



Data Sheet of SAW Components



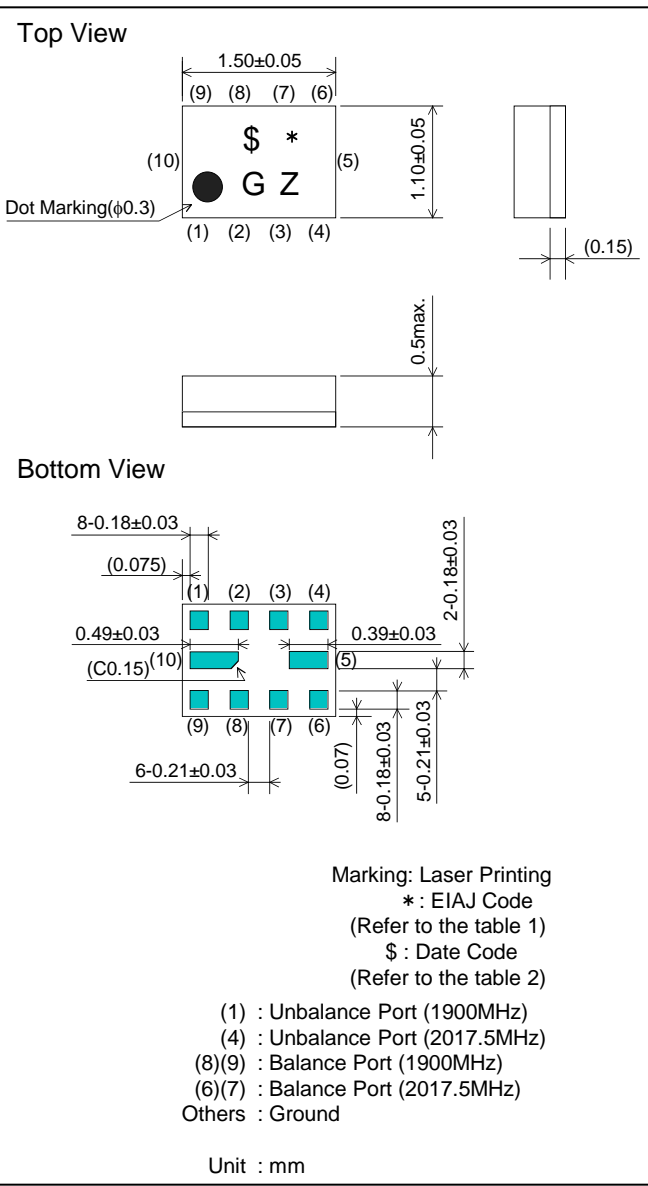
Note : Murata SAW Component is applicable for Cellular /Cordless phone (Terminal) relevant market only.
Please also read caution at the end of this document.

SAW FILTER FOR TD-SCDMA

Murata part number :SAWFD1G90CP0F0A (fc=1900MHz)

