



Data Sheet of SAW Components



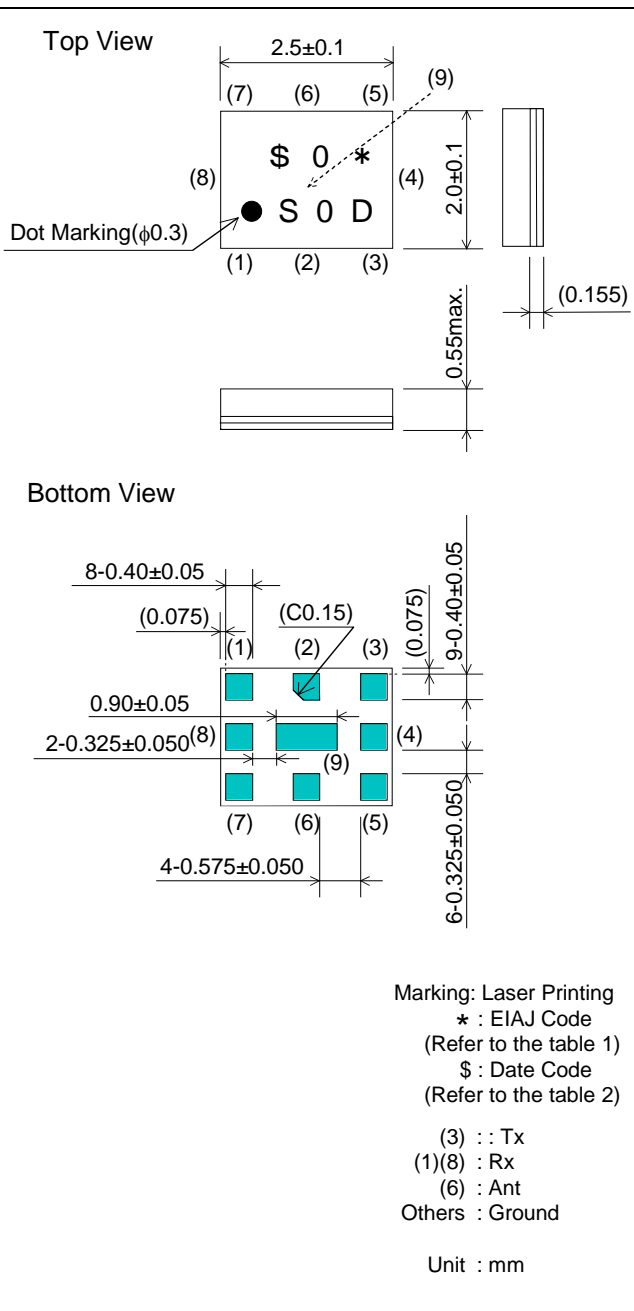
Note : Murata SAW Component is applicable for Cellular /Cordless phone (Terminal) relevant market only.

Please also read caution at the end of this document.

SAW DPX FOR UMTS BAND13

Murata part number :SAYFP751MCA0F00 [Tx→ANT]

