



Data Sheet of SAW Components



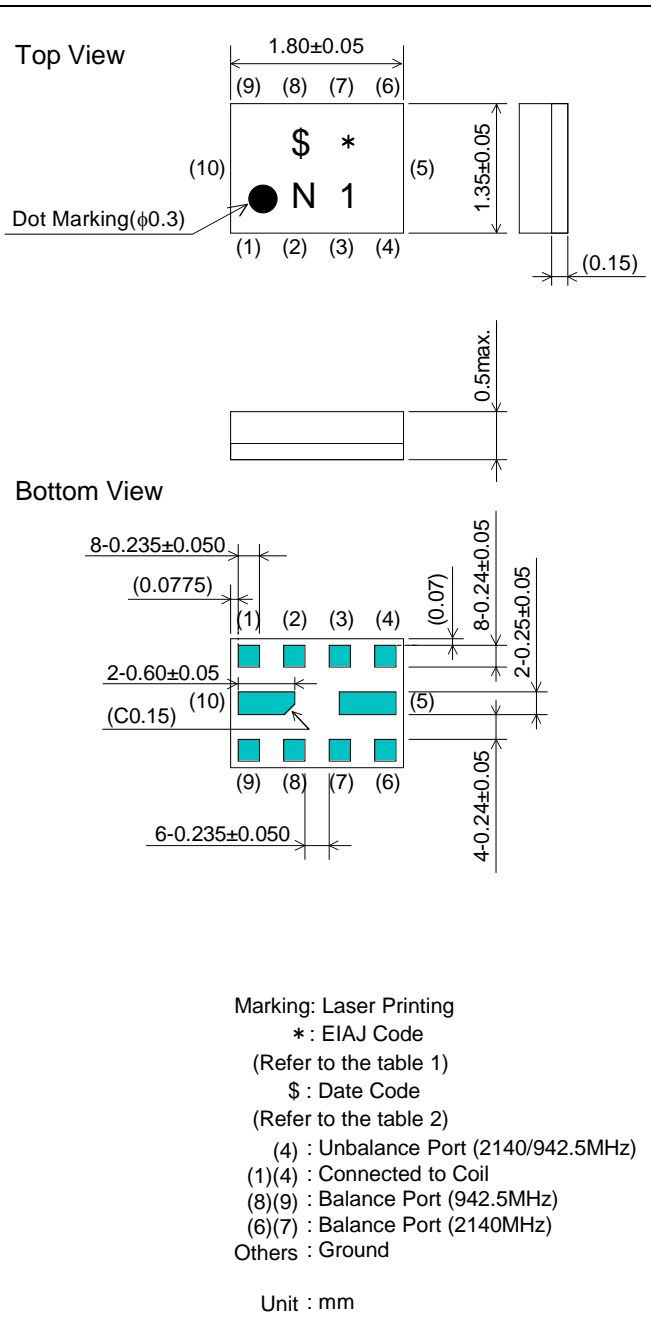
Note : Murata SAW Component is applicable for Cellular /Cordless phone (Terminal) relevant market only.

Please also read caution at the end of this document.

SAW FILTER FOR Band1&4/Band8 Rx Diplex SAW

Murata part number :SAWEN942MCA0F00 (fc=942.5MHz)

