Datasheet of SAW Device

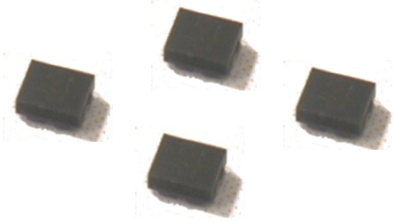
SAW Single Filter

for ISM2.4G / Unbalanced / 5pin /1109

Murata PN: SAFFB2G45MA0F0A

■ Feature

- Low Insertion loss
- High Power capability
- Small size



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

SAFFB2G45MA0F0A (ISM2.4G / Unbalanced / 5pin / 1109)

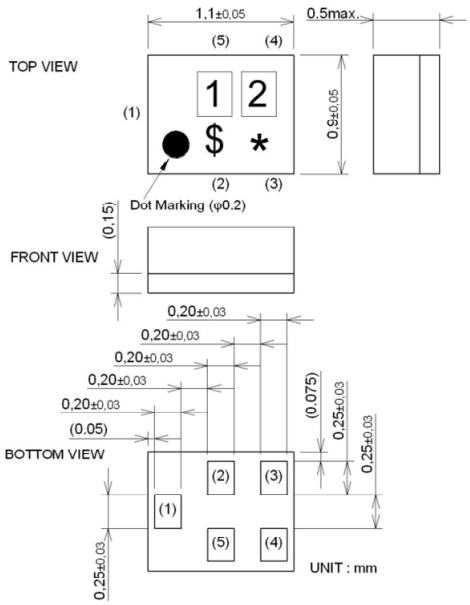
Revision Number	Date	Description
SAFFB2G45MA0F0A_rev. A	Nov-02-2015	■ Initial Release
SAFFB2G45MA0F0A_rev. B	Nov-04-2015	■ Updated General Information
SAFFB2G45MA0F0A_rev. C	Jan-21-2016	■ Updated for MP
SAFFB2G45MA0F0A_rev. D	Jan-22-2016	■ Updated SPEC
SAFFB2G45MA0F0A_rev. E	Feb-29-2016	■ Updated SPEC
SAFFB2G45MA0F0A_rev. F	Mar-18-2016	■ Updated SPEC
SAFFB2G45MA0F0A_rev. G	Jul-12-2016	■ Updated General Information
SAFFB2G45MA0F0A_rev. H	Jun-21-2017	■ Updated General Information

- Operating temperature : -20 to +85 deg.C
- Storage temperature : -40 to +85 deg.C
- Input Power : +25 dBm 5000 h +55 deg.C
  (*)Input signal shall be applied to Terminal number(1).
- 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 device

Package Dimensions & Recommended Land Pattern

unit: mm

Dimensions

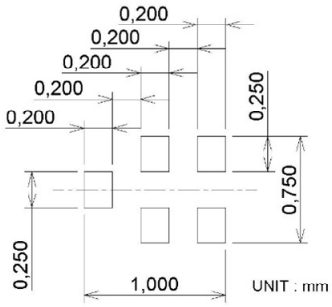


Marking : Laser Printing
* : Month code(Refer to the table A)
$: Date code(Refer to the table B)
1 : 7
2 : 3

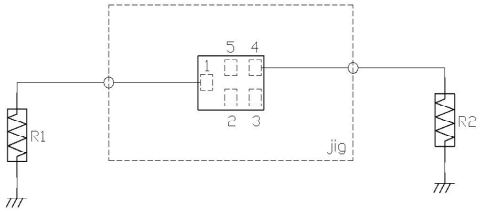
Terminal Number
(1) : Unbalance Port (PA-side)
(4) : Unbalance Port (Ant.-side)
Others : GND

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

Land Pattern



Measurement Circuit (Top Thru View)



R1 : 50 ohm	
R2 : 50 ohm	

SAFFB2G45MA0F0A (ISM2.4G / Unbalanced / 5pin / 1109)

