Datasheet of SAW Device

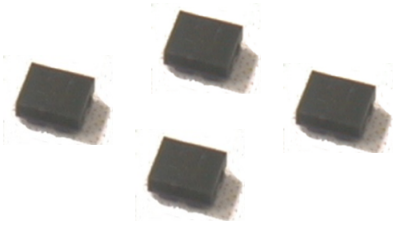
SAW Single Filter

for ISM2.4G / Unbalanced / 5pin /1411

Murata PN: SAFEA2G45MC0F0A

■ Feature

- Coexistence Band40+38



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

SAFEA2G45MC0F0A (ISM2.4G / Unbalanced / 5pin / 1411)

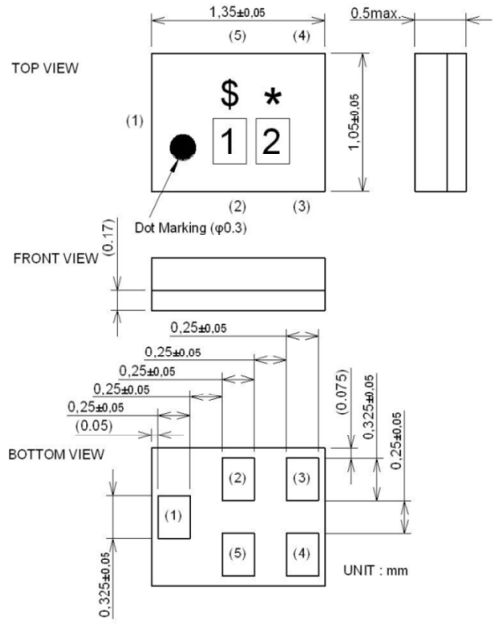
Revision Number	Date	Description
SAFEA2G45MC0F0A_rev. A	Oct-03-2012	■ Initial Release/Updated for MP
SAFEA2G45MC0F0A_rev. B	Aug-18-2016	■ Updated General Information
SAFEA2G45MC0F0A_rev. C	Aug-28-2017	■ Updated General Information

- Operating temperature : -30 to +85 deg.C
- Storage temperature : -40 to +85 deg.C
- Input Power : +28dBm, 20000 hours, 55deg.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

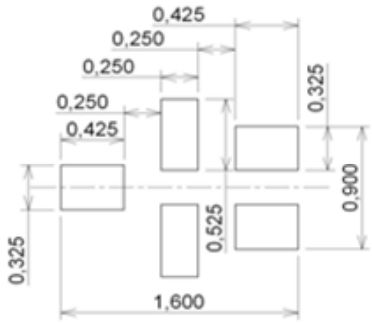


Marking : Laser Printing
* : Month code(Refer to the table A)
$: Date code(Refer to the table B)
1 : U
2 : H

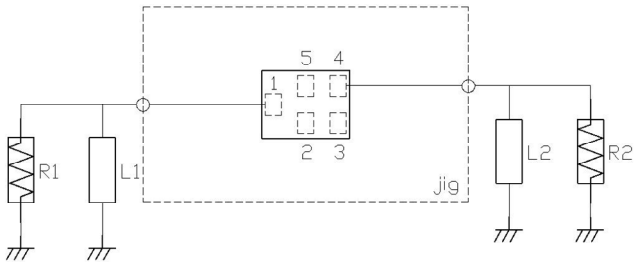
Terminal Number
(1) : Unbalance Port (PA-side)
(4) : Unbalance Port (Ant.-side)
Others : GND

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

Land Pattern



Measurement Circuit (Top Thru View)



R1 : 50 ohm	L1 :4.3nH(Ideal inductor)
R2 : 50 ohm	L2 :4.3nH(Ideal inductor)

SAFEA2G45MC0F0A (ISM2.4G / Unbalanced / 5pin / 1411)

