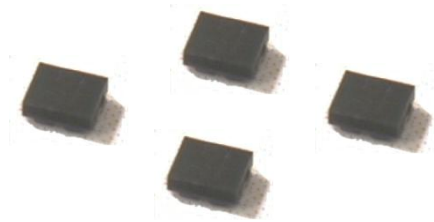
Data Sheet of SAW Components



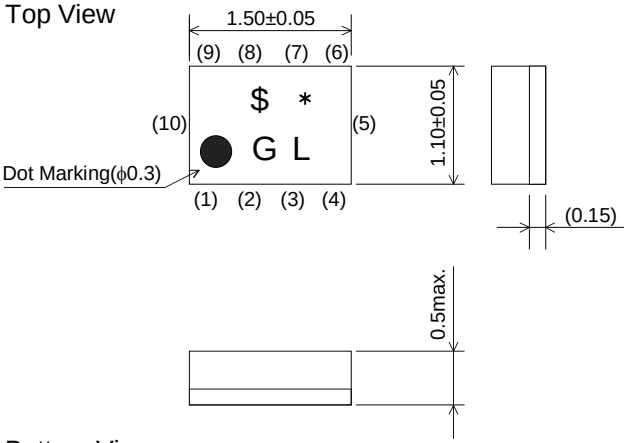
Note : Murata SAW Component is applicable for Cellular /Cordless phone (Terminal) relevant market only.
Please also read caution at the end of this document.

SAW FILTER FOR GSM850/GSM900 (Rx)

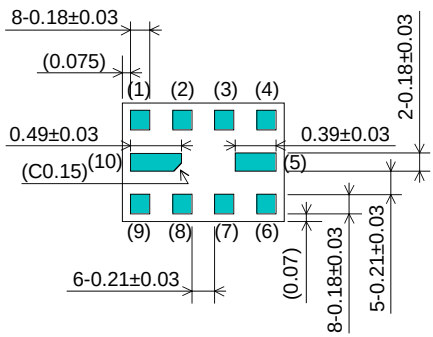
Murata part number : SAWFD881MCN0F0A (fc=881.5MHz)

■ Package Dimensions

Top View



Bottom View



Marking: Laser Printing
∗ : EIAJ Code
(Refer to the table 1)
$: Date Code
(Refer to the table 2)

(4) : Unbalance Port (881.5MHz)
(1) : Unbalance Port (942.5MHz)
(6)(7) : Balance Port (881.5MHz)
(8)(9) : Balance Port (942.5MHz)
Others : Ground

