

# **Datasheet of SAW Device**

# SAW Single Filter for GPS\_GLONASS\_BEIDOU / Balanced / 5pin /1109

## Murata PN: SAFFB1G56FA0F0A



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

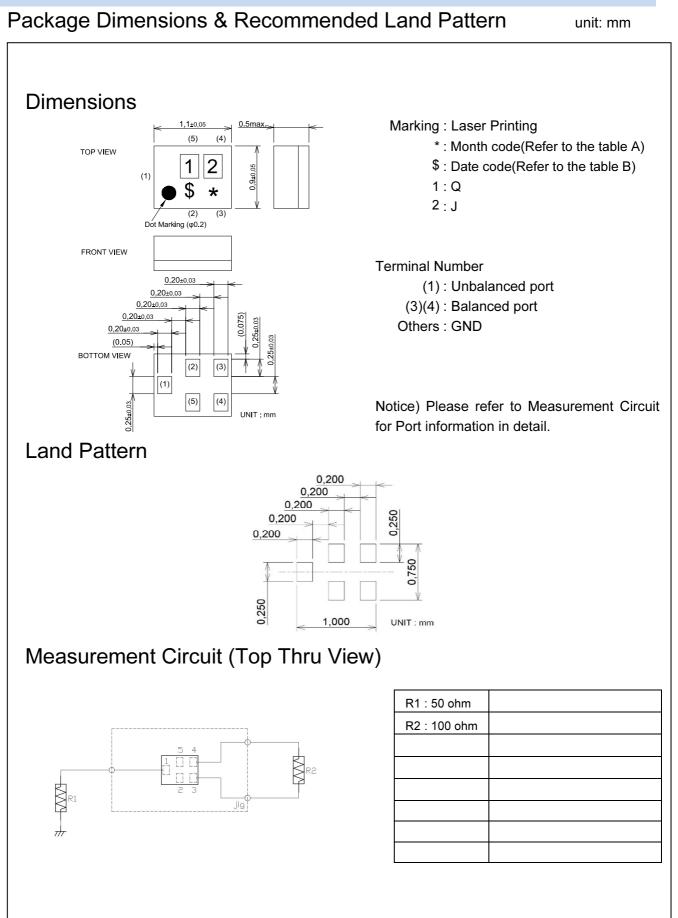




#### **General Information**

- 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
- ESD (ElectroStatic Discharge) sensitive devi	ce







## Electrical Characteristic < Single Filter >

	raciona	500	<u> </u>	ingi					1	
			Characteristics							
	ltem				(-30 to +85 deg.C )			Unit	Note	
					min.	typ.*	max.			
Center Frequency					1561.1	/1575.4	2/1602	MHz		
Insertion Loss	1559.09	to	1563.1	MHz		1.4	2.3	dB		
l	1559.09	to	1563.1	MHz		1.4	1.9	dB	+23 to +27deg.C	
	1565.42	to	1585.42	MHz		1.3	1.7	dB		
l	1574.42	to	1576.42	MHz		1.1	1.5	dB		
l	1574.42	to	1576.42	MHz		1.1	1.4	dB	+23 to +27deg.C	
l		to	1605.89	MHz		1.6	2.3	dB		
l	1597.55	to	1605.89	MHz		1.6	1.9	dB	+23 to +27deg.C	
l	1	to	1591.	MHz		1.4	2.3	dB	_	
l	1559.	to	1591.	MHz		1.4	1.9	dB	+23 to +27deg.C	
Ripple Deviation		to	1563.1	MHz		0.2	1.6	dB		
		to	1563.1	MHz		0.2	1.1	dB	+23 to +27deg.C	
l	1565.42	to	1585.42	MHz		0.3	1.0	dB		
l		to	1585.42	MHz		0.3	0.9	dB	+23 to +27deg.C	
l		to	1605.89	MHz		0.4	1.6	dB		
		to	1605.89	MHz		0.4	1.1	dB	+23 to +27deg.C	
		to	1591.	MHz		0.5	1.5	dB		
		to	1591.	MHz		0.5	1.1	dB	+23 to +27deg.C	
VSWR		to	1605.89	MHz		1.6	2.5			
		to	1605.89	MHz		1.6	2.0		+23 to +27deg.C	
GDT Ripple Deviation		to	1605.89	MHz		3	21	ns		
		to	1605.89	MHz		3	15	ns		
Amplitude Balance		to	1605.89	MHz	-1.3	0.8	1.3	dB		
		to	1605.89	MHz	-1.2	0.8	1.0	dB	+23 to +27deg.C	
Phase Balance		to	1605.89	MHz	170	183	190	deg.	12010127069.0	
Absolute Attenuation			960.	MHz	35	52	100	dB		
		to to	1463.	MHz	30	42		dB		
l		to to	1785.	MHz	29	34		dB		
l		to	1910.	MHz	35	42		dB		
l		to	1910.		35	42		dB		
l		<u>to</u>	2500.	MHz	35	44 50		dB dB		
l		<u>to</u>		MHz		50				
		to	2570.	MHz	35			dB		
Absolute Attenuation		to	960.	MHz	37	41		dB	common mode	
l		to	1463.	MHz	25	38		dB	common mode	
l		<u>to</u>	1785.	MHz	33	40		dB	common mode	
l		to	1910.	MHz	27	42		dB	common mode	
l		<u>to</u>	1980.	MHz	25	41		dB	common mode	
l		to	2500.	MHz	18	32		dB	common mode	
l	2500.	to	2570.	MHz	18	31		dB	common mode	
l										
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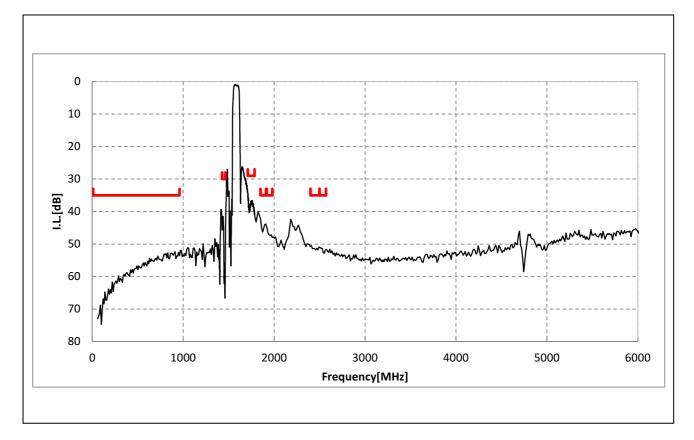
\* Typical value at 25±2deg.C



