

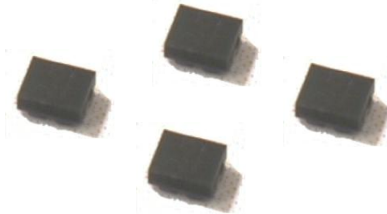
# Datasheet of SAW Device

## 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	Discription
SAFFB1G90FB0F0A_rev. A	Dec-17-2012	■ Initial Release
SAFFB1G90FB0F0A_rev. B	Mar-01-2013	■ Updatedfor MP

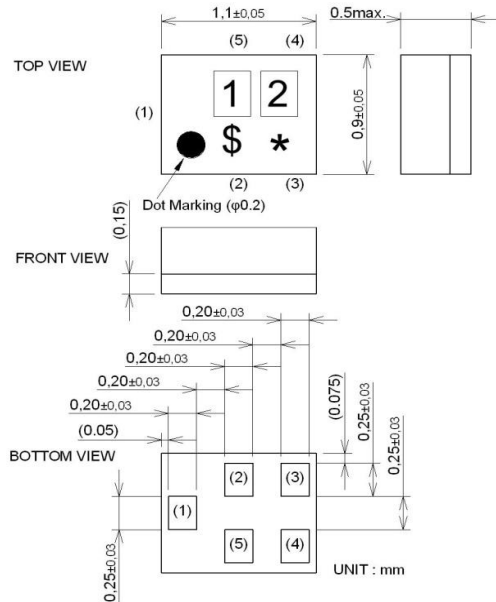
- Operating temperature : -30 to +85 deg.C
- Storage temperature : -40 to +85 deg.C
- Input Power : +13 dBm 2000 h
- D.C. Volatage between the terminals : 3V (25+/-2 deg.C)
- Minimum Resistance between the terminals : 10M ohm
- RoHS compliance : Yes

**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

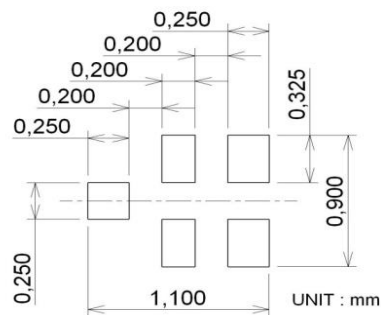
(1) :Unbalance Port

(3)(4) :Balance Port

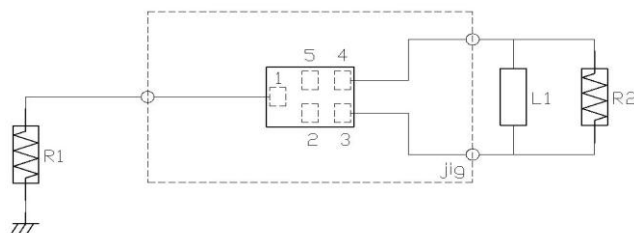
Others :GND.

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)

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Electrical Characteristic < Single Filter >

Matching Impedance (nominal)