Unit : mm

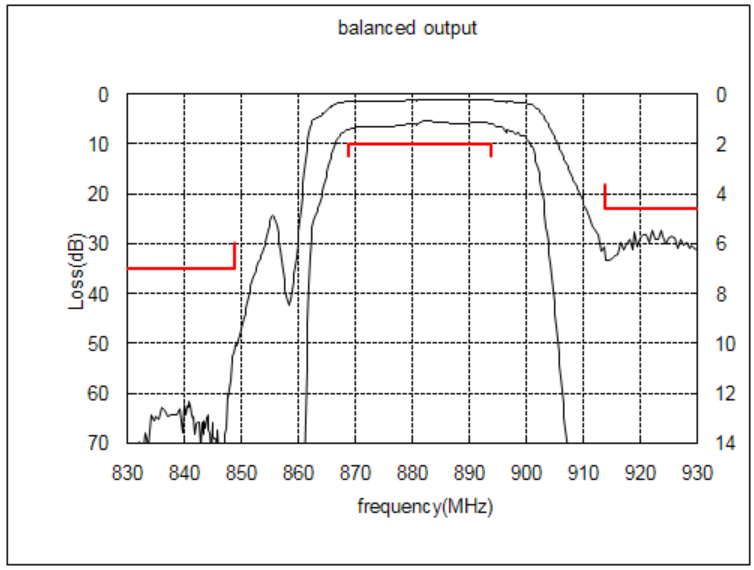
■ Specification

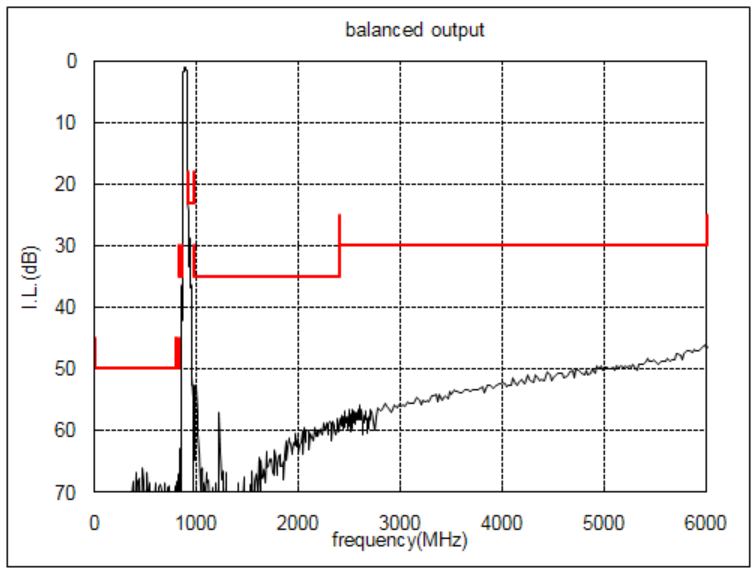
Item			Specification		
			-30 to 85°C	25±2°C	typ.
Nominal Center Frequency(fc)			881.5MHz		
Insertion Loss (869 to 894MHz)			2.0 dB max.	1.9 dB max.	1.4 dB
Absolute Attenuation					
1)	0.1 to	800 MHz	50 dB min.	50 dB min.	64 dB
2)	800 to	824 MHz	50 dB min.	50 dB min.	65 dB
3)	824 to	849 MHz	35 dB min.	38 dB min.	50 dB
4)	914 to	970 MHz	23 dB min.	23 dB min.	27 dB
5)	970 to	2400 MHz	35 dB min.	35 dB min.	53 dB
6)	2400 to	6000 MHz	30 dB min.	30 dB min.	47 dB
Ripple Deviation (869 to 894MHz)			1.1 dB max.	0.9 dB max.	0.3 dB
VSWR (869 to 894MHz)			2.0 max.	1.9 max.	1.4
Amplitude Balance (869 to 894MHz)			±0.8dB max.	±0.5dB max.	+0.1dB
Phase Balance (869 to 894MHz)			180±5deg. max.	180±5deg. max.	180+1.1deg.
Unbalance Port Matching Impedance (nominal)			50Ω		
Balance Port Matching Impedance (nominal)			150Ω//82nH		
Input Signal Level			31.6mW (+15dBm), 2000 hours		

SAW FILTER FOR GSM850/GSM900 (Rx)

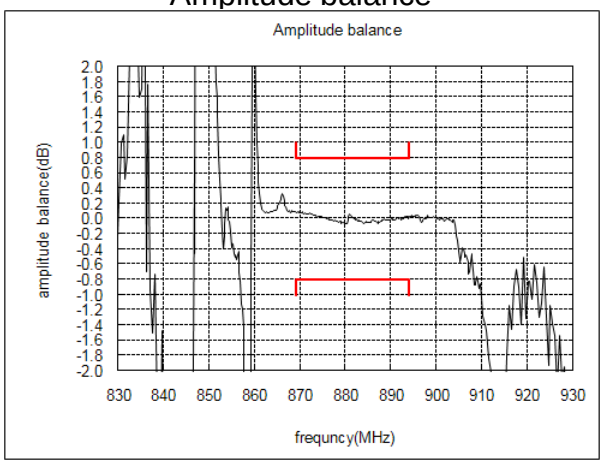
Murata part number : SAWFD881MCN0F0A (fc=881.5MHz)