Package Dimensions

Specification

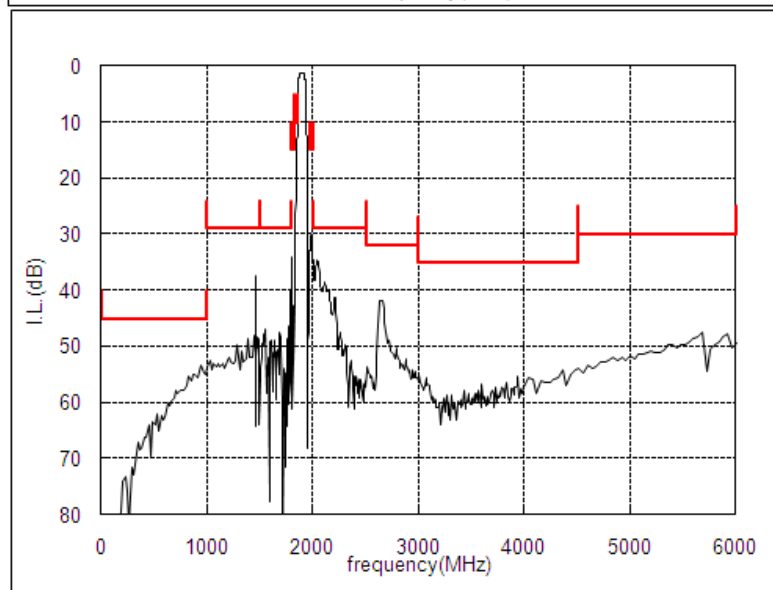
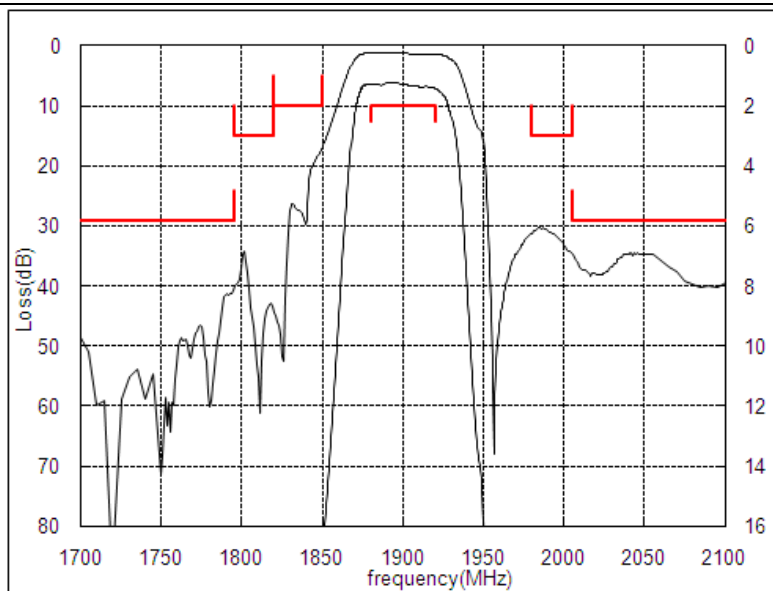


Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency(fc)	1900MHz		
Insertion Loss (1880 to 1920MHz)	2.0 dB max.	1.8 dB max.	1.4 dB
Absolute Attenuation			
1) 0.1 to 1000 MHz	45 dB min.	45 dB min.	54 dB
2) 1000 to 1500 MHz	29 dB min.	29 dB min.	36 dB
3) 1500 to 1795 MHz	29 dB min.	29 dB min.	41 dB
4) 1795 to 1820 MHz	15 dB min.	15 dB min.	34 dB
5) 1820 to 1850 MHz	10 dB min.	10 dB min.	17 dB
6) 1980 to 2005 MHz	15 dB min.	15 dB min.	30 dB
7) 2005 to 2500 MHz	29 dB min.	29 dB min.	35 dB
8) 2500 to 3000 MHz	32 dB min.	32 dB min.	42 dB
9) 3000 to 4500 MHz	35 dB min.	35 dB min.	53 dB
10) 4500 to 6000 MHz	30 dB min.	30 dB min.	47 dB
Ripple Deviation (1880 to 1920MHz)	1.0 dB max.	0.8 dB max.	0.2 dB
VSWR (1880 to 1920MHz)	2.0 max.	2.0 max.	1.4
Amplitude Balance (1880 to 1920MHz)	±1.2 dB max.	±1.2 dB max.	+0.8 dB
Phase Balance (1880 to 1920MHz)	180±10deg. max.	180±10deg. max.	180.0±2.2deg.
Unbalance Port Matching Impedance (nominal)	50Ω		
Balance Port Matching Impedance (nominal)	200Ω//30nH		
Input Signal Level	20mW (+13dBm), 2000 hours		

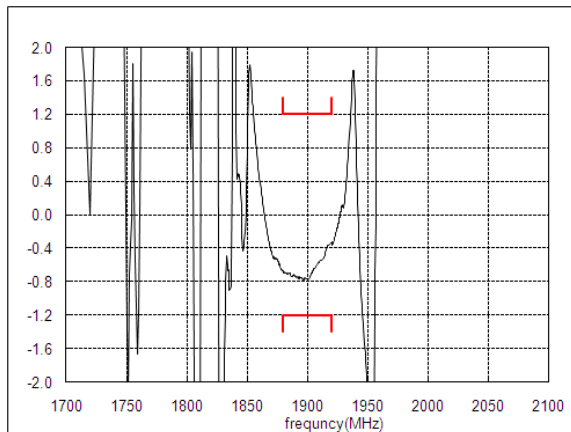
SAW FILTER FOR TD-SCDMA

Murata part number :SAWFD1G90CP0F0A (fc=1900MHz)