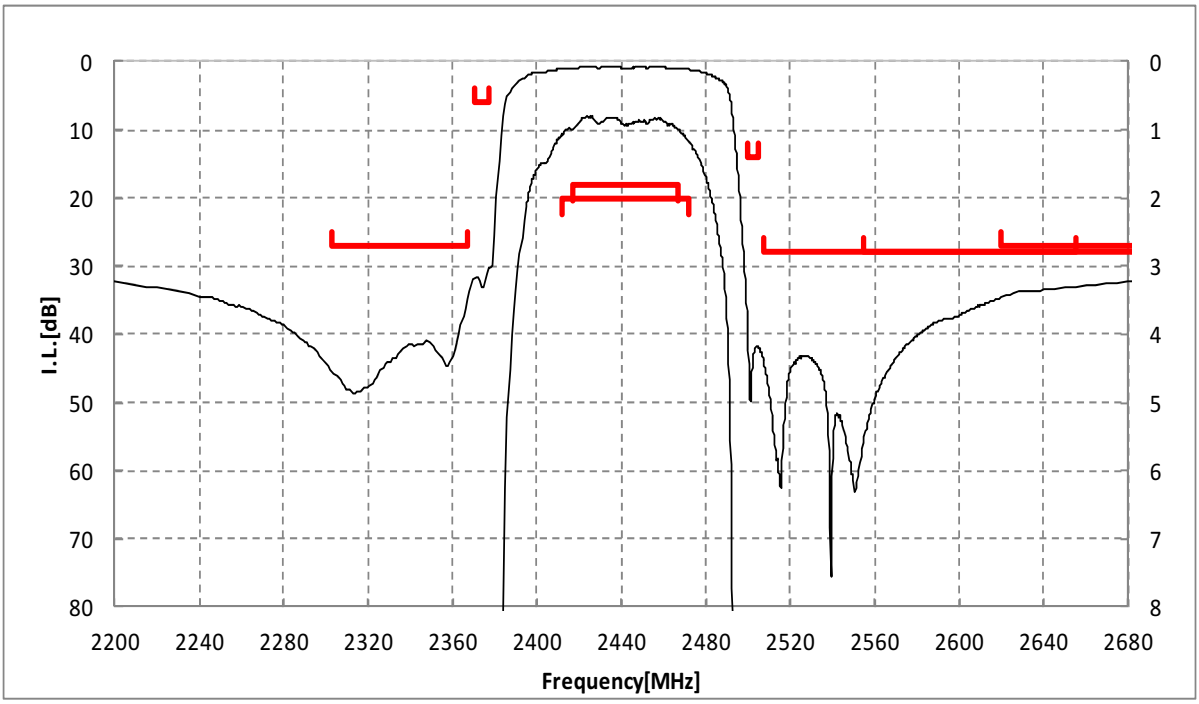
Electrical Characteristic < Single Filter >

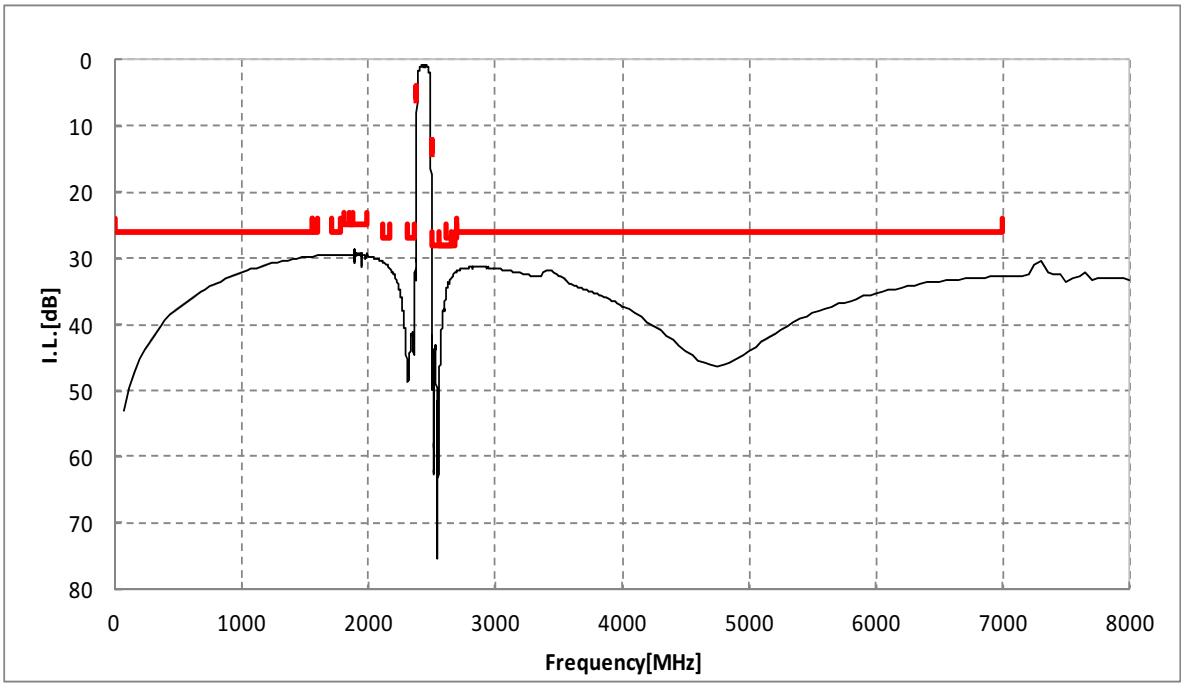
Item					Characteristics (-20 to +85 deg.C)			Unit	Note
					min.	typ.*	max.		
Center Frequency						2442		MHz	
Insertion Loss	2401.	to	2483.	MHz		1.2	2.0	dB_{INT}	WLAN ch1-13 18MHz-BW
	2406.	to	2478.	MHz		1.0	1.8	dB_{INT}	WLAN ch2-12 18MHz-BW
Ripple Deviation	2401.	to	2483.	MHz		1.0	3.4	dB	Any 18MHz
VSWR	2401.	to	2483.	MHz		1.5	2.2		
Absolute Attenuation	10.	to	1559.	MHz	26	30		dB	
	1559.	to	1606.	MHz	26	30		dB	
	1710.	to	1785.	MHz	26	30		dB	
	1805.	to	1880.	MHz	25	30		dB	
	1850.	to	1990.	MHz	25	29		dB	
	2110.	to	2170.	MHz	27	30		dB	
	2302.5	to	2367.5	MHz	27	34		dB_{INT}	Any 4.5MHz
	2370.5	to	2377.5	MHz	6.0	31.0		dB_{INT}	Any 4.5MHz
	2496.	to	2501.	MHz	16	27		dB_{INT}	+23 to +27deg.C, Average
	2500.	to	2505.	MHz	14	44		dB_{INT}	Average
	2500.	to	2505.	MHz	32	44		dB_{INT}	+23 to +27deg.C, Average
	2507.5	to	2687.5	MHz	28	32		dB_{INT}	Any 4.5MHz
	2555.	to	2655.	MHz	28	33		dB	B41 for China
	2620.	to	2690.	MHz	27	32		dB	
	2690.	to	7000.	MHz	26	31		dB	