## **Electrical Characteristic**



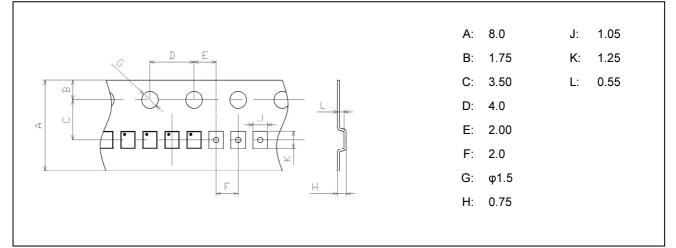
< Single Filter >



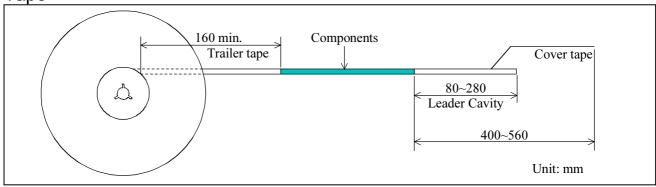


Dimensions of Tape & Reel unit: mm

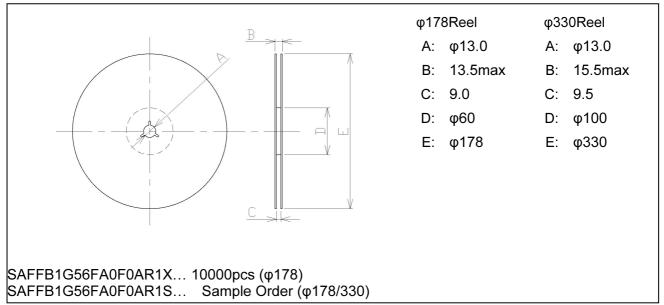
#### Carrier Tape



Tape



Reel





#### Marking Code

#### Table A: Month Code

Γ	2013	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	2017 2021	Α	В	С	D	E	F	G	н	J	к	L	м
Γ	2014	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	2018 2022	N	Ρ	Q	R	S	Т	U	V	w	х	Y	Z
Γ	2015	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	2019 2023	а	b	ю	d	е	f	g	h	j	k	l	m
Γ	2016	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	2020 2024	n	p	Ŷ	r	4	t	a	U	ω	X	y	8

#### Table B: Date Code

date	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
code	А	В	С	D	E	F	G	H	J	K	
date	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	
code	L	М	Ν	Р	Q	R	S	Т	U	V	
date	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th	31st
code	W	Х	Y	Z	а	b	ē	d	е	f	g

## Important Notice (1/2)

PLEASE READ THIS NOTICE BEFORE USING OUR PRODUCTS.

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.

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## Important Notice (2/2)

- 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.

We expressly prohibit you from analyzing, breaking, Reverse-Engineering, remodeling altering, and reproducing our product. Our product cannot be used for the product which is prohibited from being manufactured, used, and sold by the regulations and laws in the world.

Please do not use the product in molding condition.

This product is ESD (ElectroStatic Discharge) sensitive device. When you install or measure this, you should be careful not to add antistatic electricity or high voltage. Please be advised that you had better check anti serge voltage.

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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).

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