Package Dimensions



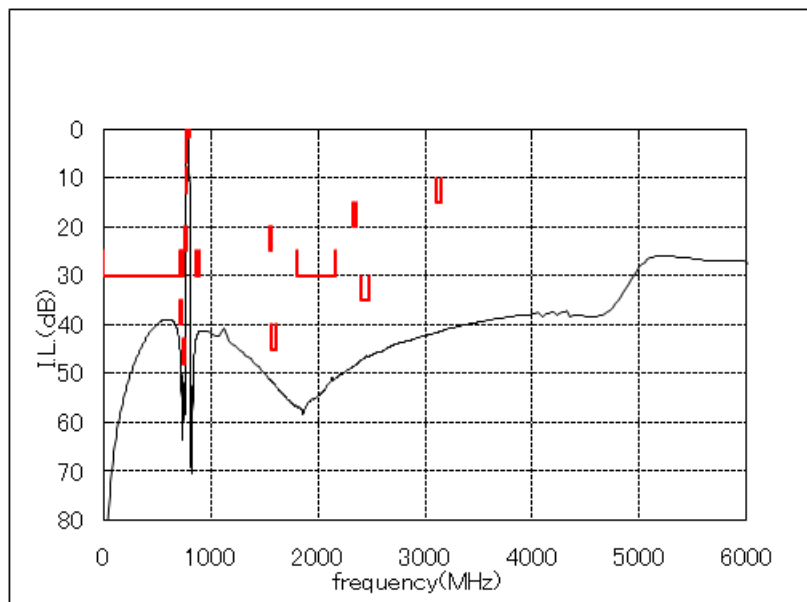
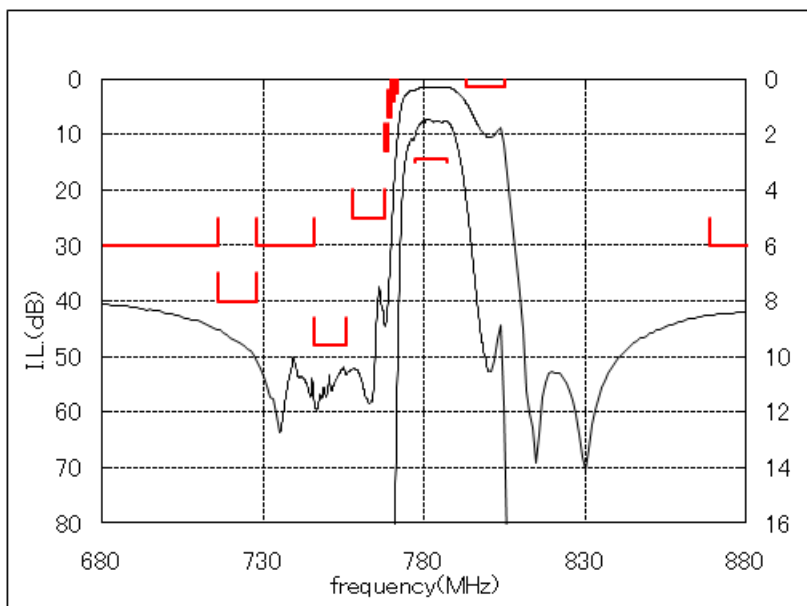
Specification

Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency(fc)	782MHz		
Insertion Loss (777 to 787MHz)	2.9dB max.	2.4dB max.	2.2 dB
Absolute Attenuation			
1) 0.1 to 716 MHz	30 dB min.	30 dB min.	39 dB
2) 716 to 728 MHz	40 dB min.	40 dB min.	45 dB
3) 728 to 746 MHz	30 dB min.	30 dB min.	50 dB
4) 746 to 756 MHz	48 dB min.	48 dB min.	52 dB
5) 758 to 768 MHz	25 dB min.	25 dB min.	37 dB
6) 768 to 769 MHz	13 dB min.	13 dB min.	38 dB
7) 769 to 770 MHz	7 dB min.	7 dB min.	26 dB
8) 770 to 771 MHz	4 dB min.	4 dB min.	16 dB
9) 771 to 772 MHz	2.5 dB min.	2.5 dB min.	9 dB
10) 793 to 805 MHz	1.5 dB min.	1.5 dB min.	4 dB
11) 869 to 894 MHz	30 dB min.	30 dB min.	41 dB
12) 1554 to 1565 MHz	25 dB min.	25 dB min.	51 dB
13) 1565 to 1607 MHz	45 dB min.	45 dB min.	51 dB
14) 1805 to 2170 MHz	30 dB min.	30 dB min.	51 dB
15) 2331 to 2361 MHz	20 dB min.	20 dB min.	48 dB
16) 2400 to 2484 MHz	35 dB min.	35 dB min.	46 dB
17) 3108 to 3148 MHz	15 dB min.	15 dB min.	41 dB
Ripple Deviation (777 to 787MHz)	1.6 dB max.	1.6 dB max.	0.7 dB
Ripple Deviation any 5.0 MHz (777 to 787MHz)	1.6 dB max.	1.6 dB max.	0.5 dB
VSWR (777 to 787MHz)	2.0 max.	2.0 max.	1.5
ANT Port Matching Impedance(nominal)	50Ω/15nH		
Tx Port Matching Impedance(nominal)	50Ω		
Rx Port Matching Impedance(nominal)	100Ω		
Input Signal Level	0.8W,35000hours (55°C)		