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

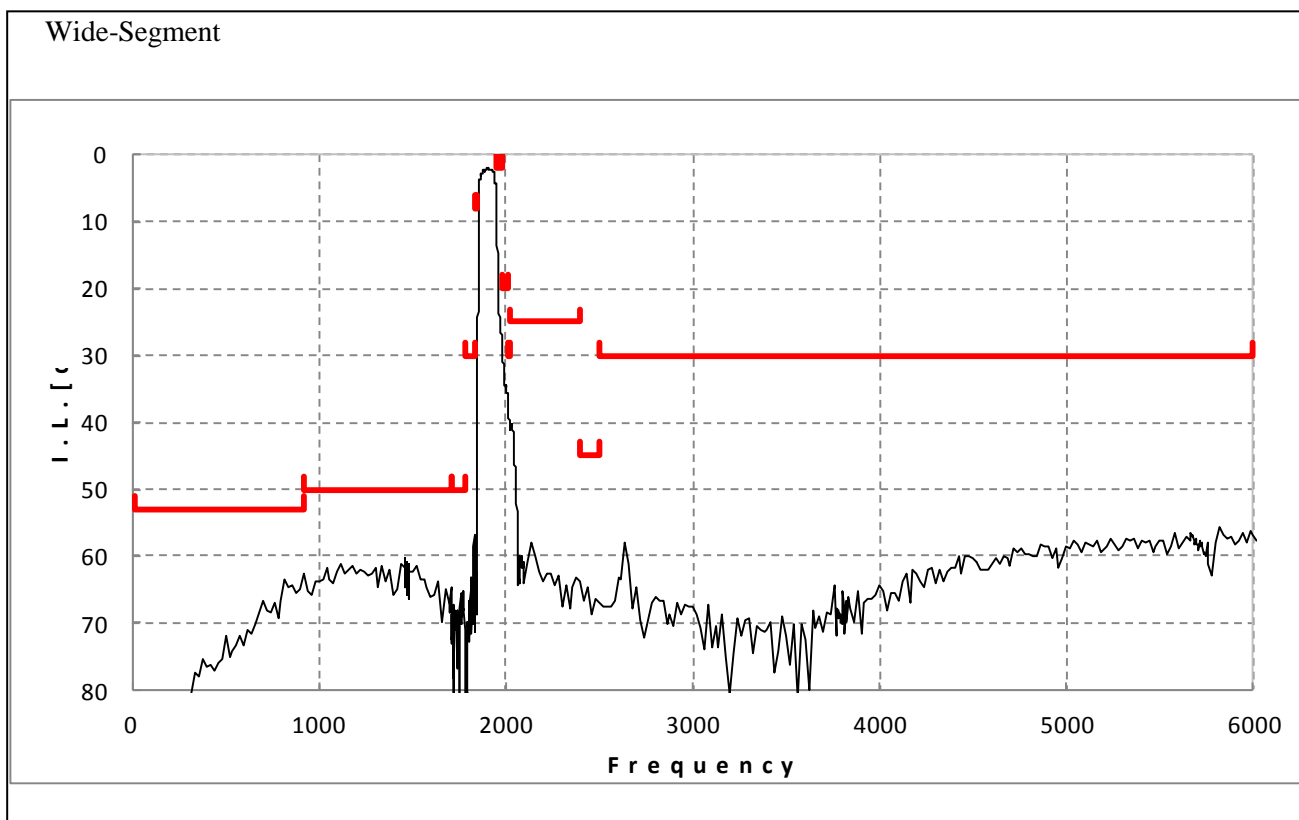
Item	Characteristics			Unit	Note	
	(-30 to +85 deg.C)					
	min.	typ.	max.			
Center Frequency		1900		MHz		
Insertion Loss	1880. to 1920. MHz	2.3	3.2	dB	+23 to +27deg.C	
	1880. to 1920. MHz	2.3	2.8			
Ripple Deviation	1880. to 1920. MHz	0.5	1.5	dB		
VSWR	1880. to 1920. MHz	1.6	2			
Amplitude Balance	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