Package Dimensions



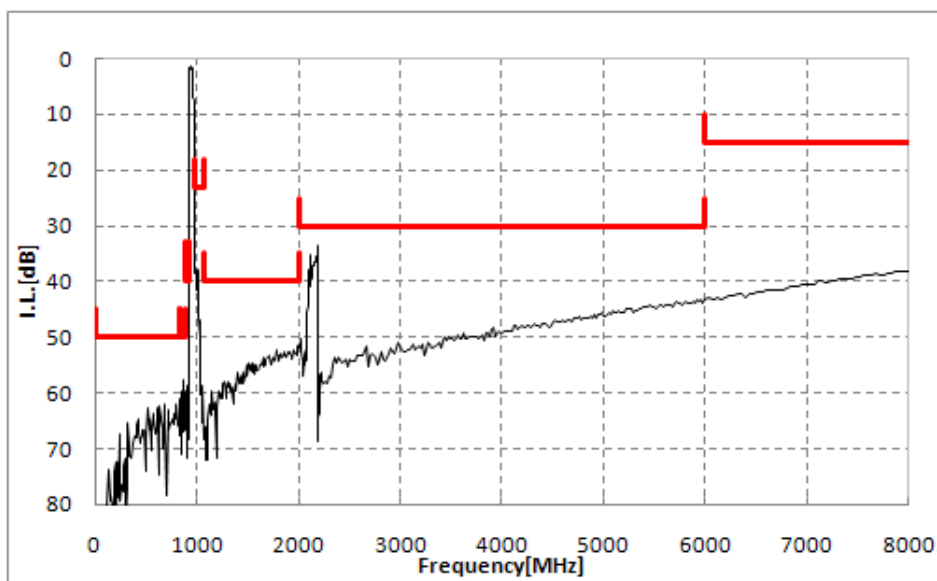
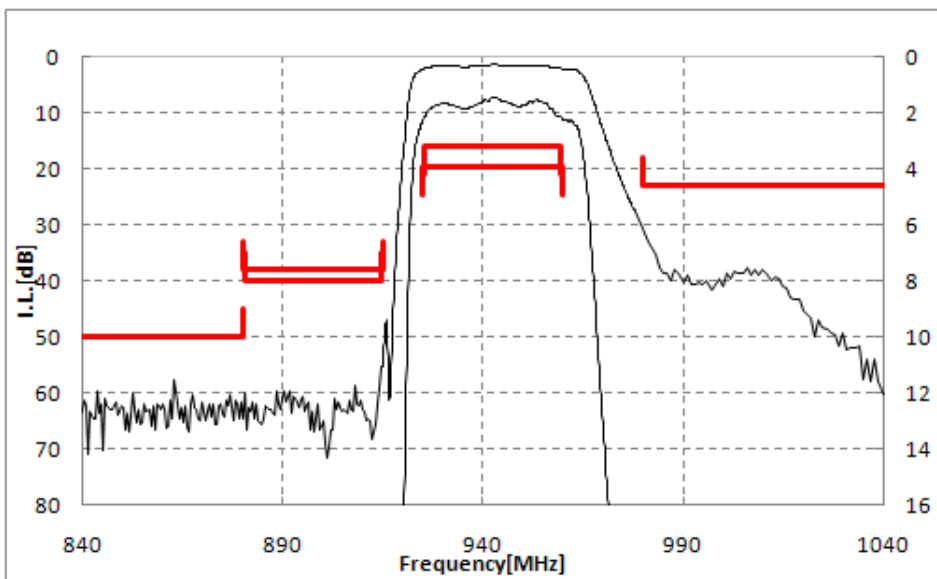
Specification

Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency(fc)	942.5MHz		
Insertion Loss (925 to 960MHz)	3.9 dB max.	2.8 dB max.	2.2 dB
	(925.48 to 959.52MHz)	3.2 dB max.	2.5 dB max.
Absolute Attenuation			
1) 0.1 to 835 MHz	50 dB min.	50 dB min.	65 dB
2) 835 to 880 MHz	50 dB min.	50 dB min.	65 dB
3) 880 to 915 MHz	38 dB min.	46 dB min.	50 dB
4) 880.48 to 914.52 MHz	40 dB min.	46 dB min.	50 dB
5) 980 to 1060 MHz	23 dB min.	23 dB min.	32 dB
6) 1060 to 2000 MHz	40 dB min.	40 dB min.	47 dB
7) 2000 to 6000 MHz	30 dB min.	30 dB min.	36 dB
8) 6000 to 12750 MHz	15 dB min.	15 dB min.	21 dB
Ripple Deviation (925 to 960MHz)	3.0dB max.	1.6dB max.	0.7dB
VSWR (925 to 960MHz)	2.1 max.	2.0 max.	1.7
Amplitude Balance (925 to 960MHz)	±1.0dB max.	± 1.0dB max.	+0.3dB
Phase Balance (925 to 960MHz)	180±10deg. max.	180±10deg. max.	180.0+3.7deg.
Unbalance Port Matching Impedance (nominal)	50Ω		
Balance Port Matching Impedance (nominal)	100Ω//47nH		
Input Signal Level	31.6mW (+15dBm), 2000 hours		