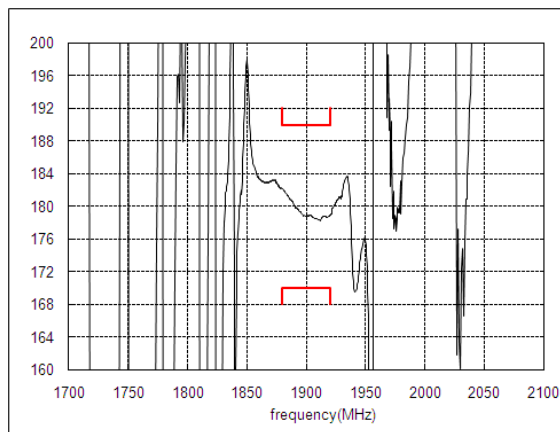
Frequency Performance



Amplitude balance



Phase balance

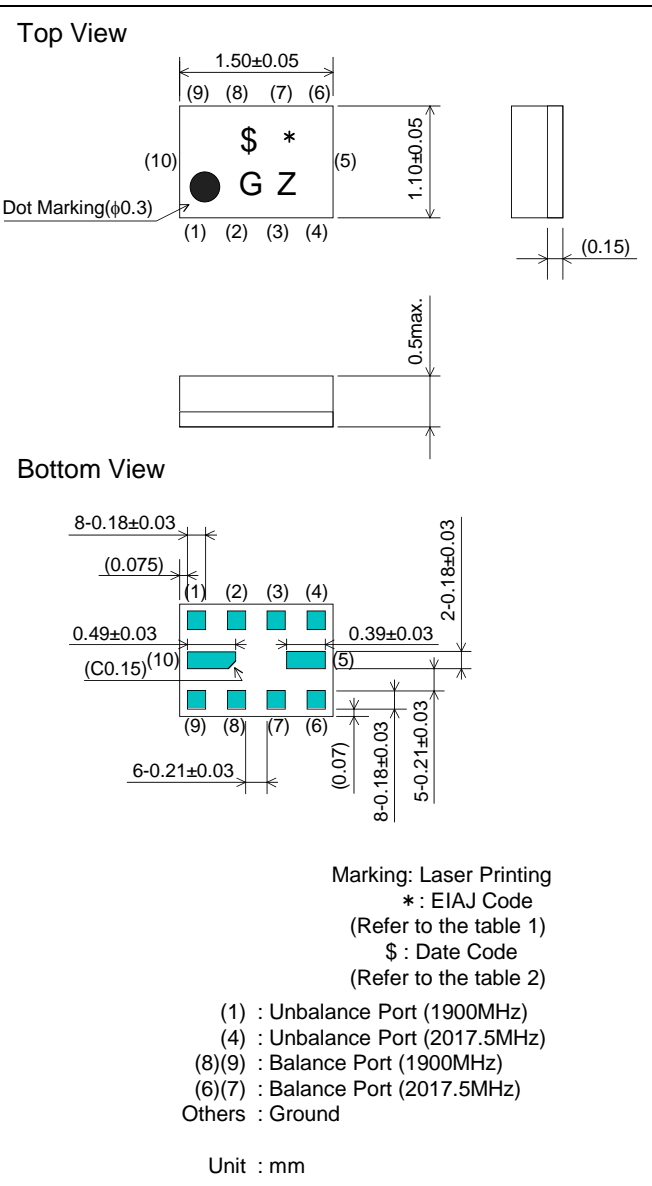


SAW FILTER FOR TD-SCDMA

Murata part number :SAWFD1G90CP0F0A (fc=2017.5MHz)