SAW DPX FOR UMTS BAND13

Murata part number :SAYFP751MCA0F00 [Tx→ANT]

Frequency Performance

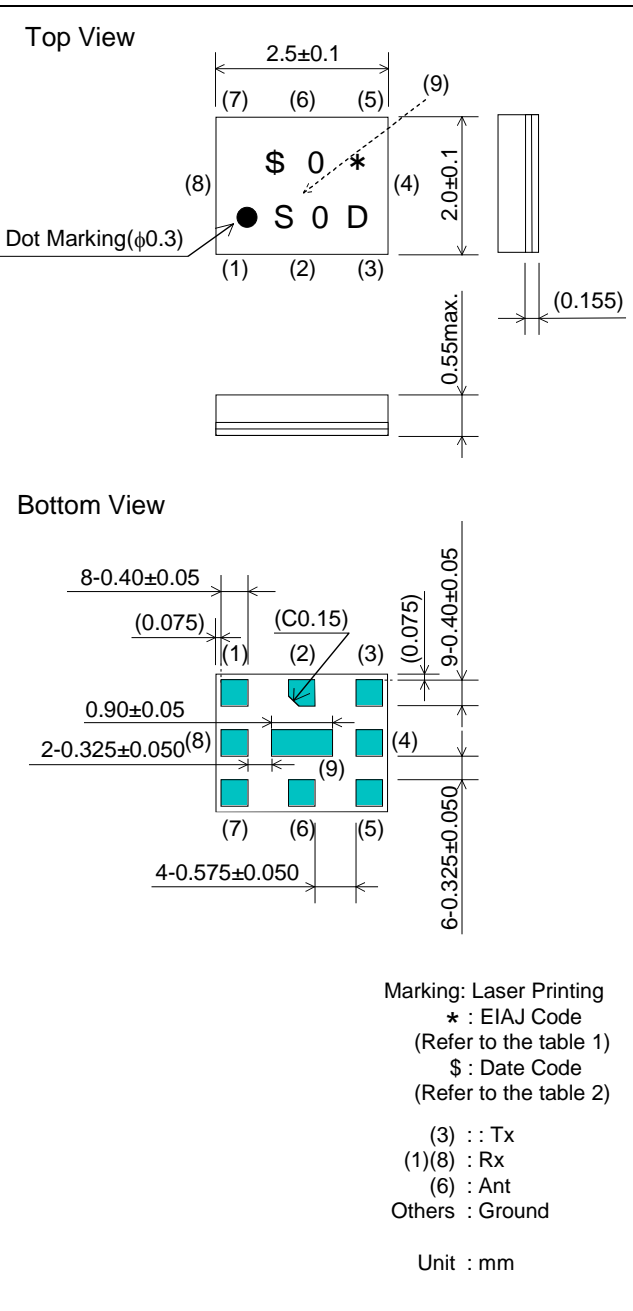


SAW DPX FOR UMTS BAND13

Murata part number :SAYFP751MCA0F00 [ANT→Rx]