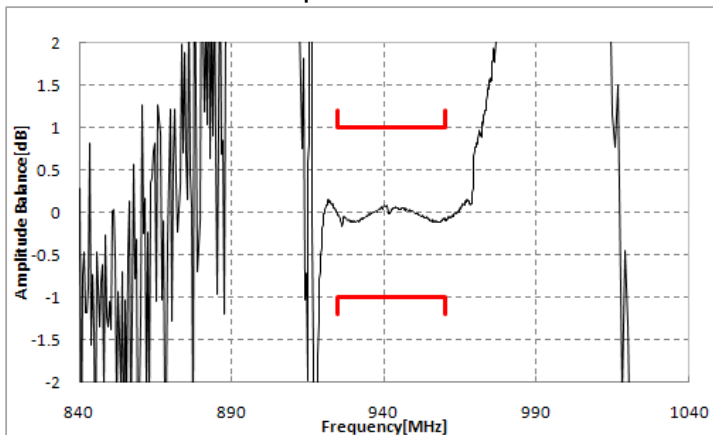
SAW FILTER FOR Band1&4/Band8 Rx Diplex SAW

Murata part number :SAWEN942MCA0F00 (fc=942.5MHz)

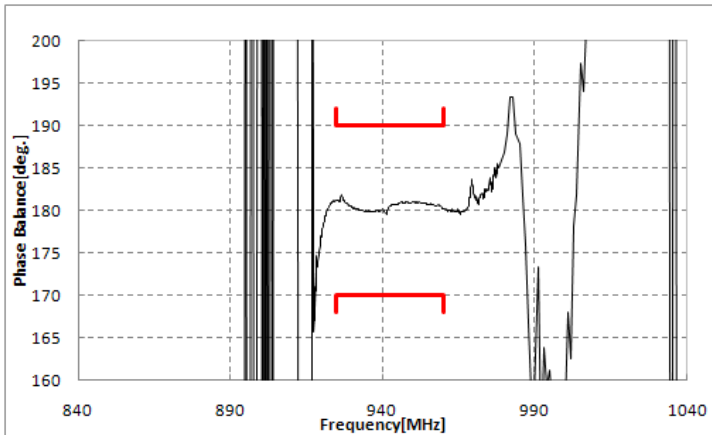
Frequency Performance



Amplitude Balance



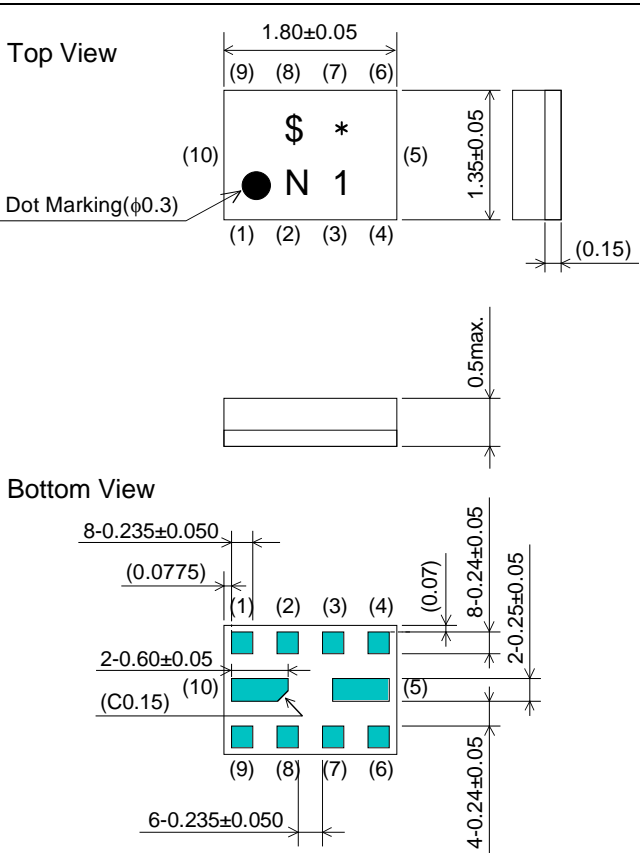
Phase Balance



SAW FILTER FOR Band1&4/Band8 Rx Diplex SAW

Murata part number :SAWEN942MCA0F00 (fc=2140MHz)