Package Dimensions

Specification

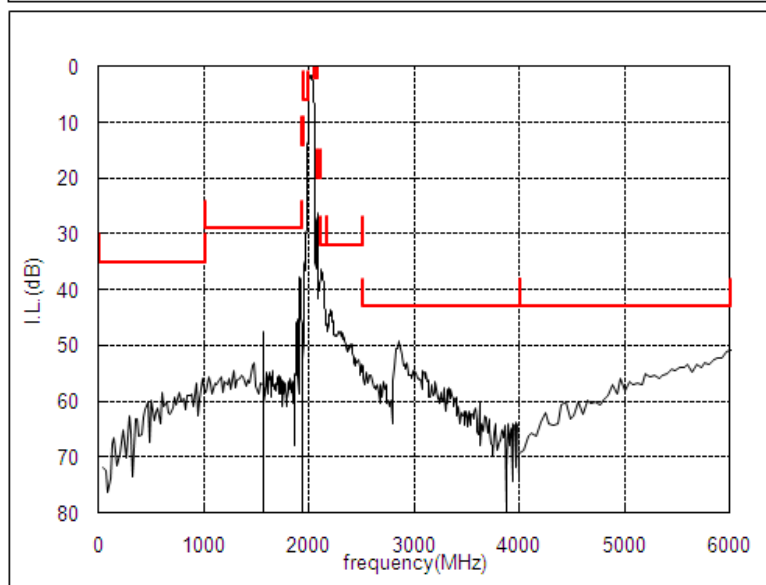
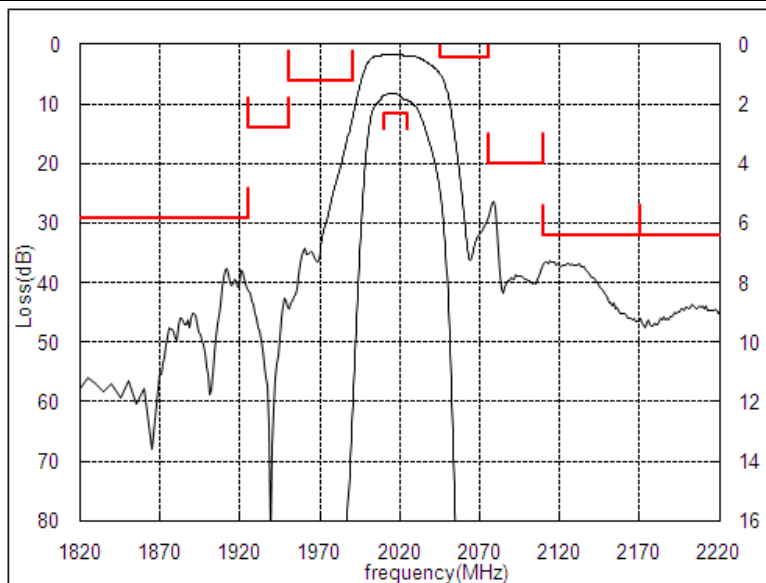


Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency(fc)	2017.5MHz		
Insertion Loss (2010 to 2025MHz)	2.5 dB max.	2.3 dB max.	1.9 dB
Absolute Attenuation			
1) 0.1 to 1013 MHz	35 dB min.	35 dB min.	56 dB
2) 1013 to 1925 MHz	29 dB min.	29 dB min.	38 dB
3) 1925 to 1950 MHz	14 dB min.	14 dB min.	41 dB
4) 1950 to 1990 MHz	6 dB min.	6 dB min.	13 dB
5) 2045 to 2075 MHz	2.0 dB min.	2.0 dB min.	4.8 dB
6) 2075 to 2110 MHz	20 dB min.	20 dB min.	26 dB
7) 2110 to 2170 MHz	32 dB min.	32 dB min.	36 dB
8) 2170 to 2500 MHz	32 dB min.	32 dB min.	44 dB
9) 2500 to 4000 MHz	43 dB min.	43 dB min.	49 dB
10) 4000 to 6000 MHz	43 dB min.	43 dB min.	53 dB
Ripple Deviation (2010 to 2025MHz)	1.0 dB max.	0.8 dB max.	0.3 dB
VSWR (2010 to 2025MHz)	2.0 max.	2.0 max.	1.2
Amplitude Balance (2010 to 2025MHz)	±1.0 dB max.	±1.0 dB max.	+0.6 dB
Phase Balance (2010 to 2025MHz)	180±10deg. max.	180±10deg. max.	180.0+3.3deg.
Unbalance Port Matching Impedance (nominal)	50Ω		
Balance Port Matching Impedance (nominal)	200Ω		
Input Signal Level	20mW (+13dBm), 2000 hours		

