



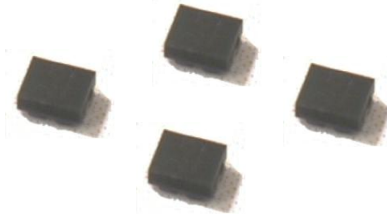
# Datasheet of SAW Device

## SAW Single Filter

for B39 / Balanced / 5pin /1109

Murata PN: SAFFB1G90FB0F0A

- Feature
  - High Rejection



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

## SAFFB1G90FB0F0A ( B39 / Balanced / 5pin / 1109 )

Revision No.	Date	Description
SAFFB1G90FB0F0A_rev. A	Dec-17-2012	■ Initial Release
SAFFB1G90FB0F0A_rev. B	Mar-01-2013	■ Updated for MP

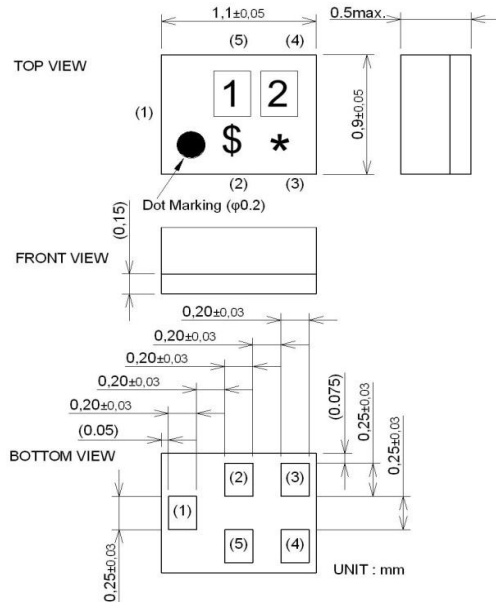
- Operating temperature : -30 to +85 deg.C
- Storage temperature : -40 to +85 deg.C
- Input Power : +13 dBm 2000 h
- D.C. Voltage between the terminals : 3V (25±2 deg.C)
- Minimum Resistance between the terminals : 10M ohm
- RoHS compliance : Yes

**SAFFB1G90FB0F0A ( B39 / Balanced / 5pin / 1109 )**

**Package Dimensions & Recommended Land Pattern**

unit: mm

**Dimensions**



Marking : Laser Printing

\* : Month code(Refer to the table A)

\$ : Date code(Refer to the table B)

1 : V

2 : S

Terminal Number

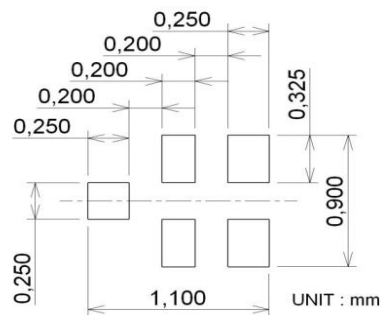
(1) :Unbalance Port

(3)(4) :Balance Port

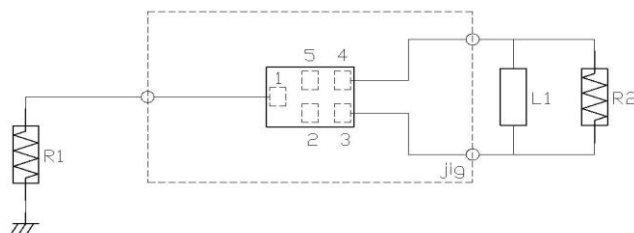
Others :GND.

Notice) Please refer to Measurement Circuit for Port information in detail.

**Land Pattern**



**Measurement Circuit (Top View)**



R1 : 50 ohm	
R2 : 100 ohm	L1 : 18 nH)