Frequency Performance

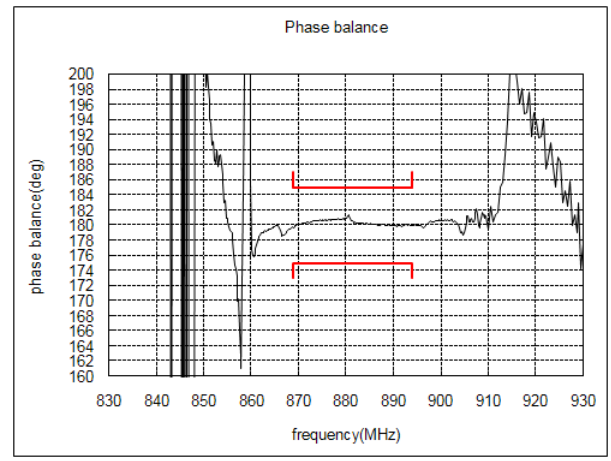




Amplitude balance



Phase balance

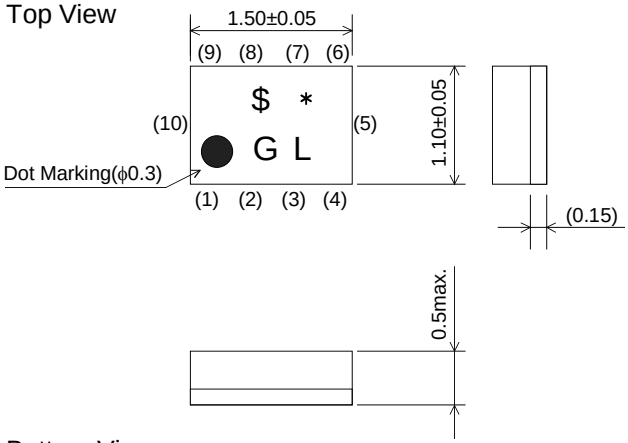


SAW FILTER FOR GSM850/GSM900 (Rx)

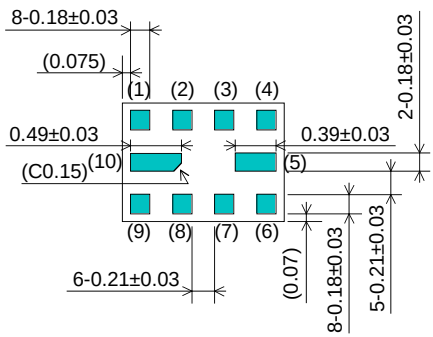
Murata part number : SAWFD881MCN0F0A (fc=942.5MHz)

■ Package Dimensions

Top View



Bottom View



Marking: Laser Printing
∗ : EIAJ Code
(Refer to the table 1)
$: Date Code
(Refer to the table 2)

(4) : Unbalance Port (881.5MHz)
(1) : Unbalance Port (942.5MHz)
(6)(7) : Balance Port (881.5MHz)
(8)(9) : Balance Port (942.5MHz)
Others : Ground