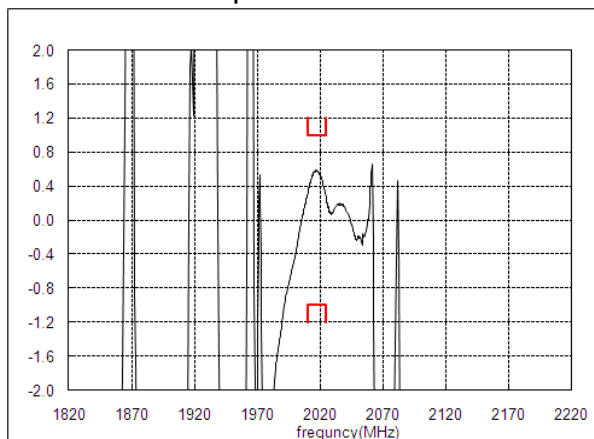
SAW FILTER FOR TD-SCDMA

Murata part number :SAWFD1G90CP0F0A (fc=2017.5MHz)

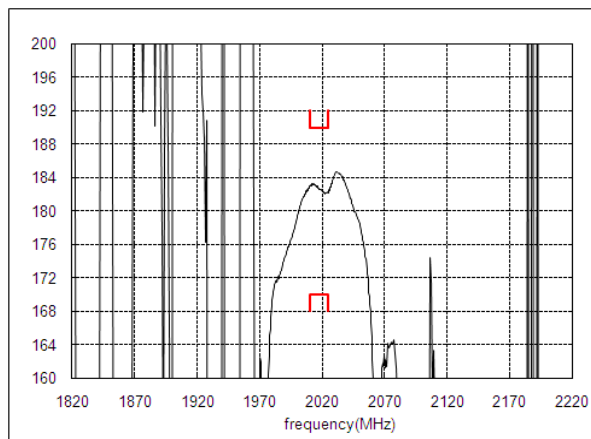
Frequency Performance



Amplitude balance



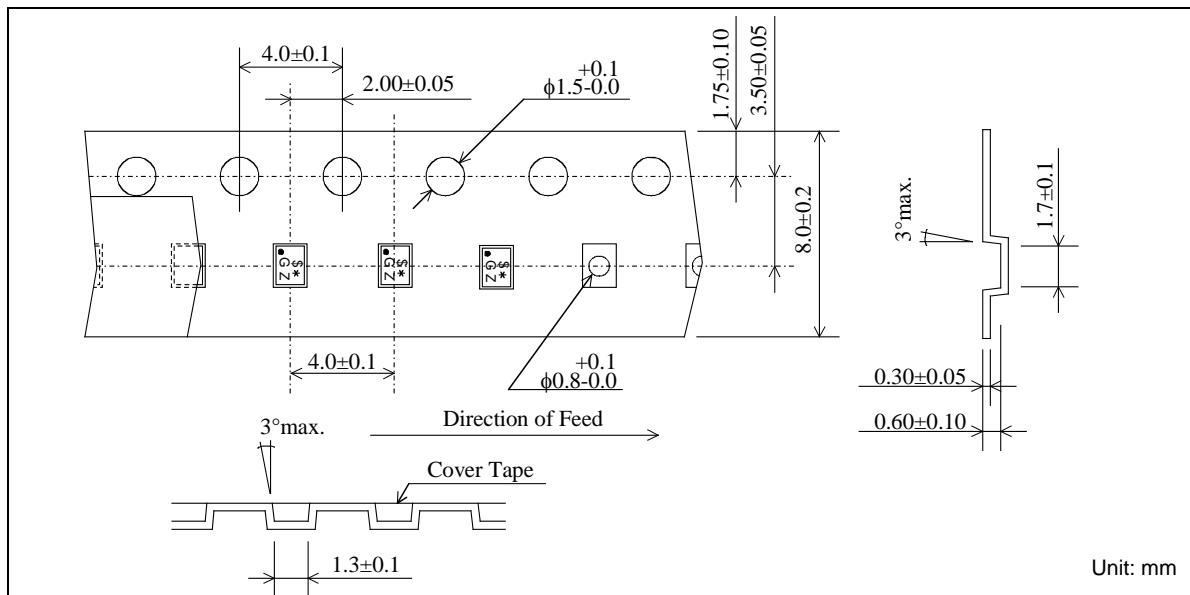
Phase balance



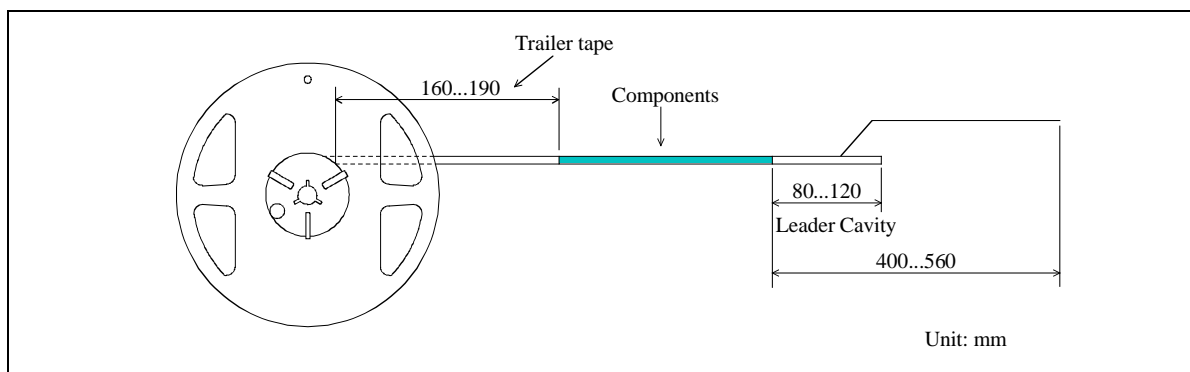