Package Dimensions

Specification

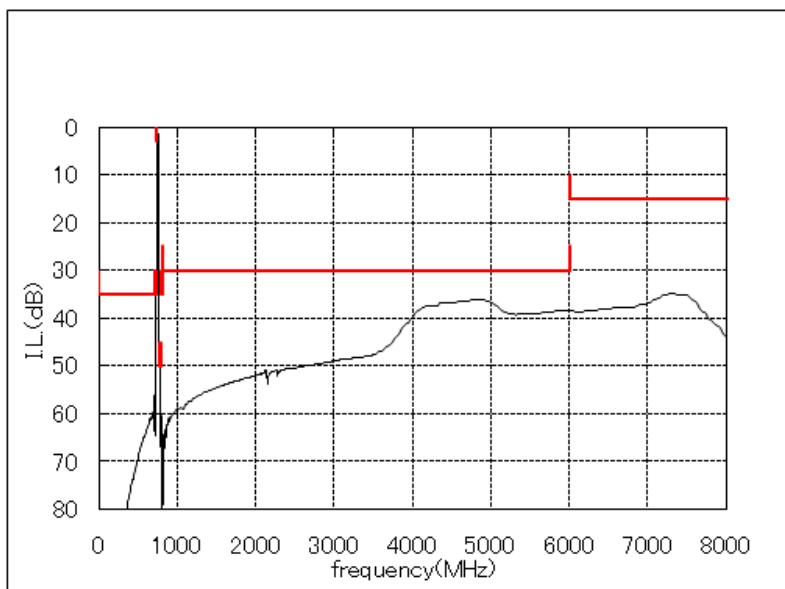
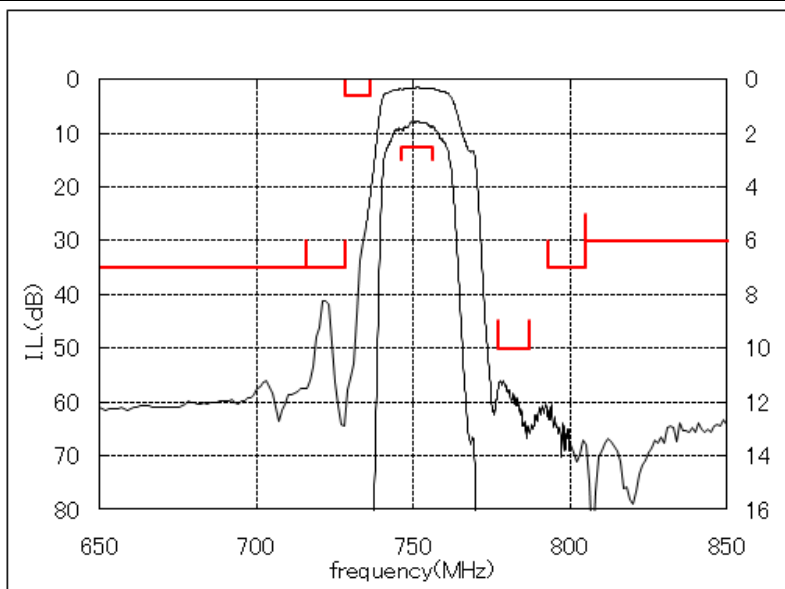


Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency(fc)	751MHz		
Insertion Loss (746 to 756MHz)	2.5 dB max.	2.5 dB max.	2.0 dB
Absolute Attenuation			
1) 0.1 to 716 MHz	35 dB min.	35 dB min.	56 dB
2) 716 to 728 MHz	35 dB min.	35 dB min.	39 dB
3) 728 to 736 MHz	3 dB min.	3 dB min.	23 dB
4) 777 to 787 MHz	50 dB min.	50 dB min.	57 dB
5) 793 to 805 MHz	35 dB min.	35 dB min.	61 dB
6) 805 to 6000 MHz	30 dB min.	30 dB min.	37 dB
7) 6000 to 12750 MHz	15 dB min.	15 dB min.	22 dB
Ripple Deviation (746 to 756MHz)	1.2 dB max.	1.0 dB max.	0.4 dB
Ripple Deviation any 5.0MHz (746 to 756MHz)	1.0 dB max.	1.0 dB max.	0.4 dB
Amplitude Balance (746 to 756MHz)	±0.8 dB max.	±0.8 dB max.	0.4 dB
Phase Balance (746 to 756MHz)	180±8deg. max.	180±8deg. max.	180+4deg.
VSWR (746 to 756MHz)	2.0 max.	2.0 max.	1.2
ANT Port Matching Impedance(nominal)	50Ω//15nH		
Tx Port Matching Impedance(nominal)	50Ω		
Rx Port Matching Impedance(nominal)	100Ω		