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Electrical Characteristic

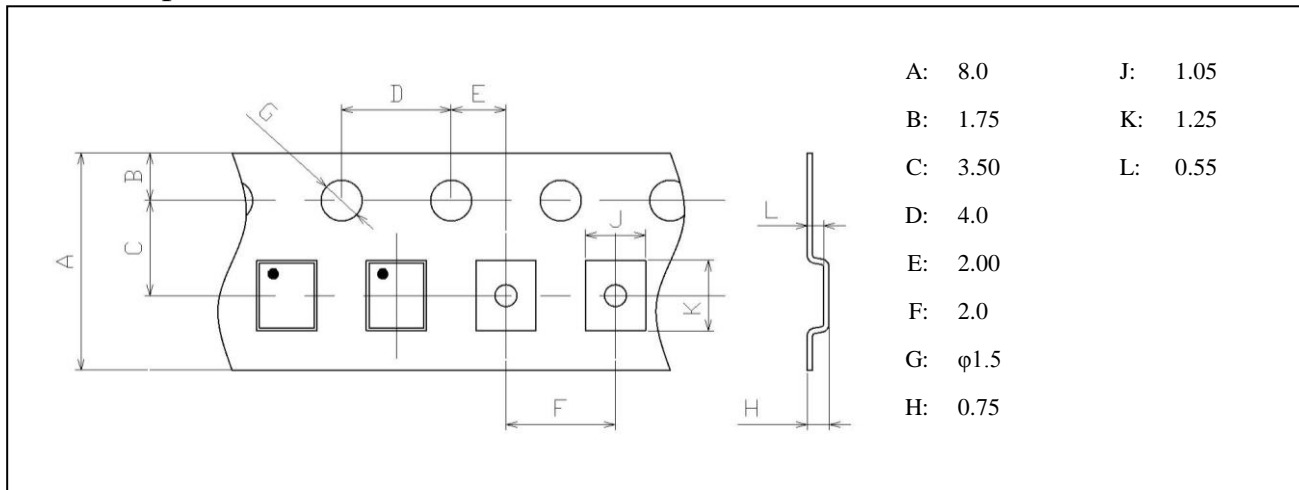
< Single Filter >



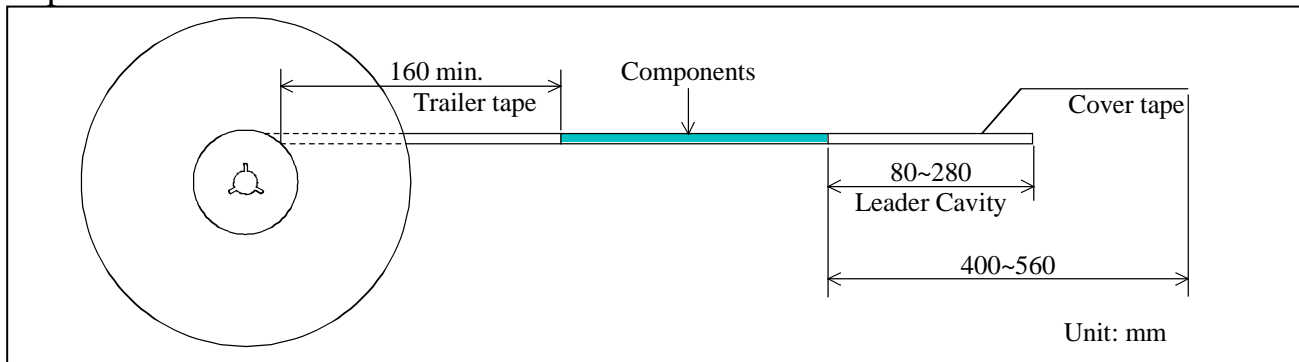
**SAFFB1G90FB0F0A ( B39 / Balanced / 5pin / 1109 )**

