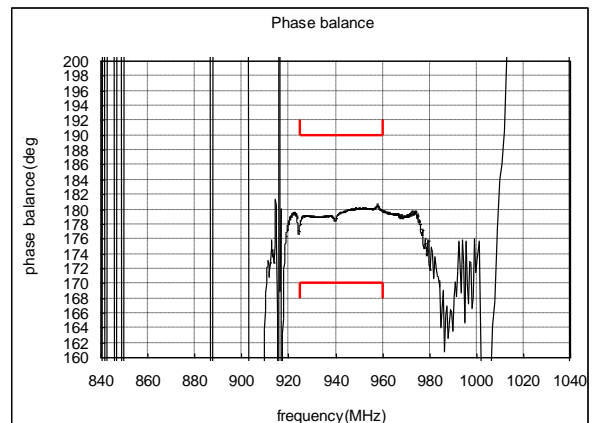
Frequency Performance



Amplitude balance



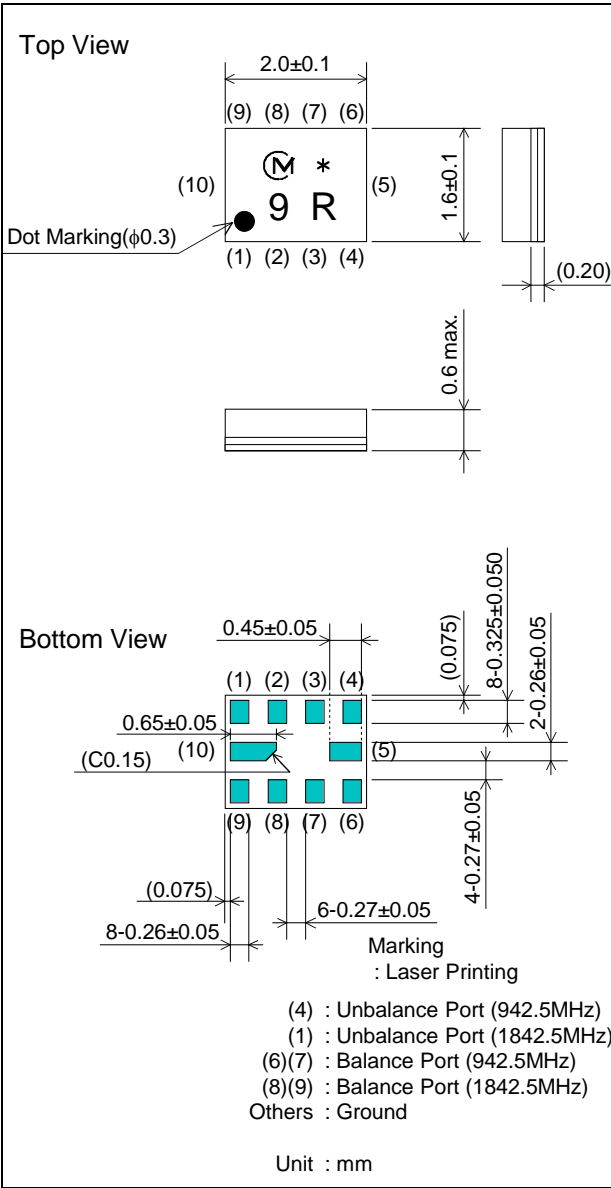
Phase balance



SAW FILTER FOR GSM900/GSM1800 (Rx)

Murata part number : SAWEP942MCN0F00 ($f_c=1842.5\text{MHz}$)