* Typical value at 25±2deg.C

Electrical Characteristic

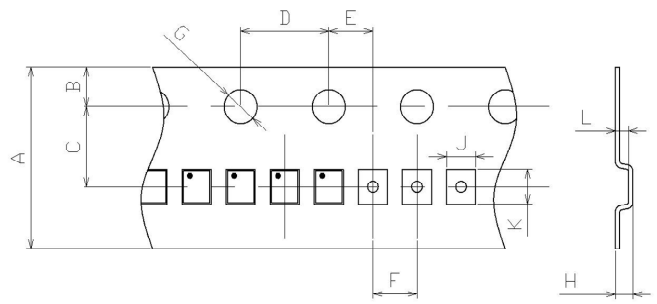
< Single Filter >





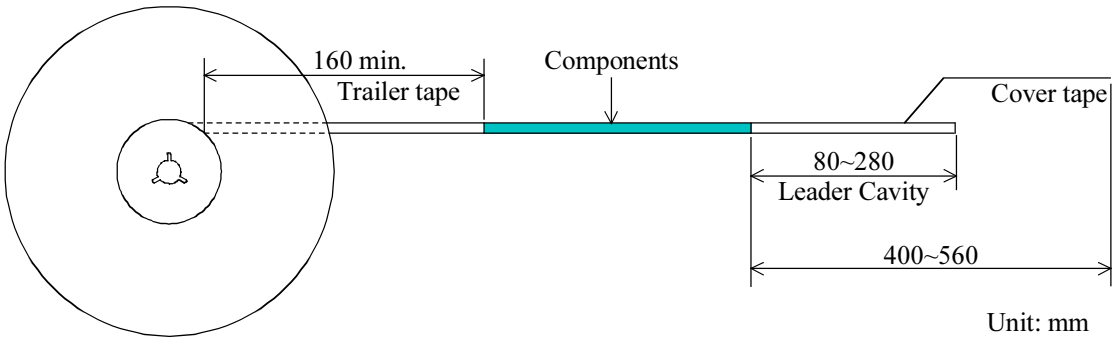
Dimensions of Tape & Reel unit: mm

Carrier Tape

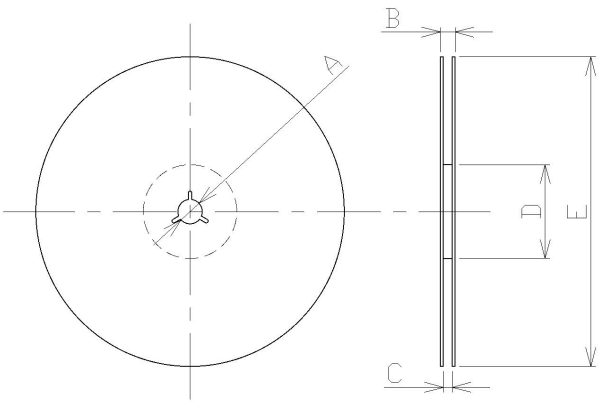


A:	8.0	J:	1.05
B:	1.75	K:	1.25
C:	3.50	L:	0.55
D:	4.0		
E:	2.00		
F:	2.0		
G:	φ1.5		
H:	0.75		

Tape



Reel



φ178Reel		φ330Reel	
A:	φ13.0	A:	-
B:	13.5max	B:	-
C:	9.0	C:	-
D:	φ60	D:	-
E:	φ178	E:	-

SAFFB2G45MA0F0AR1X… 10000pcs (φ178)
SAFFB2G45MA0F0AR1S… Sample Order (φ178/330)

Marking Code

Table A: Month Code

2013 2017 2021	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	A	B	C	D	E	F	G	H	J	K	L	M
2014 2018 2022	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015 2019 2023	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	a	b	c̄	d	e	f	g	h	j	k	l	m
2016 2020 2024	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

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.
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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.

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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.

We do not warrant or represent that any license, either express or implied, is granted under any our patent right, copyright, mask work right, or our other intellectual property right relating to any combination, machine, or process in which our products or services are used. Information provided by us regarding third-party products or services does not constitute a license from us to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from us under our patents or other intellectual property.

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