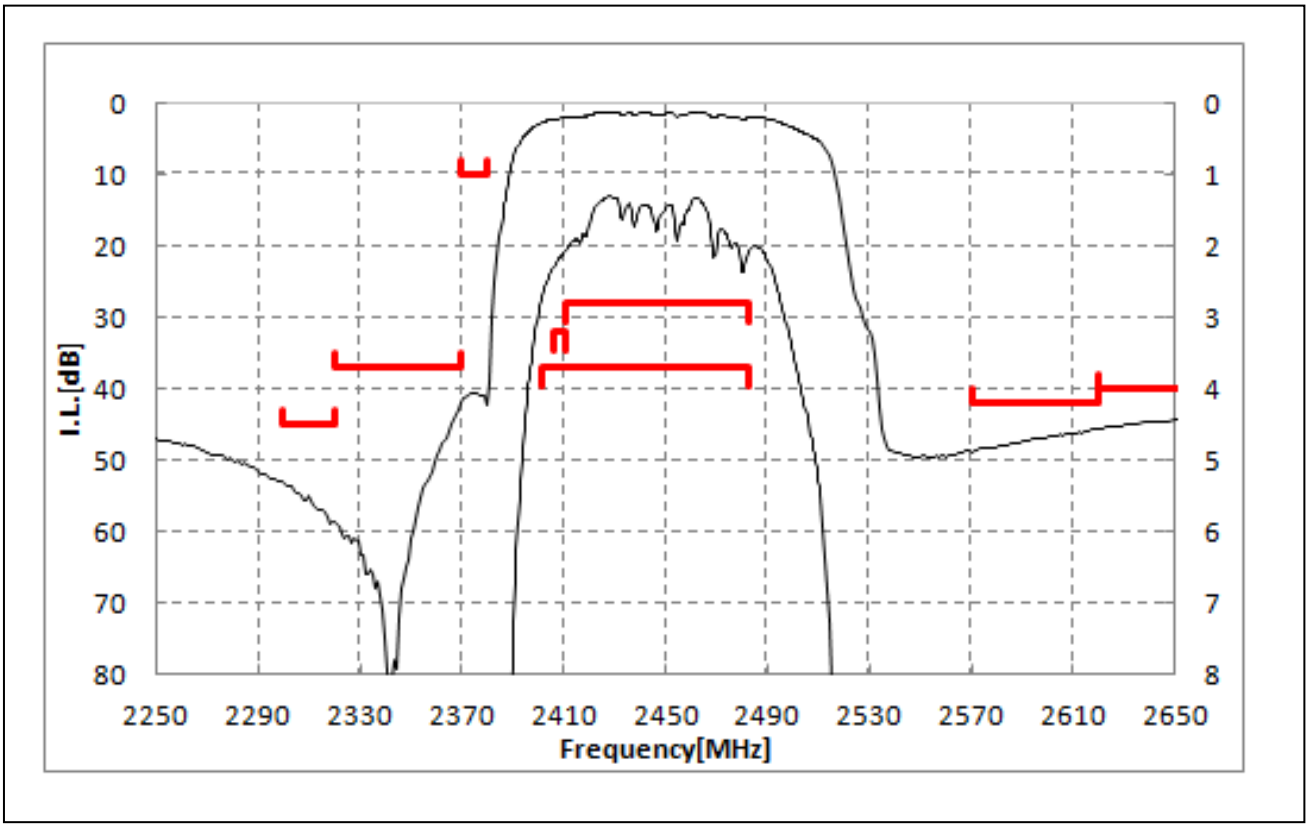
Electrical Characteristic < Single Filter >