Unit : mm

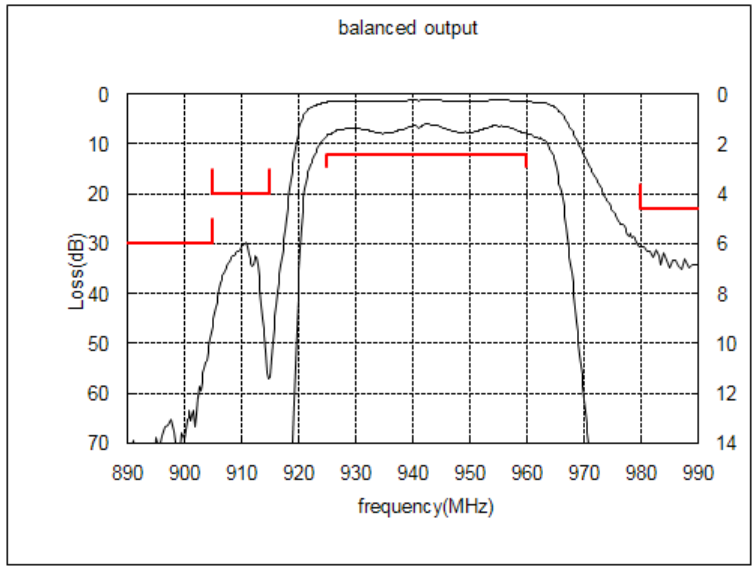
■ Specification

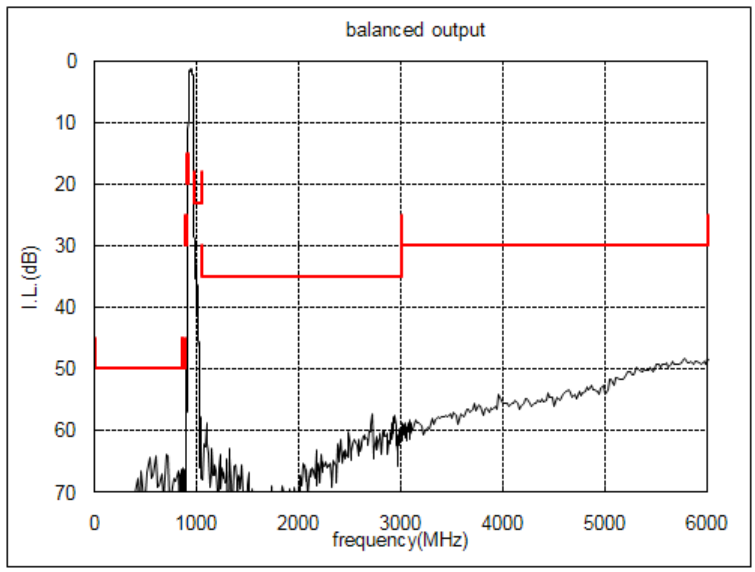
Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency(fc)	942.5MHz		
Insertion Loss (925 to 960MHz)	2.4 dB max.	2.1 dB max.	1.6 dB
Absolute Attenuation			
1) 0.1 to 860 MHz	50 dB min.	50 dB min.	65 dB
2) 860 to 880 MHz	50 dB min.	50 dB min.	68 dB
3) 880 to 905 MHz	30 dB min.	32 dB min.	42 dB
4) 905 to 915 MHz	20 dB min.	22 dB min.	30 dB
5) 980 to 1050 MHz	23 dB min.	23 dB min.	31 dB
6) 1050 to 3000 MHz	35 dB min.	35 dB min.	55 dB
7) 3000 to 6000 MHz	30 dB min.	30 dB min.	46 dB
Ripple Deviation (925 to 960MHz)	1.5 dB max.	1.3 dB max.	0.4 dB
VSWR (925 to 960MHz)	2.1 max.	2.0 max.	1.8
Amplitude Balance (925 to 960MHz)	±0.8dB max.	±0.5dB max.	-0.1dB
Phase Balance (925 to 960MHz)	180±5deg. max.	180±5deg. max.	180+3deg.
Unbalance Port Matching Impedance (nominal)	50Ω		
Balance Port Matching Impedance (nominal)	150Ω//82nH		
Input Signal Level	31.6mW (+15dBm), 2000 hours		

SAW FILTER FOR GSM850/GSM900 (Rx)

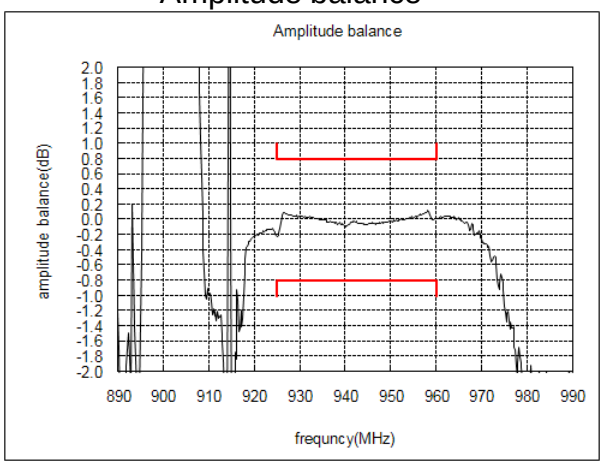
Murata part number : SAWFD881MCN0F0A (fc=942.5MHz)