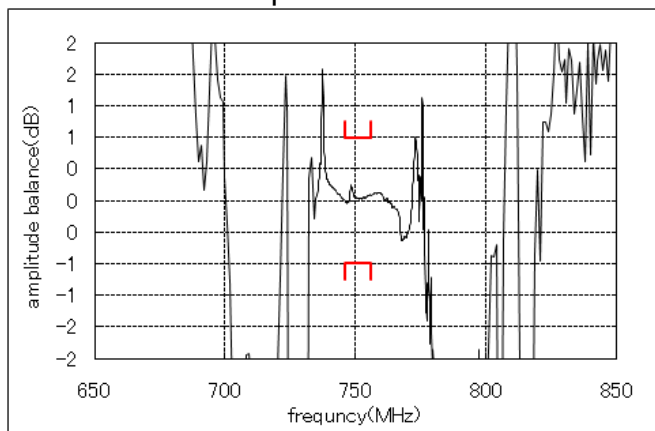
SAW DPX FOR UMTS BAND13

Murata part number :SAYFP751MCA0F00 [ANT→Rx]

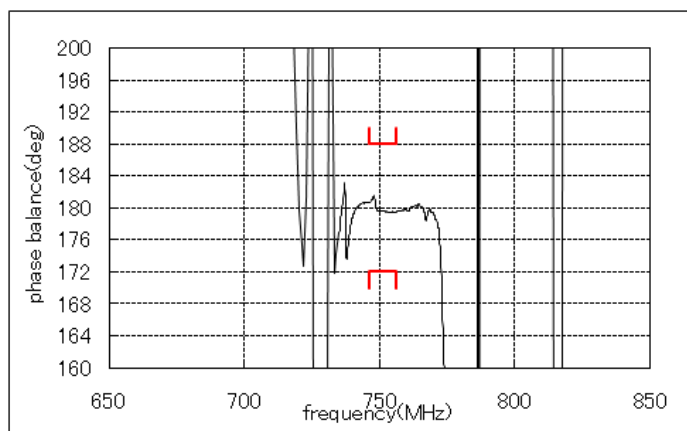
Frequency Performance



Amplitude balance



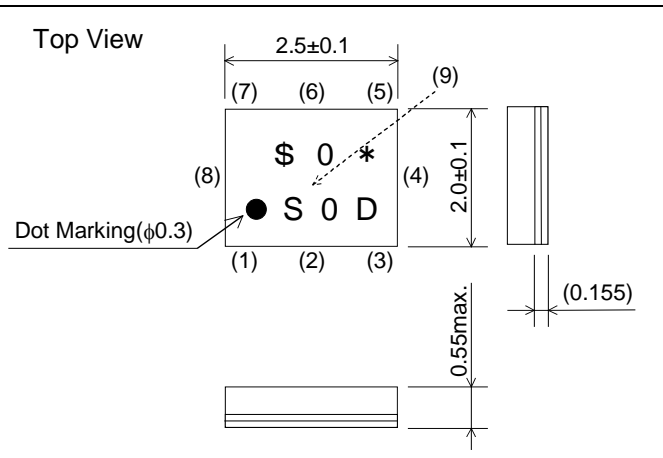
Phase balance



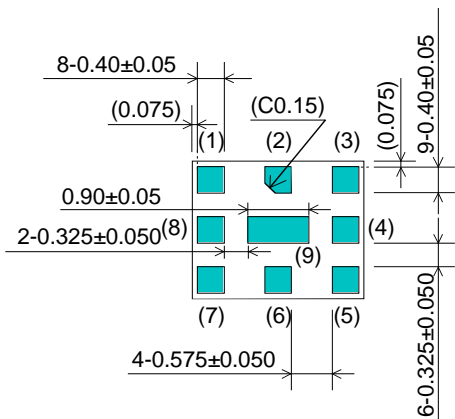
SAW DPX FOR UMTS BAND13

Murata part number :SAYFP751MCA0F00 [Tx→Rx]

Package Dimensions



Bottom View



Marking: Laser Printing

* : EIAJ Code
(Refer to the table 1)
\$: Date Code
(Refer to the table 2)