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

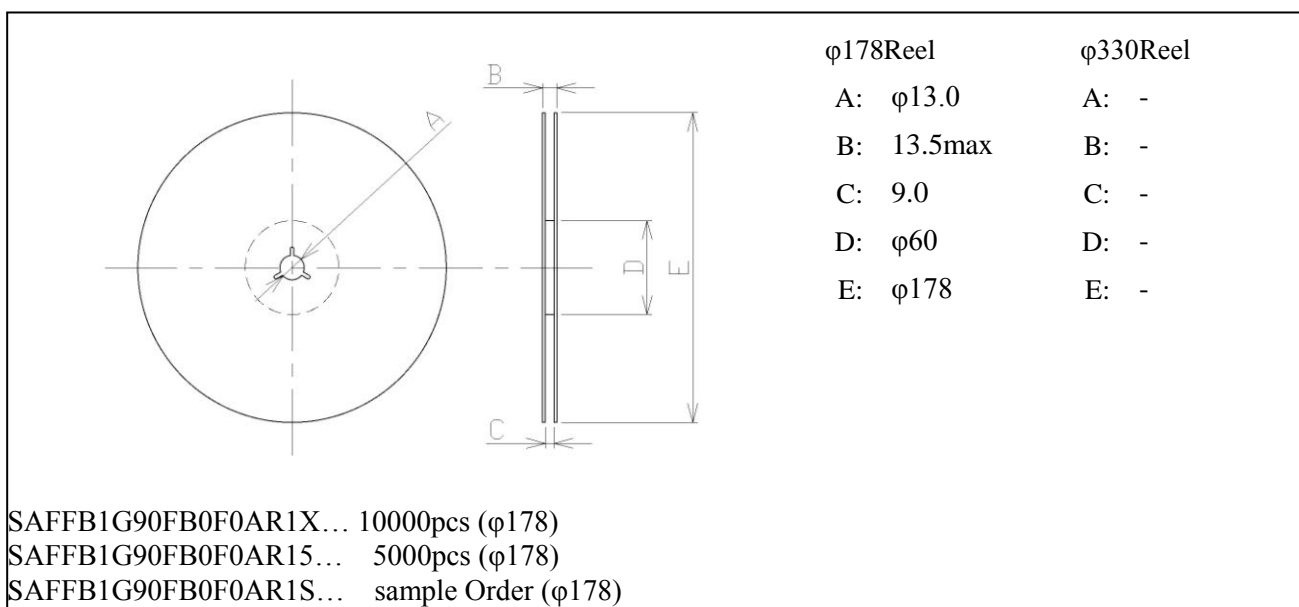
**Carrier Tape**



**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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Please make sure that your product has been evaluated and confirmed from the aspect of the fitness for the specifications of our product when our product is mounted to your product.

All the items and parameters in this product specification/datasheet/catalog have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment specified in this specification. You are requested not to use our product deviating from the condition and the environment specified in this specification.

Please note that the only warranty that we provide regarding the products is its conformance to the specifications provided herein. Accordingly, we shall not be responsible for any defects in products or equipment incorporating such products, which are caused under the conditions other than those specified in this specification.

WE HEREBY DISCLAIMS ALL OTHER WARRANTIES REGARDING THE PRODUCTS, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, THAT THEY ARE DEFECT-FREE, OR AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS.

The product shall not be used in any application listed below which requires especially high reliability for the prevention of such defect as may directly cause damage to the third party's life, body or property. You acknowledge and agree that, if you use our products in such applications, we will not be responsible for any failure to meet such requirements.

SAFFB1G90FB0F0A ( B39 / Balanced / 5pin / 1109 )

## Important Notice (2/2)

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- Aircraft equipment.
- Aerospace equipment
- Undersea equipment.
- Power plant control equipment            - Medical equipment.
- Transportation equipment (vehicles, trains, ships, elevator, etc.).
- Traffic signal equipment.
- 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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Please do not use our products, our technical information and other data provided by us for the purpose of developing of mass-destruction weapons and the purpose of military use. Moreover, you must comply with "foreign exchange and foreign trade law", the "U.S. export administration regulations", etc.

Please note that we may discontinue the manufacture of our products, due to reasons such as end of supply of materials and/or components from our suppliers.

Customer acknowledges that Murata will, if requested by you, conduct a failure analysis for defect or alleged defect of Products only at the level required for consumer grade Products, and thus such analysis may not always be available or be in accordance with your request (for example, in cases where the defect was caused by components in Products supplied to Murata from a third party).

The product shall not be used in any other application/model than that of claimed to Murata.

Customer acknowledges that engineering samples may deviate from specifications and may contain defects due to their development status.

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In particular we disclaim liability for damages caused by

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- deviation or lapse in function of engineering sample,
- improper use of engineering samples.

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