Package Dimensions



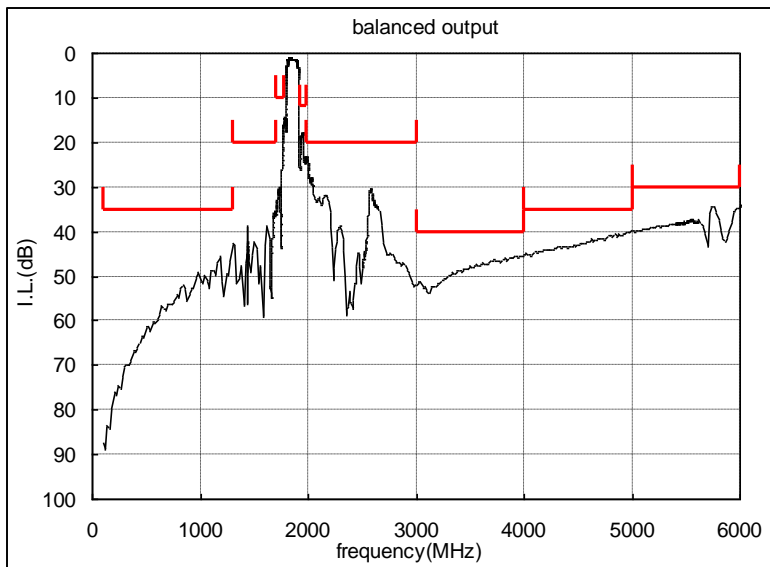
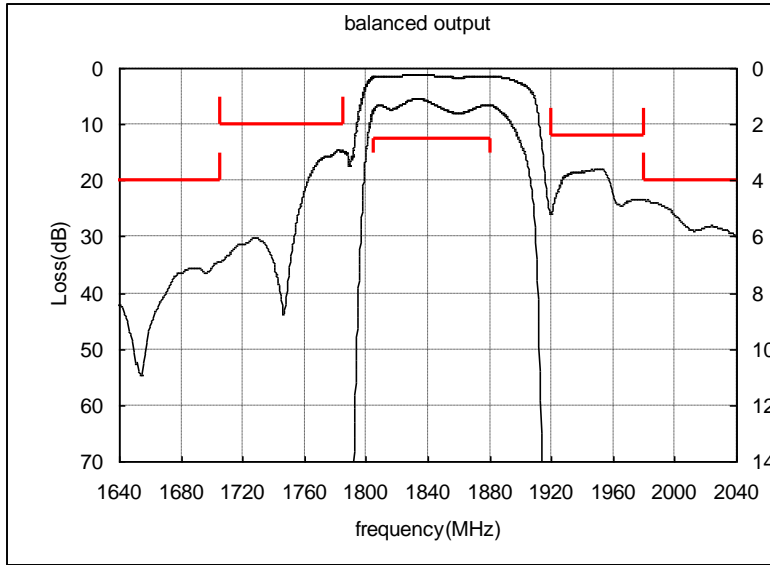
Specification

Item	Specification			
	-30 to 85°C	-10 to 80°C	25±2°C	typ.
Nominal Center Frequency(f_c)	1842.5 MHz			
Insertion Loss (1805 to 1880MHz)	2.5 dB max.	2.2 dB max.	1.8 dB max.	1.6 dB
Absolute Attenuation				
1) 100 to 1300 MHz	35 dB min.	35 dB min.	35 dB min.	49 dB
2) 1300 to 1705 MHz	20 dB min.	20 dB min.	20 dB min.	32 dB
3) 1705 to 1785 MHz	10 dB min.	11 dB min.	13 dB min.	16 dB
4) 1920 to 1980 MHz	12 dB min.	13 dB min.	15 dB min.	18 dB
5) 1980 to 3000 MHz	20 dB min.	20 dB min.	20 dB min.	23 dB
6) 3000 to 4000 MHz	40 dB min.	40 dB min.	40 dB min.	45 dB
7) 4000 to 5000 MHz	35 dB min.	35 dB min.	35 dB min.	41 dB
8) 5000 to 6000 MHz	30 dB min.	30 dB min.	30 dB min.	34 dB
Ripple Deviation (1805 to 1880MHz)	1.5 dB max.	1.2 dB max.	0.8 dB max.	0.4 dB
VSWR (1805 to 1880MHz)	2.3 max.	2.2 max.	2.1 max.	1.7
Amplitude Balance (1805 to 1880MHz)	±1.5dB max.	±1.5dB max.	±1.4dB max.	±0.9dB
Phase Balance (1805 to 1880MHz)	180±12deg. max.	180±12deg. max.	180±10deg. max.	180±5deg.
Unbalance Port Matching Impedance (nominal)	50Ω			
Balance Port Matching Impedance (nominal)	150Ω//15nH			
Input Signal Level	20mW (+13dBm), 2000 hours			