(3) : Tx
(1)(8) : Rx
(6) : Ant
Others : Ground

Unit : mm

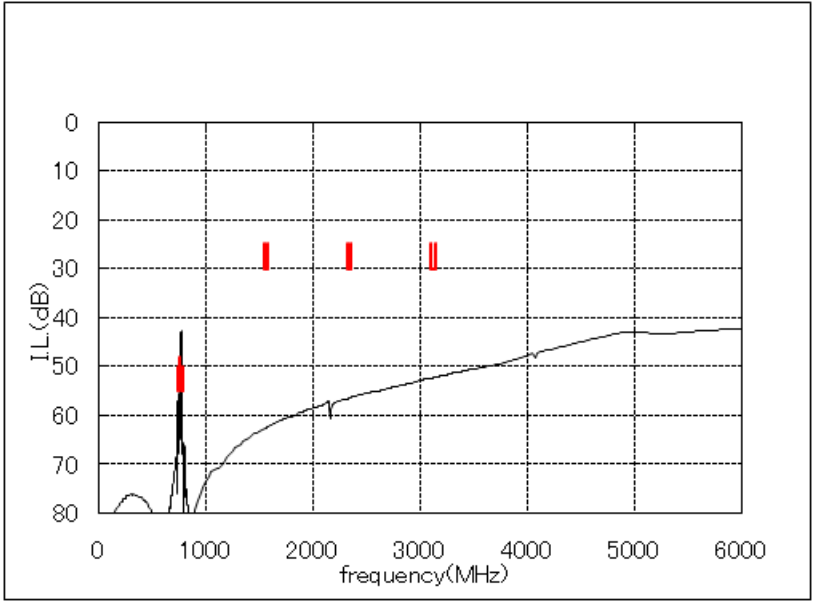
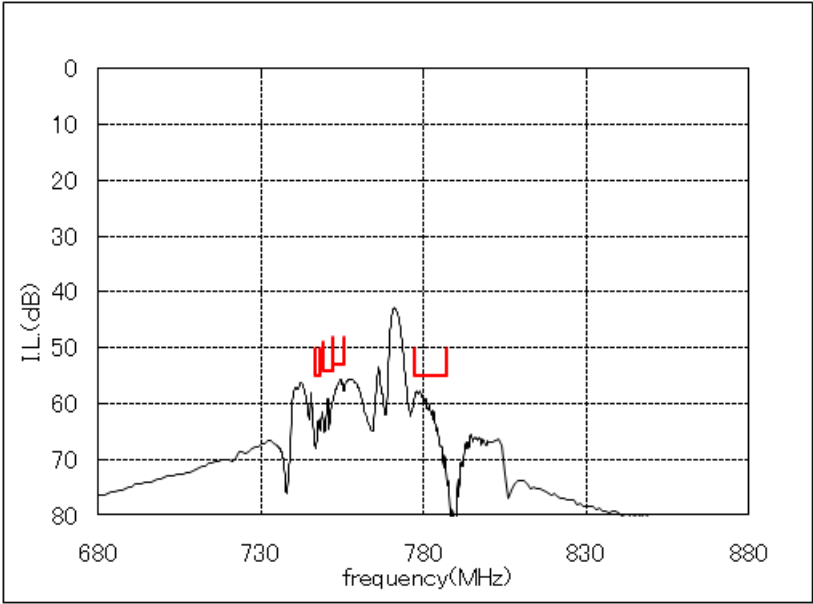
Specification

Item	Specification		
	-30 to 85°C	25±2°C	typ.
Isolation			
1) 777 to 787 MHz	55 dB min.	55 dB min.	57 dB
2) 746.5 to 749 MHz	55 dB min.	55 dB min.	62 dB
3) 749 to 752 MHz	54 dB min.	54 dB min.	59 dB
4) 752 to 755.5 MHz	53 dB min.	53 dB min.	56 dB
5) 1552 to 1574 MHz	30 dB min.	30 dB min.	62 dB
6) 2328 to 2361 MHz	30 dB min.	30 dB min.	56 dB
7) 3104 to 3148 MHz	30 dB min.	30 dB min.	52 dB
Isolation (Common mode) (777 to 787MHz)	52 dB min.	52 dB min.	54 dB

SAW DPX FOR UMTS BAND13

Murata part number :SAYFP751MCA0F00 [Tx→Rx]