Package Dimensions



Marking: Laser Printing
 * : EIAJ Code
 (Refer to the table 1)
 \$: Date Code
 (Refer to the table 2)
 (4) : Unbalance Port (2140/942.5MHz)
 (1)(4) : Connected to Coil
 (8)(9) : Balance Port (942.5MHz)
 (6)(7) : Balance Port (2140MHz)
 Others : Ground

Unit : mm

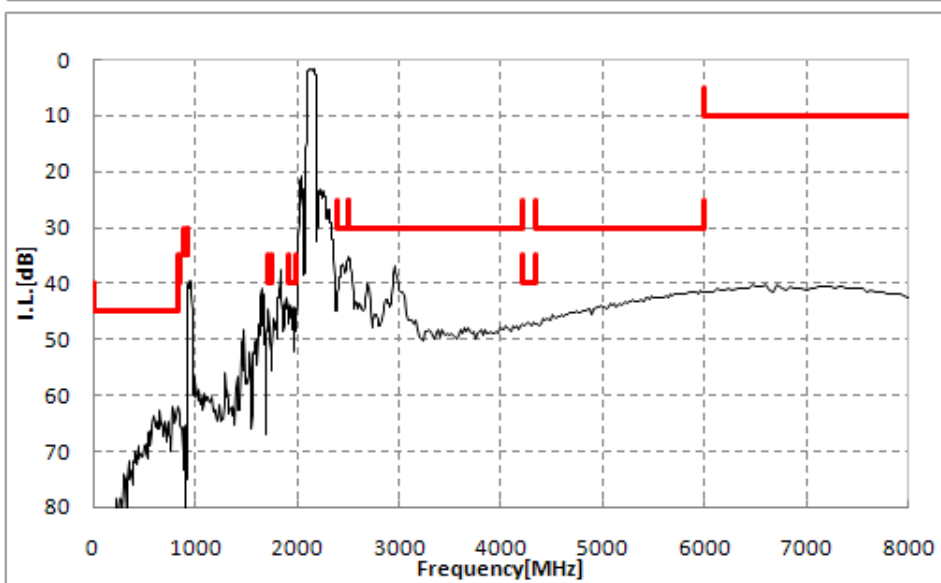
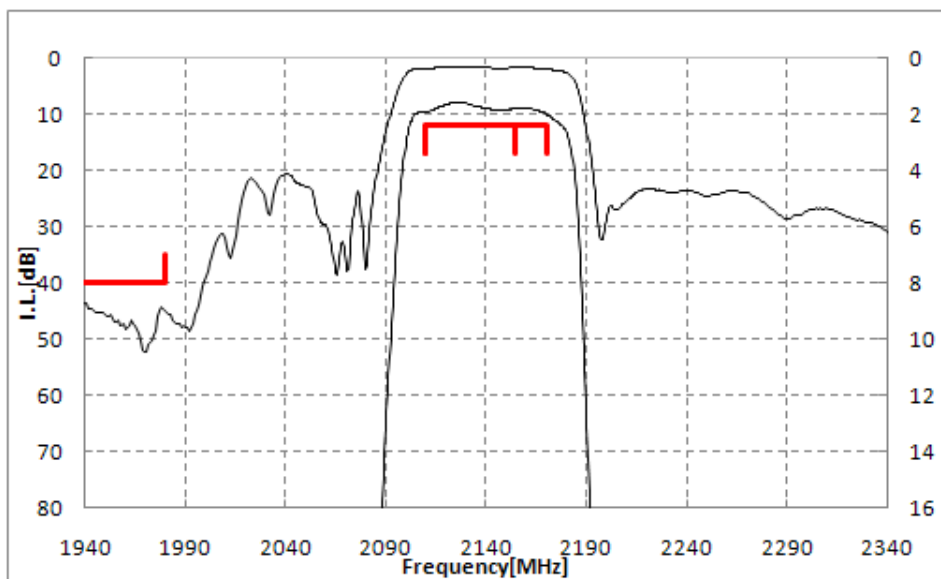
Specification

Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency(fc)	2140MHz		
Insertion Loss (2110 to 2155MHz)	2.4 dB max.	2.2 dB max.	1.9 dB
(2110 to 2170MHz)	2.4 dB max.	2.2 dB max.	1.9 dB
Absolute Attenuation			
1) 0.1 to 824 MHz	45 dB min.	45 dB min.	64 dB
2) 824 to 849 MHz	40 dB min.	40 dB min.	65 dB
3) 880 to 915 MHz	35 dB min.	35 dB min.	62 dB
4) 915 to 925 MHz	35 dB min.	35 dB min.	41 dB
5) 1710 to 1755 MHz	40 dB min.	40 dB min.	45 dB
6) 1920 to 1980 MHz	40 dB min.	40 dB min.	44 dB
7) 2400 to 2500 MHz	30 dB min.	30 dB min.	35 dB
8) 2500 to 4220 MHz	30 dB min.	30 dB min.	35 dB
9) 4220 to 4340 MHz	40 dB min.	40 dB min.	46 dB
10) 4340 to 6000 MHz	30 dB min.	30 dB min.	42 dB
11) 6000 to 12750 MHz	10 dB min.	10 dB min.	30 dB
Ripple Deviation (2110 to 2170MHz)	1.1dB max.	0.9dB max.	0.4dB
VSWR (2110 to 2170MHz)	2.0 max.	1.9 max.	1.5
Amplitude Balance (2110 to 2170MHz)	±1.2dB max.	±1.2dB max.	+0.5dB
Phase Balance (2110 to 2170MHz)	180±10deg. max.	180±10deg. max.	180.0+3.2deg.
Unbalance Port Matching Impedance (nominal)	50Ω		
Balance Port Matching impedance (nominal)	100Ω//18nH		
Input Signal Level	20mW (+13dBm), 2000 hours		

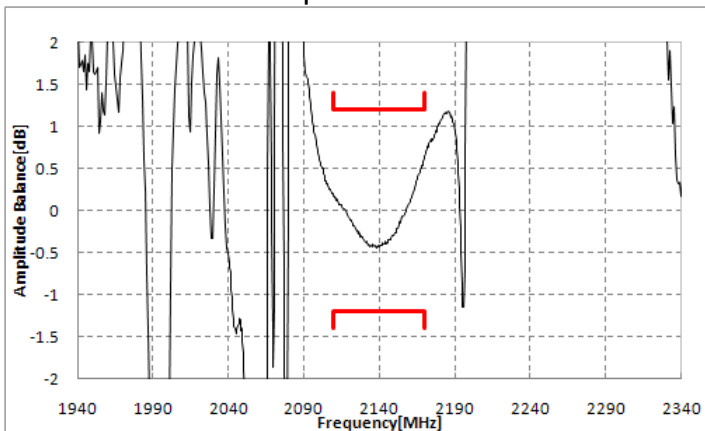
SAW FILTER FOR Band1&4/Band8 Rx Diplex SAW

Murata part number :SAWEN942MCA0F00 (fc=2140MHz)

