

Datasheet of SAW Device

SAW Single Filter for ISM2.4G / Unbalanced / 5pin /1411

Murata PN: SAFEA2G45MA0F0A

Feature

- Coexistence AXGP
- Coexistence UQWiMAX



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

Please also read caution at the end of this document.



Revision No.	Date	Description					
SAFEA2G45MA0F0A_rev. A	Jan-17-2012	■ Initial Release / MP					
SAFEA2G45MA0F0A_rev. B	Dec-16-2013	■ Updated added Absolute Attenuation					
SAFEA2G45MA0F0A_rev. C	Dec-05-2014	■ Updated Feature					
SAFEA2G45MA0F0A_rev. D	Jul-29-2016	■ Updated General Information					
SAFEA2G45MA0F0A_rev. E	Apr-26-2017	■ Updated General Information					

- Operating temperature : -30 to +85 deg.C - Storage temperature : -40 to +85 deg.C

- Input Power : +28 dBm 20000 h 55 deg.C

(*)Input signal shall be applied to Terminal number(1).

- D.C. Volatage between the terminals : 3V (25+/-2 deg.C)

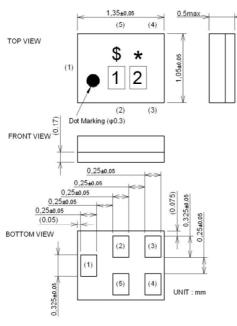
Minimum Resistance between the terminals : 10M ohm
 RoHS compliance : Yes
 ESD (ElectroStatic Discharge) sensitive device



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 : T 2 : W

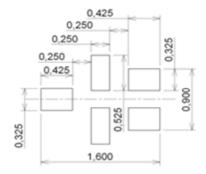
Terminal Number

(1): Unbalance Port (PA-side)(4): Unbalance Port (Ant.-side)

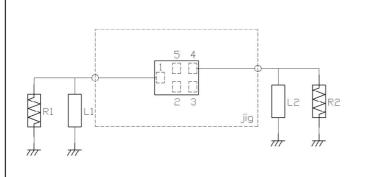
Others: GND

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

Land Pattern



Measurement Circuit (Top Thru View)



R1 : 50 ohm	L1 :3.8nH(Ideal inductor)						
R2 : 50 ohm	L2 :3.8nH(Ideal inductor)						



Electrical Characteristic < Single Filter >

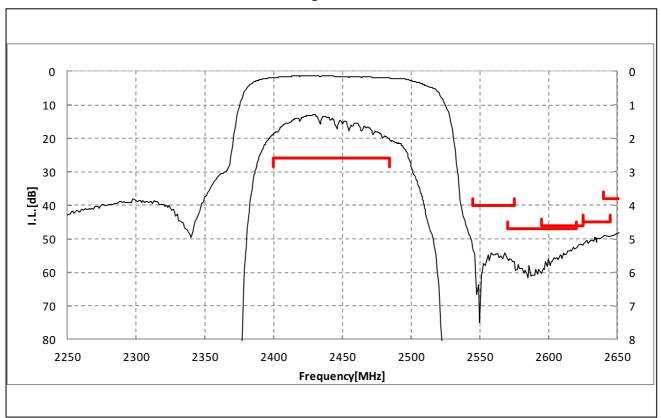
Characteristic											
					Cha	racteri	stics				
	ltem			(-30 to +85 deg.C)			Unit	Note			
				min.	min. typ.* max.						
Center Frequency	T					2442	I III CAX.	MHz	1		
Insertion Loss	2400.	to	2484.	MHz	-	1.9	2.6	dB			
Insertion Loss	2400.	to	2484.	MHz		1.9	2.3	dB	+23 to +27deg.C		
Dinnle Deviction		to				0.6		dB	+23 to +27deg.C		
Ripple Deviation	2400.	to	2484.	MHz			1.8		1.00 to 1.07 to 1.0		
VOMB	2400.	to	2484.	MHz		0.6	1.3	dB	+23 to +27deg.C		
VSWR	2400.	to	2484.	MHz		1.5	2.1				
	2400.	to	2484.	MHz		1.5	1.9		+23 to +27deg.C		
Absolute Attenuation	0.1	to	960.	MHz	45	55		dB			
	960.	to	1570.	MHz	37	43		dB			
	1570.	to	1580.	MHz	37	43		dB			
	1580.	to	1710.	MHz	37	42		dB			
	1710.	to	1910.	MHz	35	40		dB			
	1910.	to	1980.	MHz	35	41		dB			
	2110.	to	2170.	MHz	40	45		dB			
	2545.	to	2575.	MHz	40	53		dB			
	2545.	to	2575.	MHz	45	53		dB	+23 to +27deg.C		
	2570.	to	2620.	MHz	47	52		dB			
	2595.	to	2625.	MHz	46	51		dB			
	2625.	to	2645.	MHz	45	48		dB			
	2640.	to	3000.	MHz	38	45		dB			
	3000.		4800.	MHz	25	32		dB			
		to									
	4800.	to	5000.	MHz	25	31		dB			
	5000.	to	6000.	MHz	25	31		dB			
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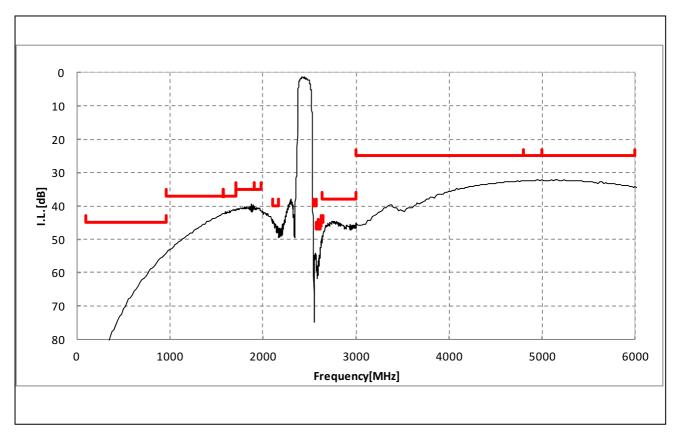
^{*} Typical value at 25±2deg.C