# SAFFB1G90FB0F0A ( B39 / Balanced / 5pin / 1109 )

## Electrical Characteristic < Single Filter >

### Matching Impedance (nominal)

- :Unbalance Port : 50 ohm
- :Balance Port : 100 ohm // 18 nH

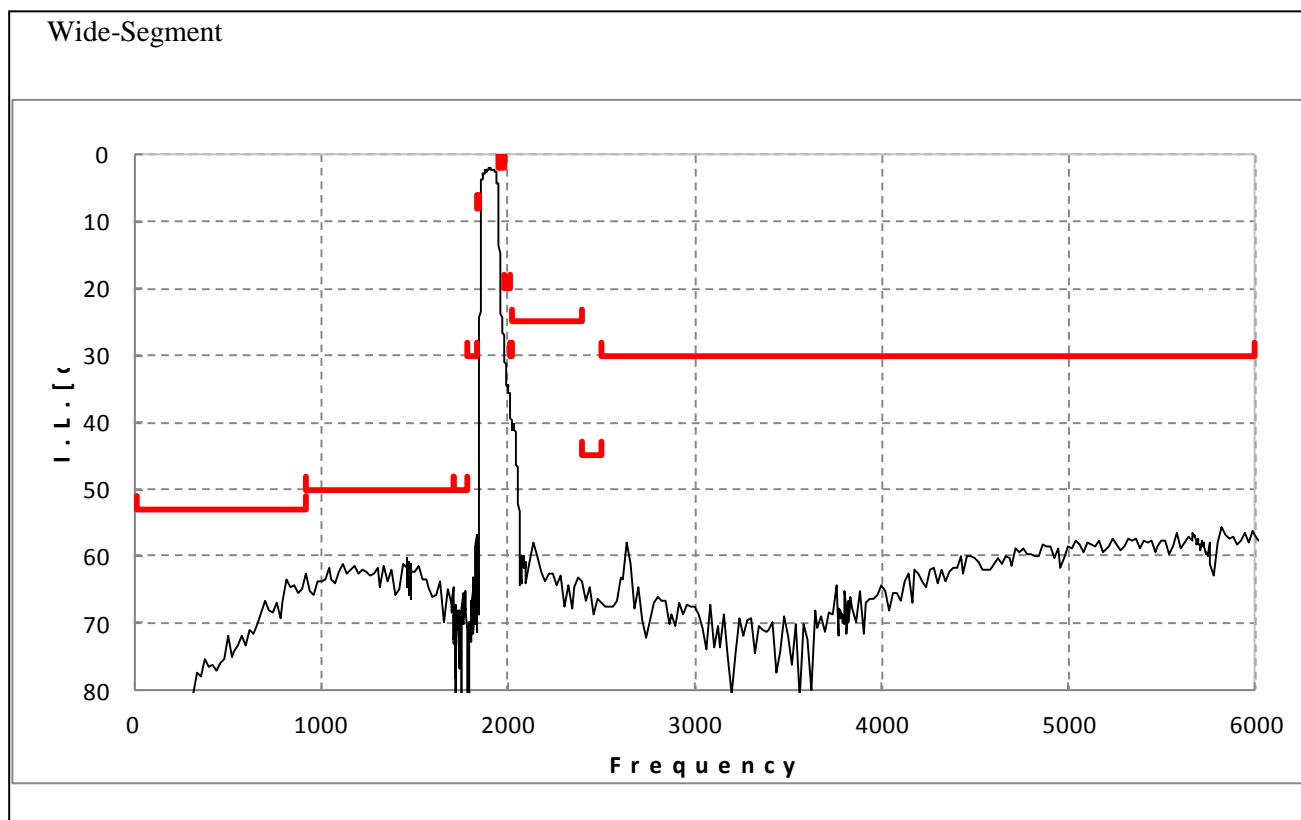
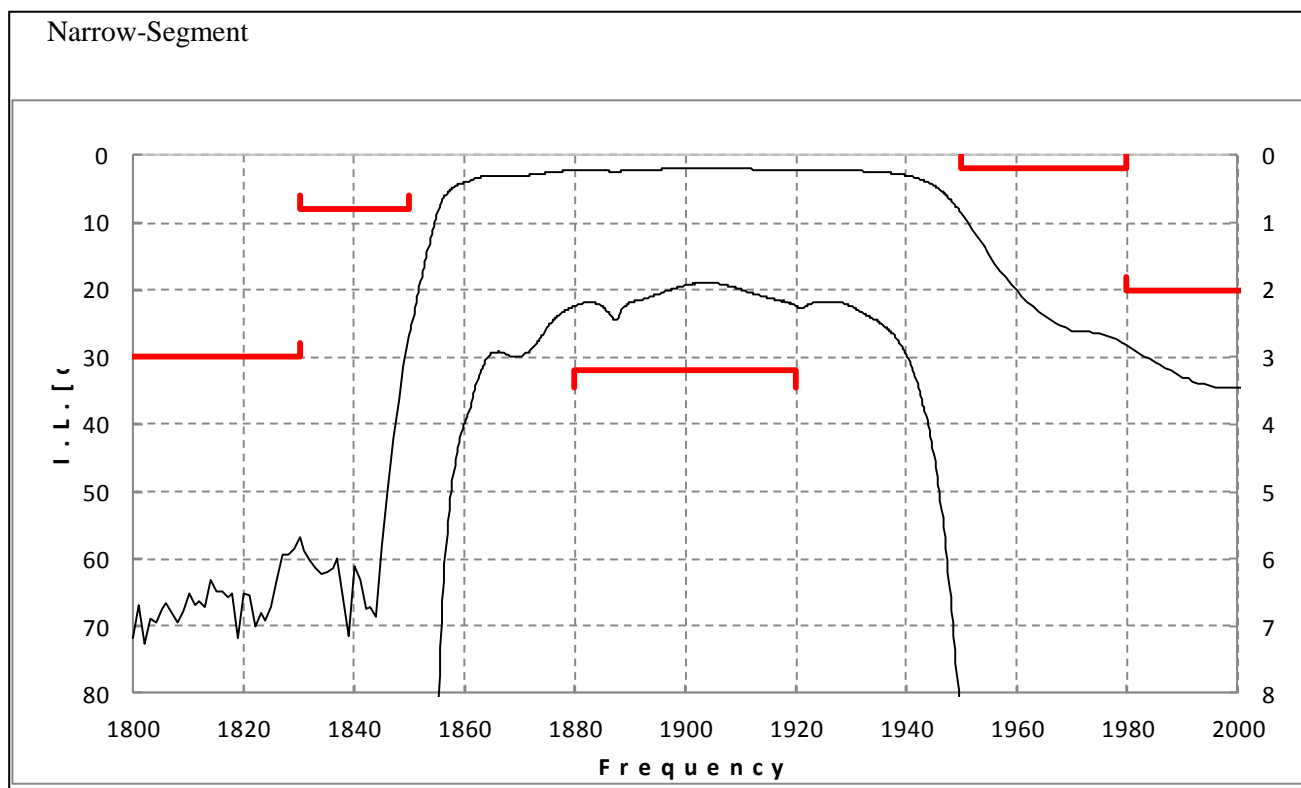
Item	Characteristics ( -30 to +85 deg.C )			Unit	Note	
	min.	typ.	max.			
	Center Frequency		1900			
Insertion Loss	1880. to 1920. MHz	2.3	3.2	dB		
	1880. to 1920. MHz	2.3	2.8			
Ripple Deviation	1880. to 1920. MHz	0.5	1.5	dB		
VSWR	1880. to 1920. MHz	1.6	2			
Amplitude Balance	1880. to 1920. MHz	-1.5	0.4	+1.5	dB	
Phase Balance	1880. to 1920. MHz	165	186	195	deg.	
Absolute Attenuation	10. to 915. MHz	53	63		dB	
	915. to 1710. MHz	50	60		dB	
	1710. to 1785. MHz	50	64		dB	
	1785. to 1830. MHz	30	56		dB	
	1830. to 1850. MHz	8	30		dB	
	1830. to 1850. MHz	10	30		dB	+23 to +27deg.C
	1950. to 1980. MHz	2	7		dB	
	1980. to 2010. MHz	20	28		dB	
	2010. to 2025. MHz	30	36		dB	
	2025. to 2400. MHz	25	40		dB	
	2400. to 2500. MHz	45	63		dB	
	2500. to 6000. MHz	30	53		dB	