SAW FILTER FOR TD-SCDMA

Murata part number :SAWFD1G90CP0F0A

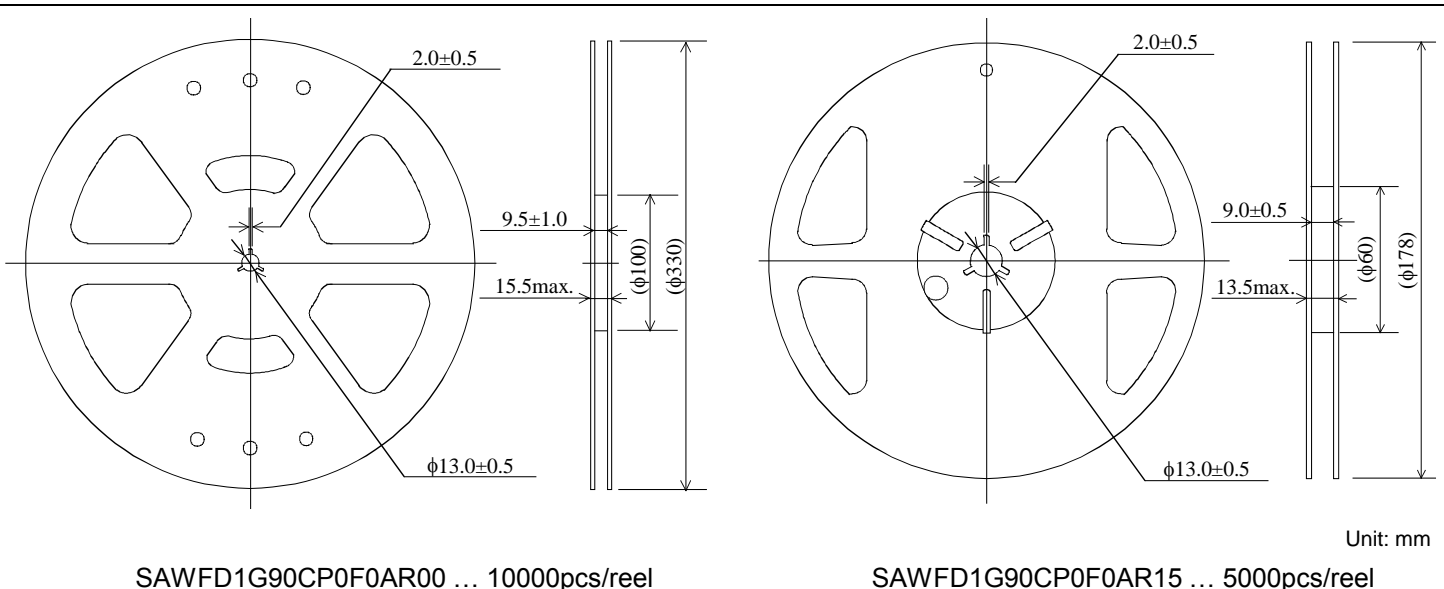
Dimensions of Carrier Tape



Dimensions of Tape



Dimensions of Reel



SAWFD1G90CP0F0AR00 ... 10000pcs/reel

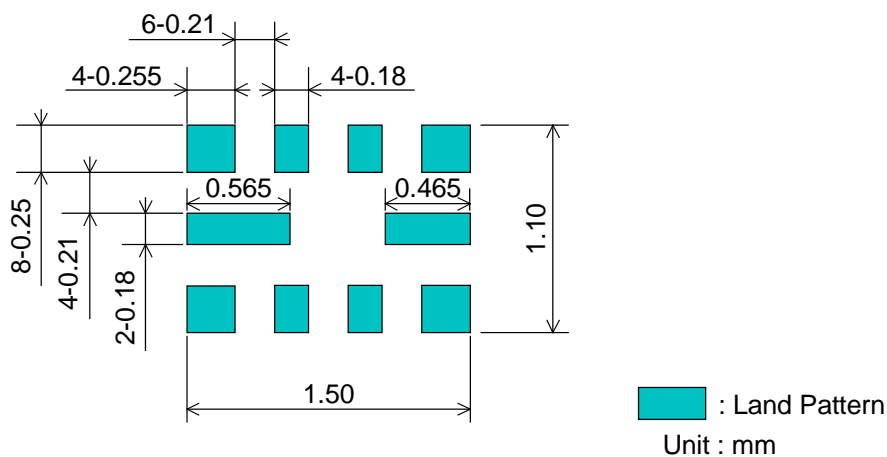
SAWFD1G90CP0F0AR15 ... 5000pcs/reel

SAW FILTER FOR TD-SCDMA