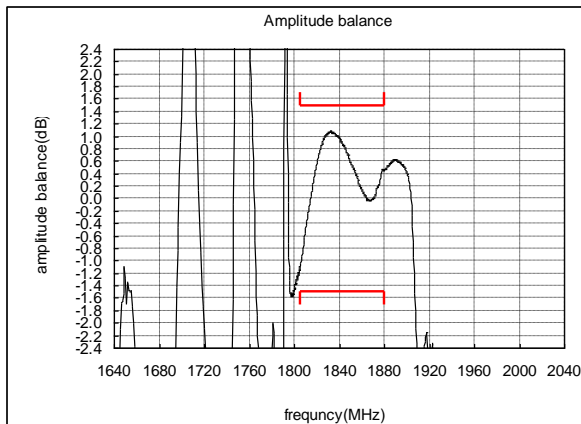
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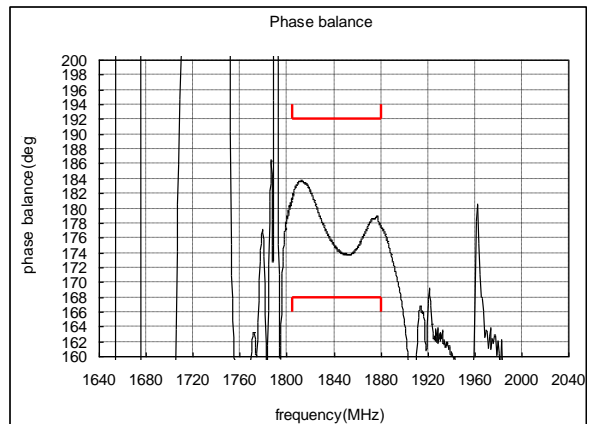
Frequency Performance