\* Typical value at 25±2deg.C

SAFFB1G90FB0F0A ( B39 / Balanced / 5pin / 1109 )

Electrical Characteristic

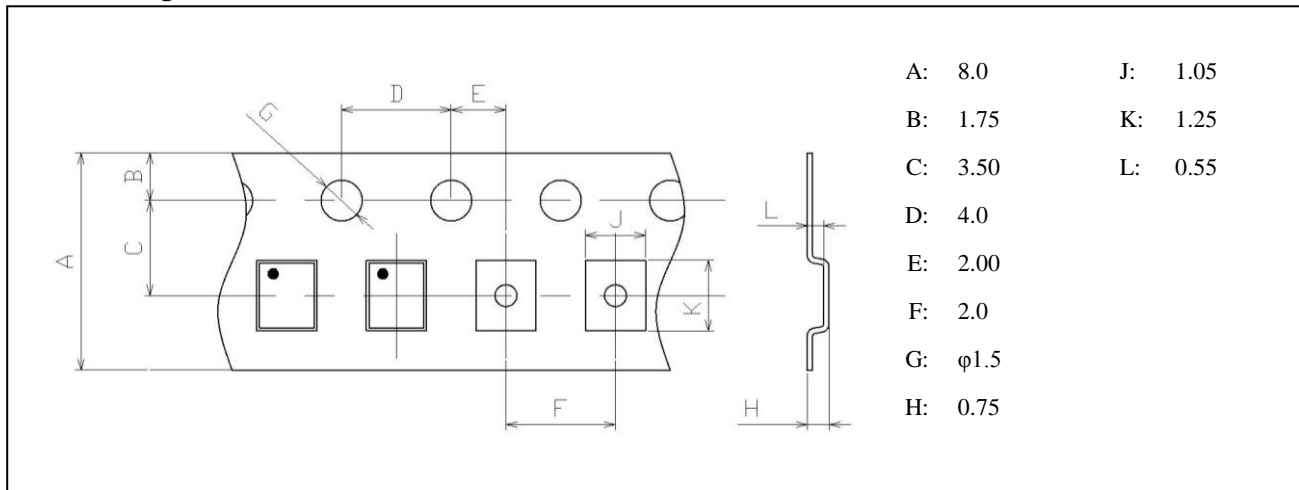
< Single Filter >



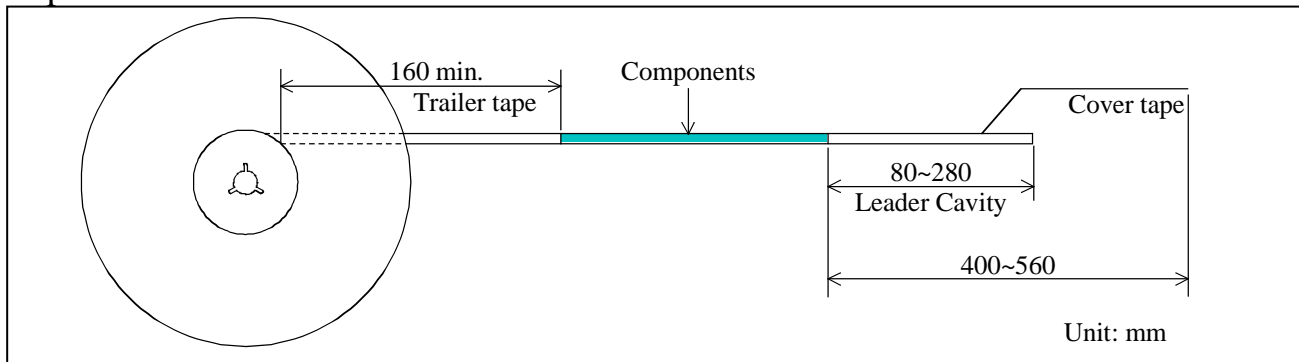
**SAFFB1G90FB0F0A ( B39 / Balanced / 5pin / 1109 )**

**Dimensions of Tape & Reel**      unit: mm

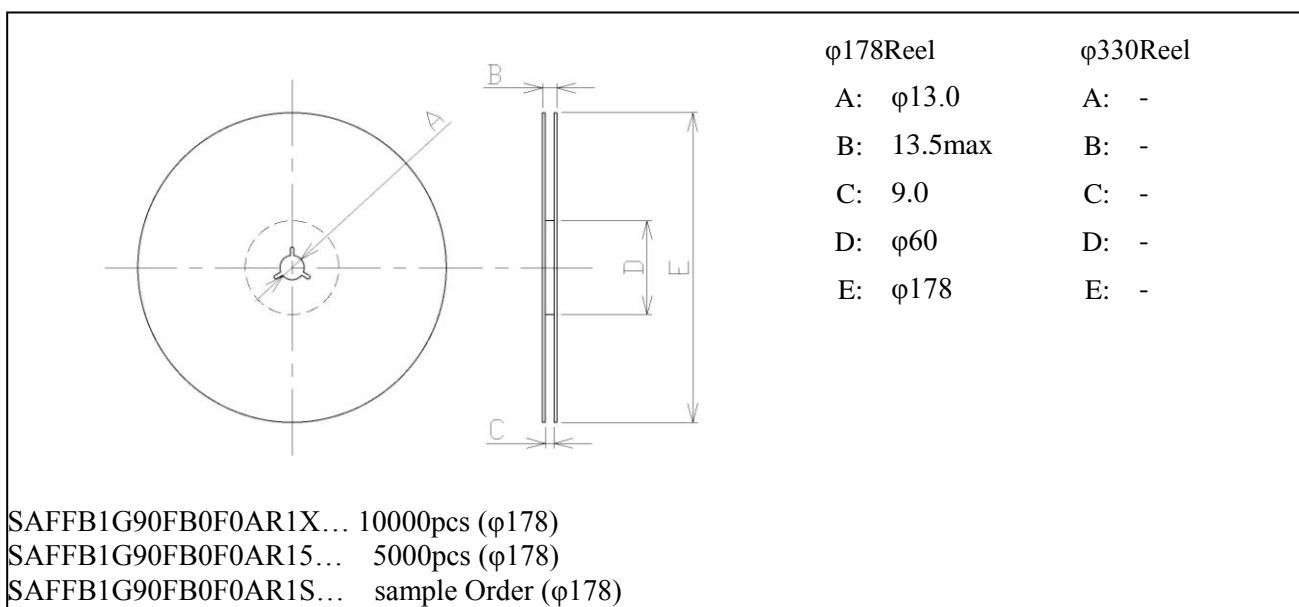
**Carrier Tape**



**Tape**



**Reel**



## SAFFB1G90FB0F0A ( B39 / Balanced / 5pin / 1109 )

### Marking Code

Table A: Month Code

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 B: 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

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SAFFB1G90FB0F0A ( B39 / Balanced / 5pin / 1109 )

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- Disaster prevention / crime prevention equipment.
- Burning / explosion control equipment
- Application of similar complexity and/ or reliability requirements to the applications listed in the above.

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