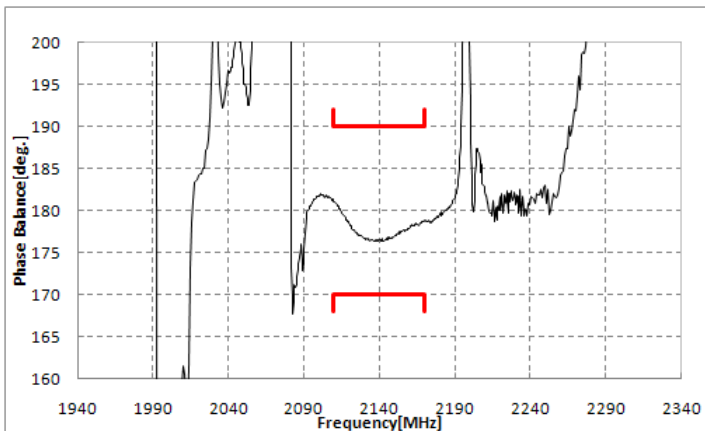
Frequency Performance



Amplitude Balance



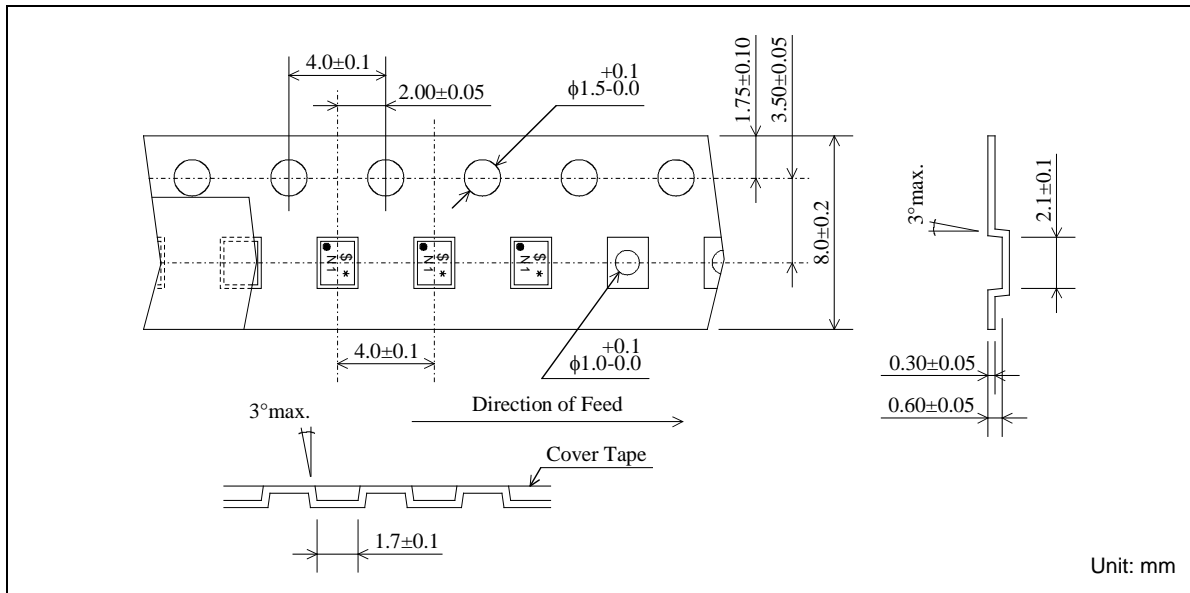
Phase Balance



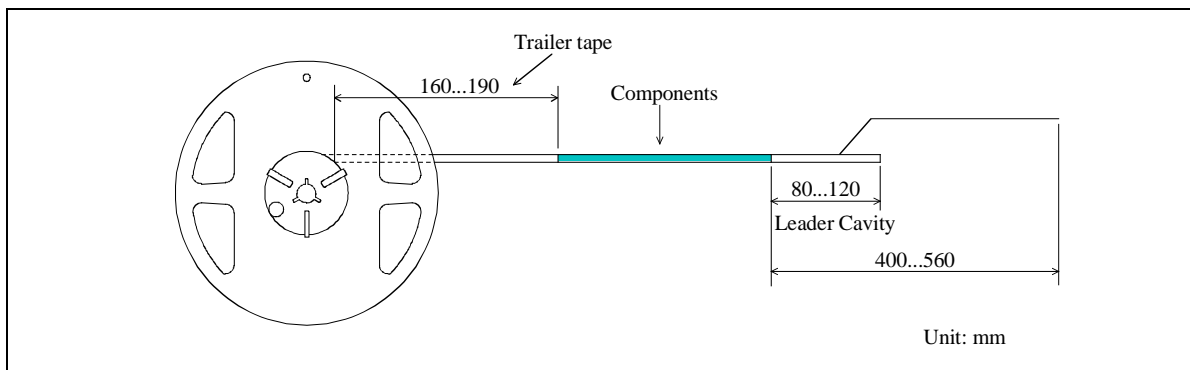
SAW FILTER FOR Band1&4/Band8 Rx Diplex SAW