Amplitude balance



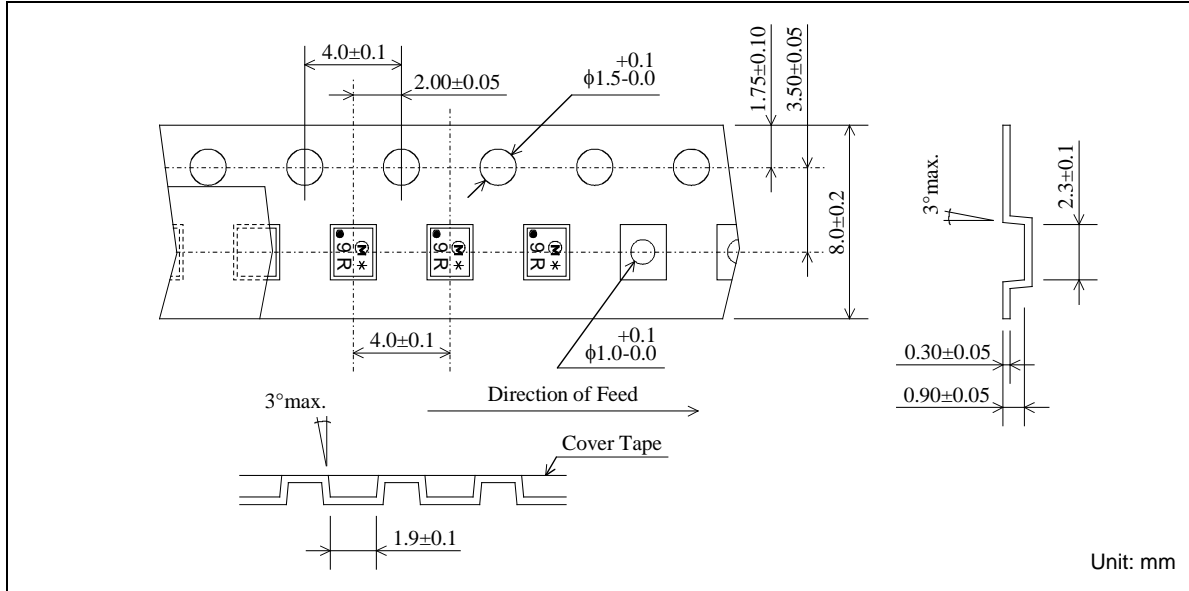
Phase balance



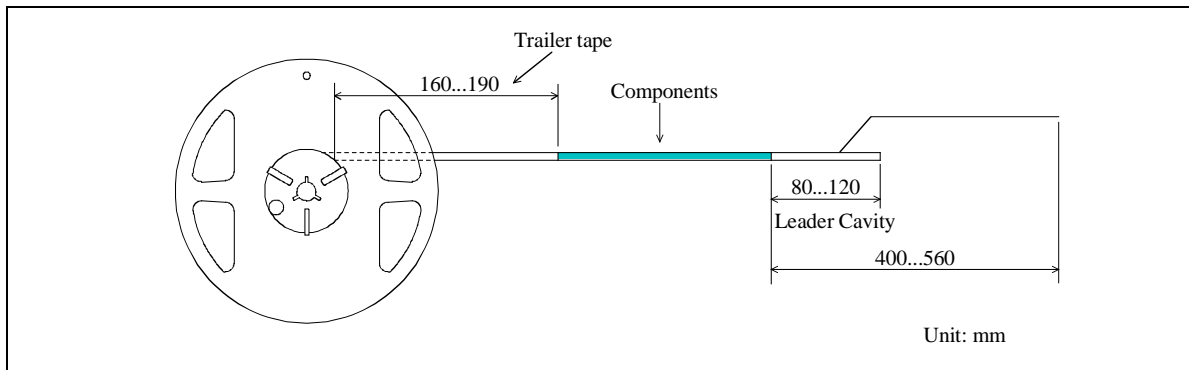
SAW FILTER FOR GSM900/GSM1800 (Rx)

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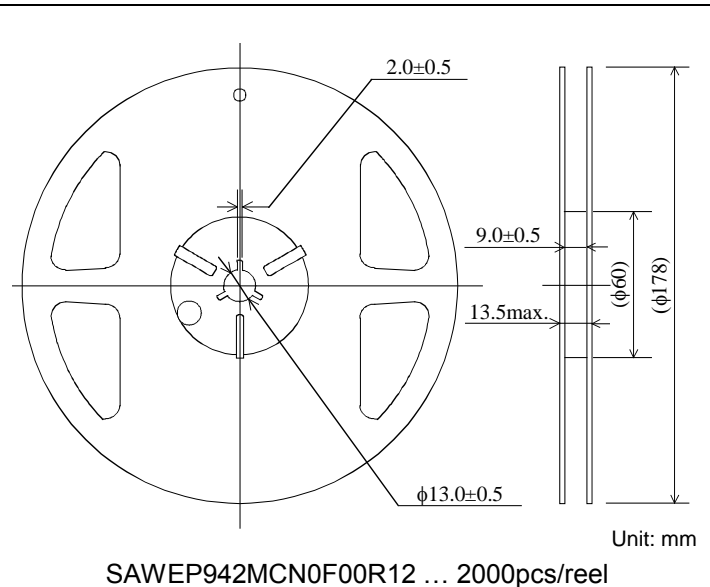
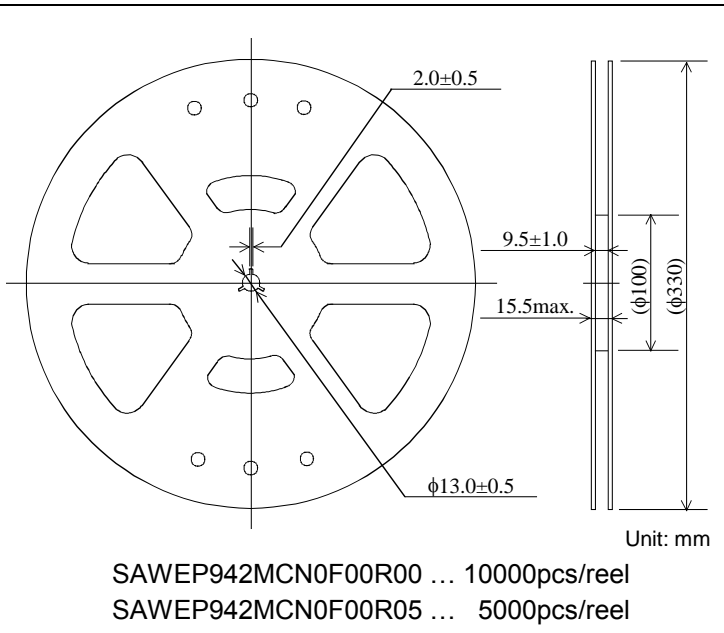
Dimensions of Carrier Tape