Frequency Performance

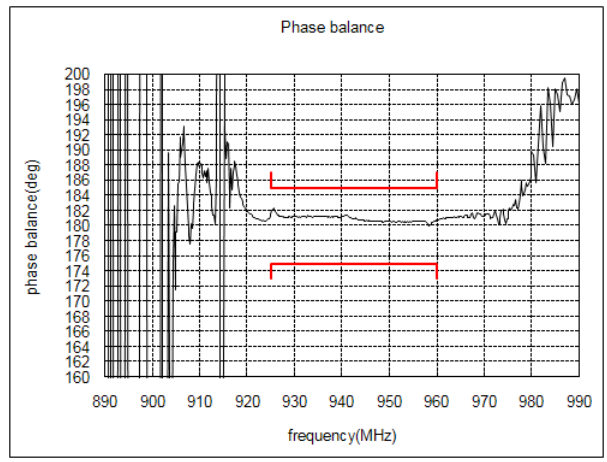




Amplitude balance



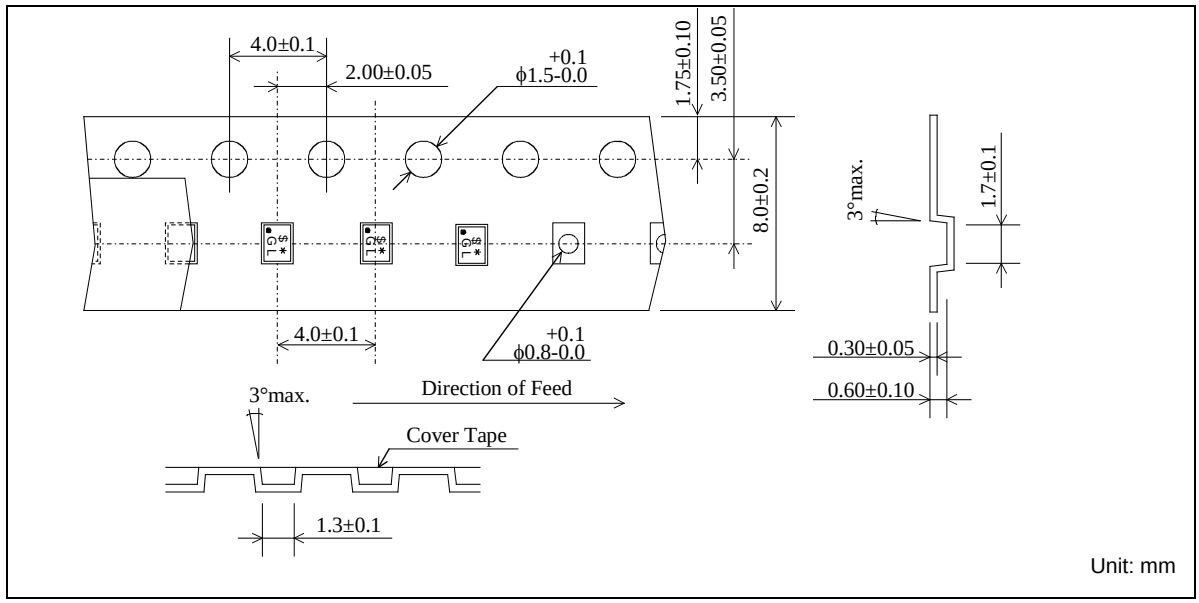
Phase balance



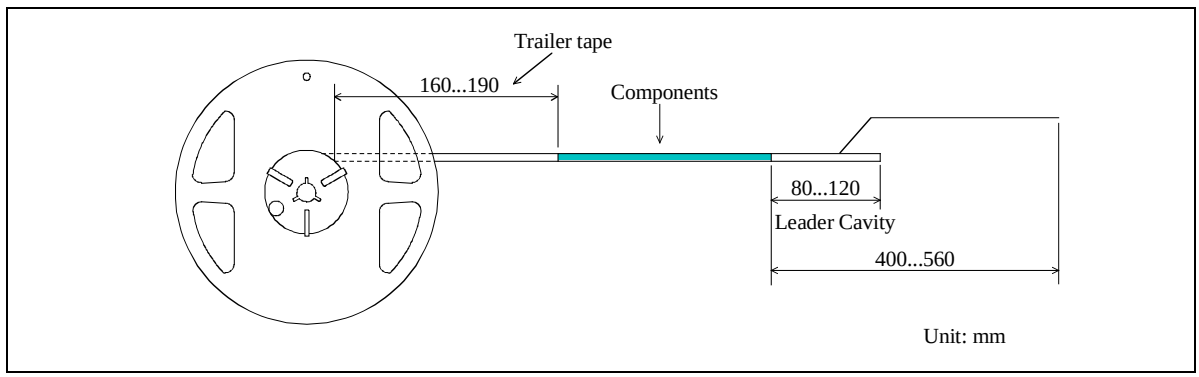
SAW FILTER FOR GSM850/GSM900 (Rx)