Electrical Characteristic

< Single Filter >

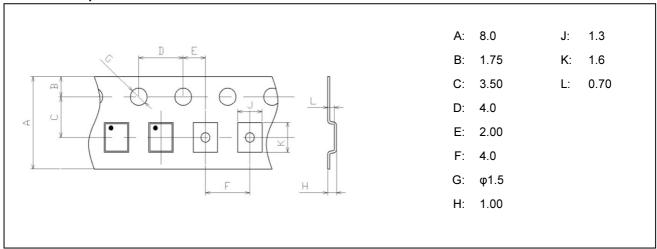




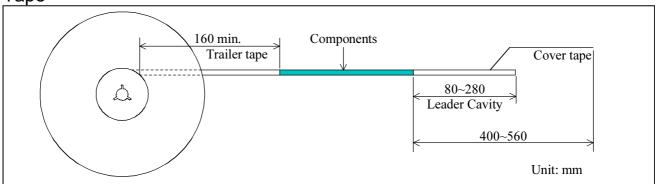


Dimensions of Tape & Reel unit: mm

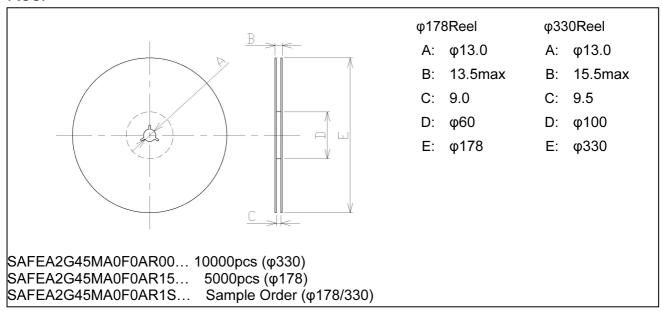
Carrier Tape



Tape



Reel





Marking Code

Table A: Month Code

2013	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2017 2021	4	В	O	D	Е	F	G	Н	٦	K	١	М
2014	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2018 2022	N	Р	Q	R	S	Т	U	V	W	Х	Υ	Z
2015	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2019 2023	а	ь	10	đ	e	f	gg	h	j	k	Q	E
2016	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2020 2024	r	P	G	r	4	t	a	V	3	x	y	3

Table B: Date Code

date code	21st W	22nd X	23rd	24th	25th a	26th b	27th	28th	29th e	30th	31st g
code	L	М	N	Р	Q	R	S	Т	U	V	
date	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	
code	Α	В	С	D	Е	F	G	Н	J	K	
date	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	

Important Notice (1/2)

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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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- 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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