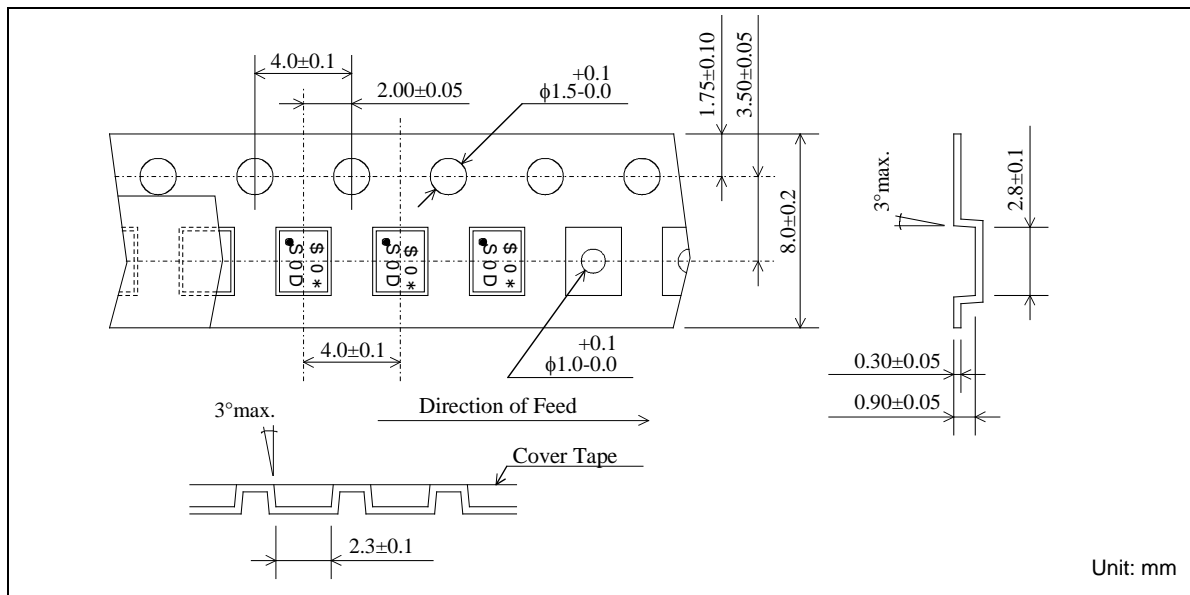
■ Frequency Performance



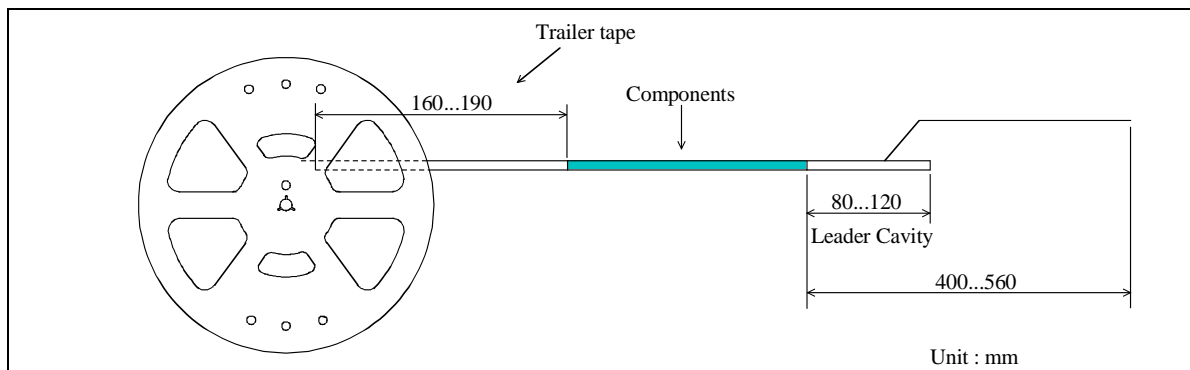
SAW DPX FOR UMTS BAND13

Murata part number :SAYFP751MCA0F00

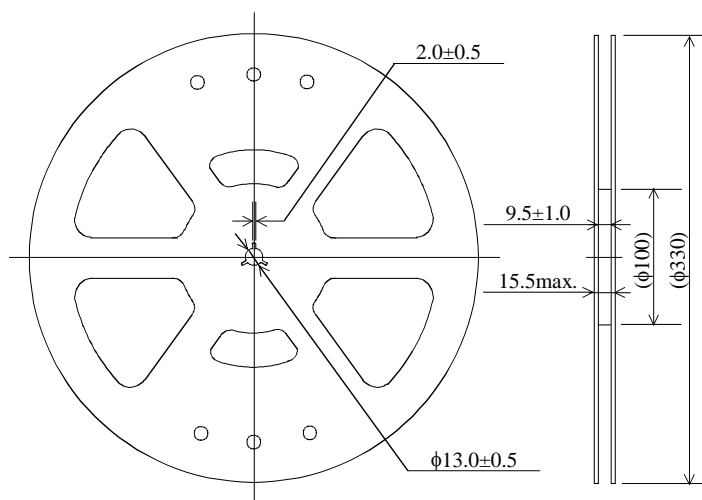
Dimensions of Carrier Tape



Dimensions of Tape



Dimensions of Reel



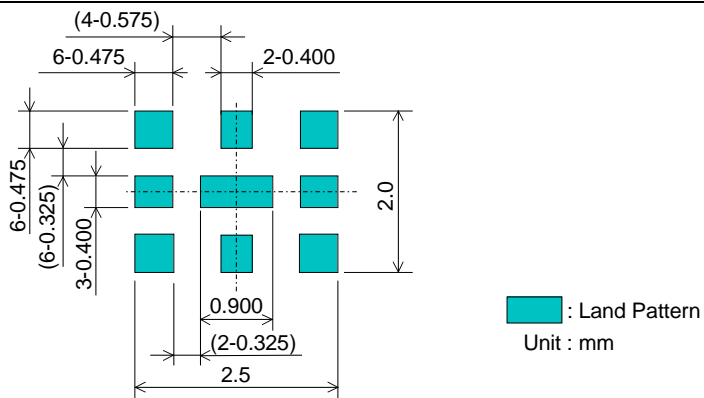