Murata part number : SAWFD881MCN0F0A

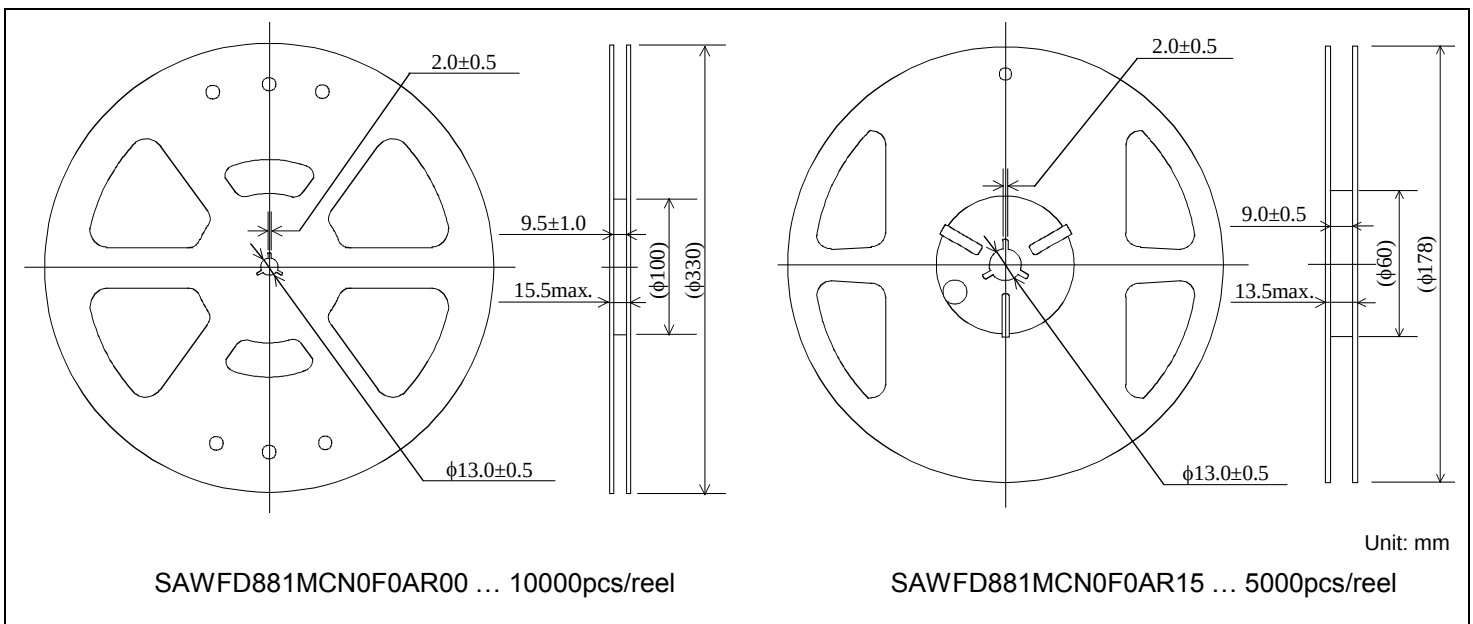
■ Dimensions of Carrier Tape



■ Dimensions of Tape



■ Dimensions of Reel



SAWFD881MCN0F0AR00 … 10000pcs/reel

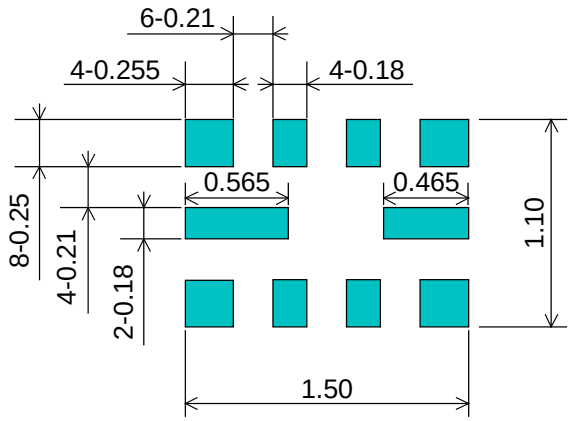
SAWFD881MCN0F0AR15 … 5000pcs/reel

SAW FILTER FOR GSM850/GSM900 (Rx)