Murata part number :SAWEN942MCA0F00

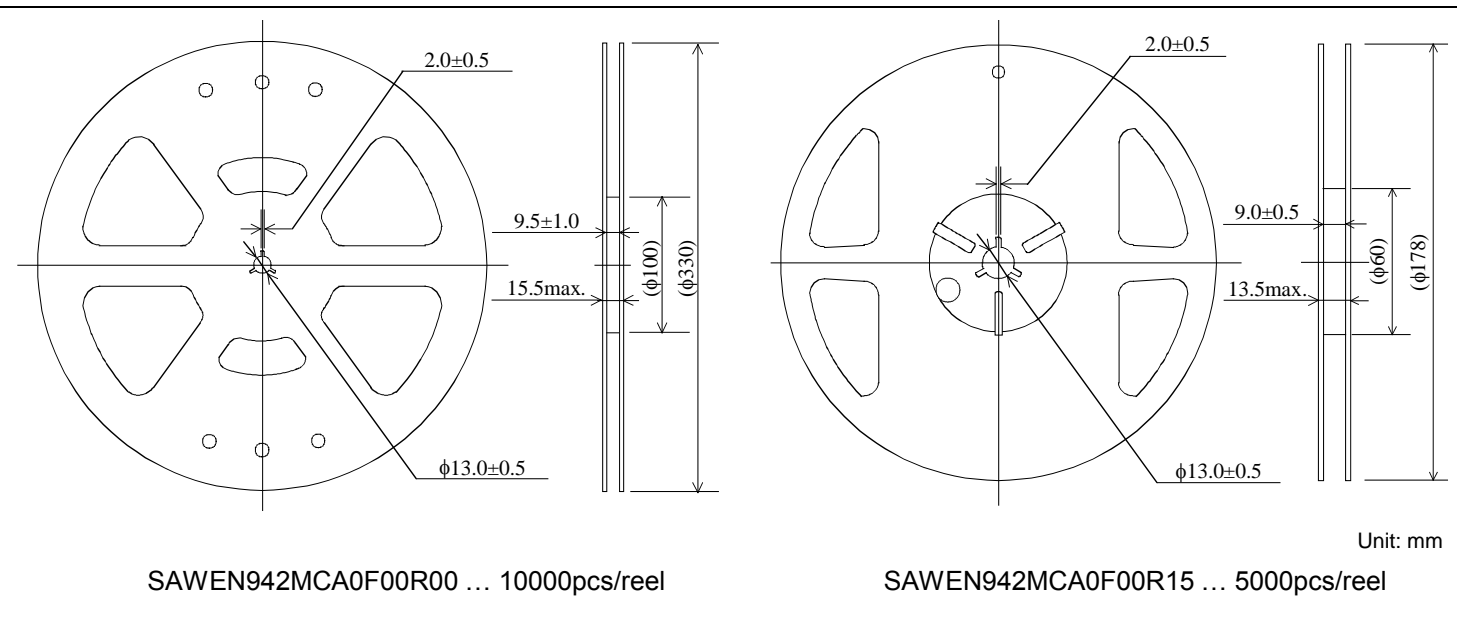
Dimensions of Carrier Tape



Dimensions of Tape



Dimensions of Reel



SAWEN942MCA0F00R00 ... 10000pcs/reel

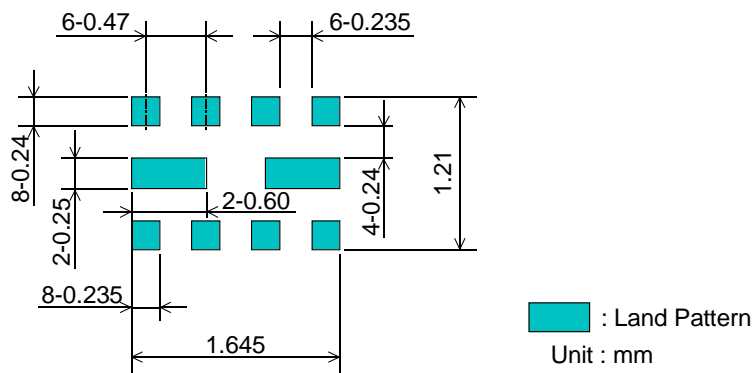
SAWEN942MCA0F00R15 ... 5000pcs/reel

SAW FILTER FOR Band1&4/Band8 Rx Diplex SAW