Dimensions of Tape



Dimensions of Reel

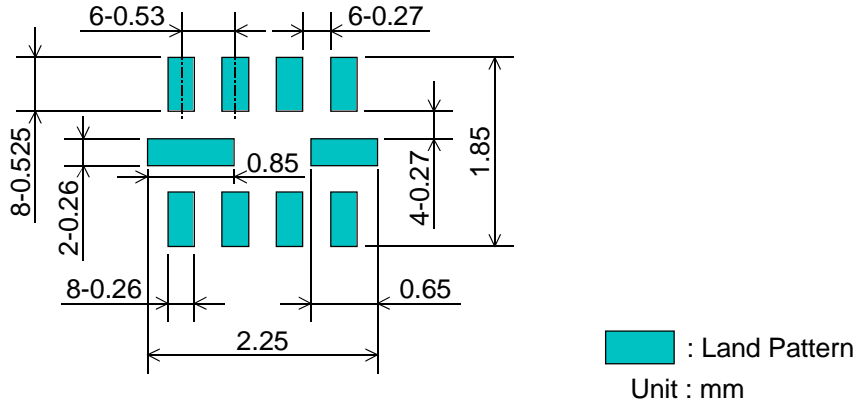


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Recommended Land Pattern

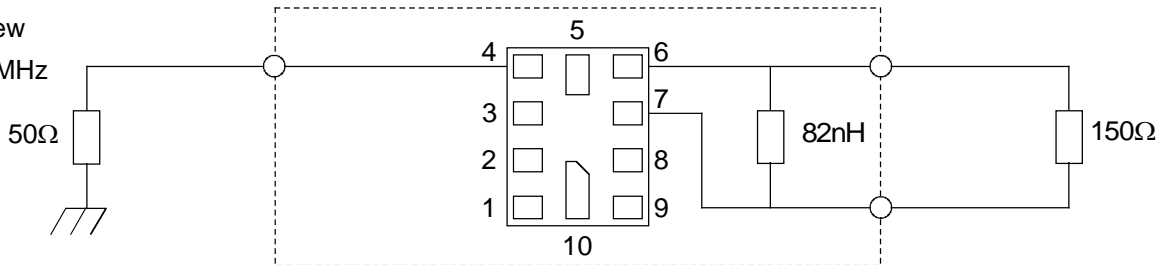
Top View



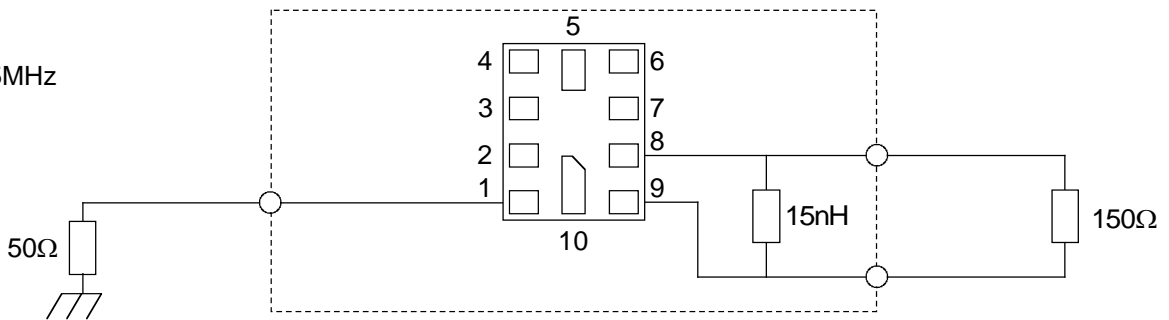
Test Circuit

Bottom View

942.5MHz



1842.5MHz



SAW FILTER FOR GSM900/GSM1800 (Rx)

Murata part number : SAWEP942MCN0F00

■ 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.