Murata part number :SAWFD1G90CP0F0A

Recommended Land Pattern

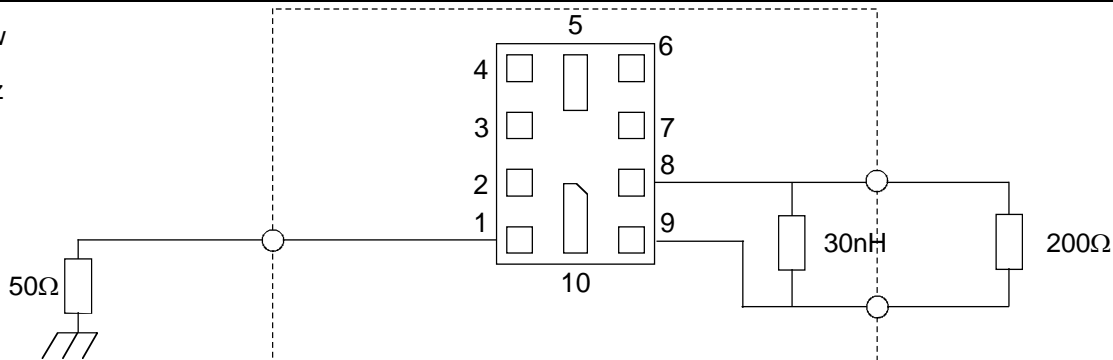
Top View



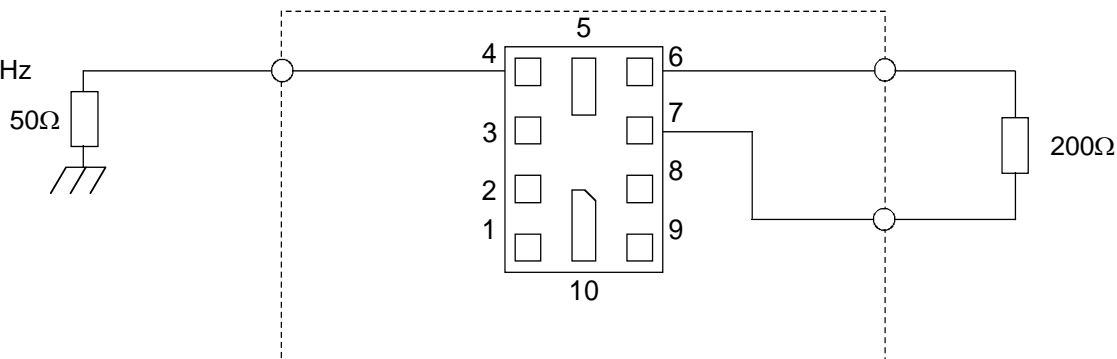
Test Circuit

Bottom View

1900MHz



2017.5MHz



SAW FILTER FOR TD-SCDMA

Murata part number :SAWFD1G90CP0F0A

■ 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