Murata part number : SAWFD881MCN0F0A

■ Recommended Land Pattern

Top View



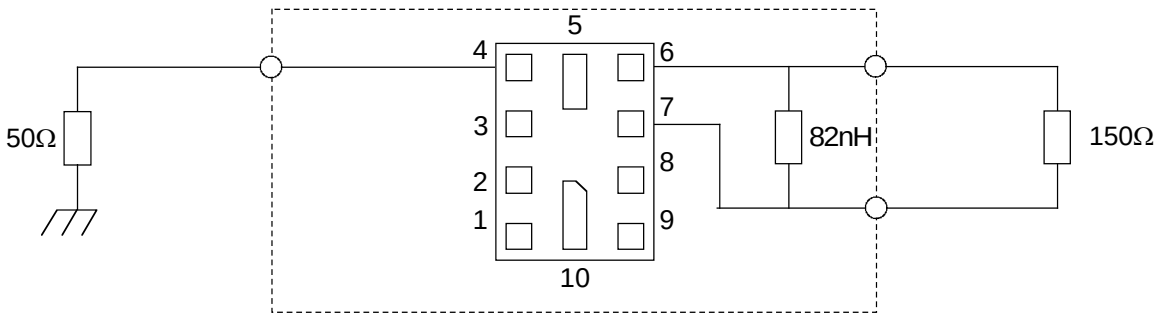
: Land Pattern

Unit : mm

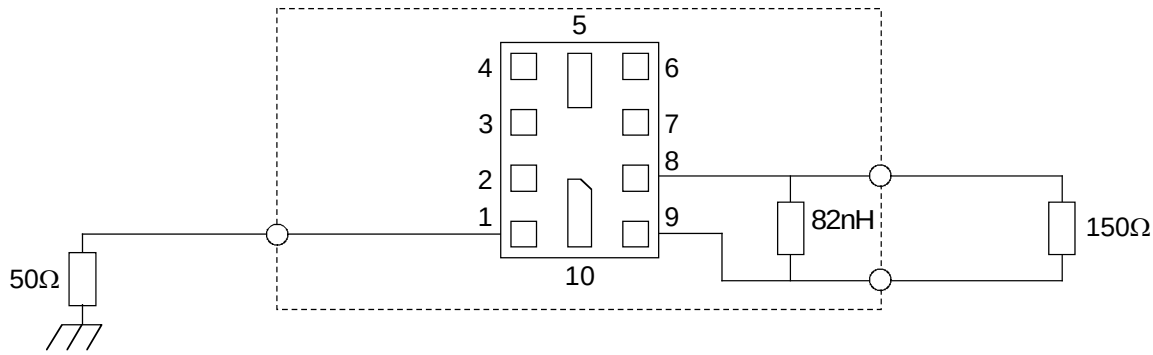
■ Test Circuit

Bottom View

881.5MHz



942.5MHz



SAW FILTER FOR GSM850/GSM900 (Rx)

Murata part number : SAWFD881MCN0F0A

■ 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.

■ Marking code

Table 1 ＊: EIAJ Code
This rule of code is applied repeatedly every four year.

2009 2013 2017	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	A	B	C	D	E	F	G	H	J	K	L	M
2010 2014 2018	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	N	P	Q	R	S	T	U	V	W	X	Y	Z
2011 2015 2019	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	a	b	c̄	d	e	f	g	h	j	k	l	m
2012 2016 2020	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	n	p	q	r	s	t	u	v	w	x	y	z

Table 2 $: Date Code

date	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
code	A	B	C	D	E	F	G	H	J	K	
date	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	
code	L	M	N	P	Q	R	S	T	U	V	
date	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th	31st
code	W	X	Y	Z	a	b	c̄	d	e	f	g