Murata part number :SAWEN942MCA0F00

Recommended Land Pattern

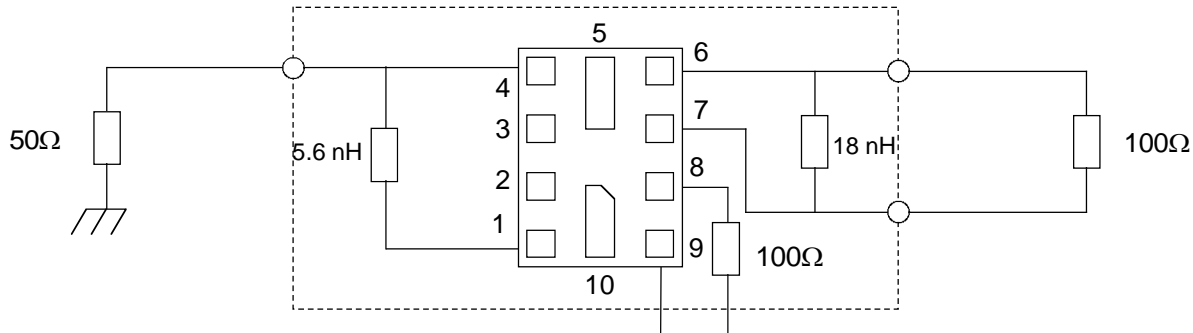
Top View



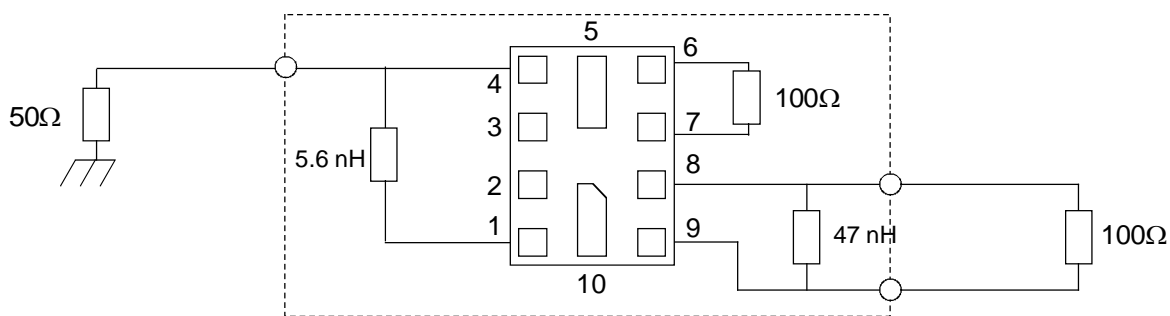
Test Circuit

Bottom View

2140MHz



942.5MHz



SAW FILTER FOR Band1&4/Band8 Rx Diplex SAW

Murata part number :SAWEN942MCA0F00

■ 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