SAYFP751MCA0F00R00 ... 10000pcs/reel
SAYFP751MCA0F00R05 ... 5000pcs/reel

SAW DPX FOR UMTS BAND13

Murata part number :SAYFP751MCA0F00

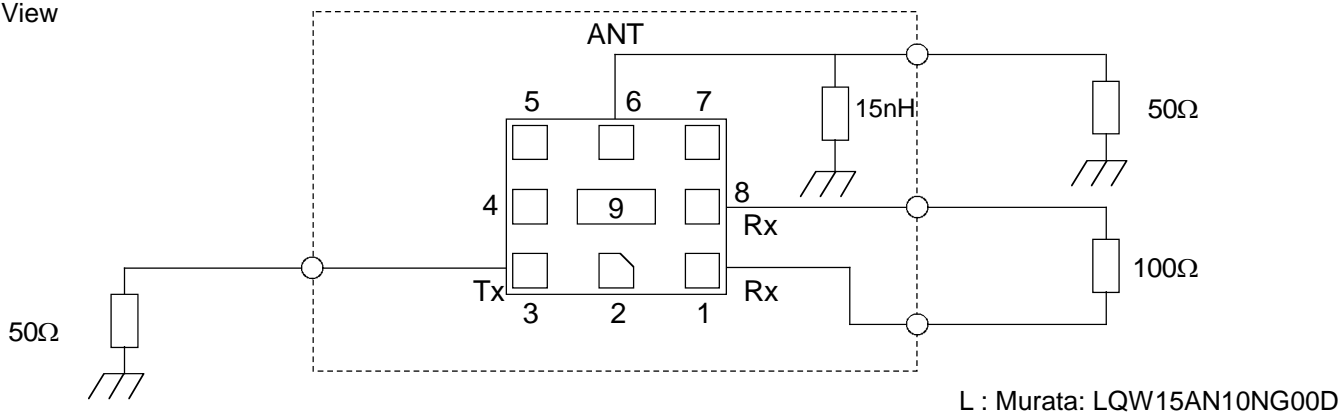
Recommended Land Pattern

Top View



Test Circuit

Bottom View



SAW DPX FOR UMTS BAND13

Murata part number :SAYFP751MCA0F00

■ 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