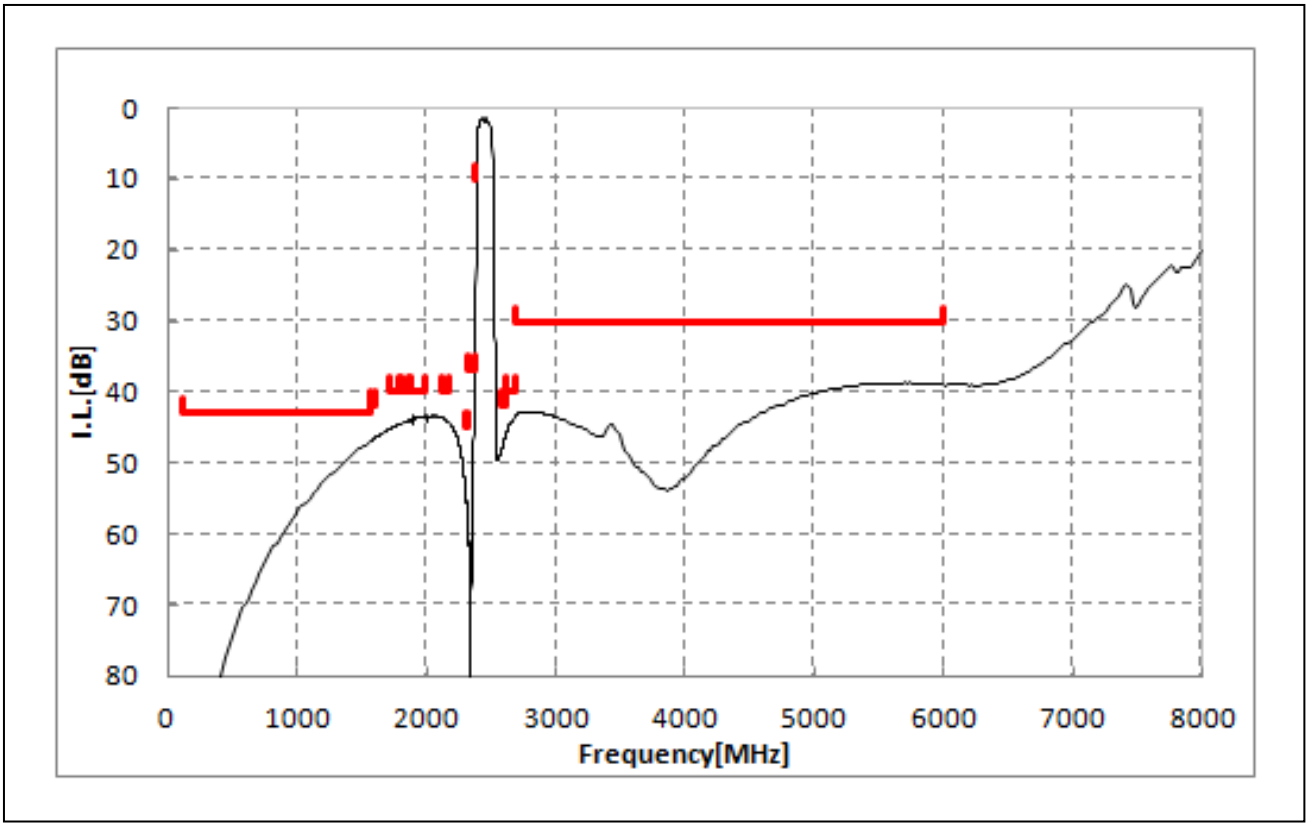
Item					Characteristics (-30 to +85 deg.C)			Unit	Note
					min.	typ.*	max.		
Center Frequency						2442		MHz	
Insertion Loss	2401.	to	2406.	MHz		2.7	4.8	dB	
	2401.	to	2406.	MHz		2.7	3.7	dB	+23 to +27deg.C
	2406.	to	2411.	MHz		2.3	3.2	dB	
	2406.	to	2411.	MHz		2.3	2.7	dB	+23 to +27deg.C
	2411.	to	2483.	MHz		2.3	2.8	dB	
	2411.	to	2483.	MHz		2.3	2.6	dB	+23 to +27deg.C
	2401.	to	2483.	MHz		2.7	3.7	dB	+25 to +85deg.C
Ripple Deviation	2401.	to	2483.	MHz		1.3	3.9	dB	
	2401.	to	2483.	MHz		1.3	2.6	dB	+23 to +27deg.C
	2406.	to	2483.	MHz		1.0	2.0	dB	
	2406.	to	2483.	MHz		1.0	1.8	dB	+23 to +27deg.C
VSWR	2401.	to	2483.	MHz		1.6	2.0	dB	
	2401.	to	2483.	MHz		1.6	1.9	dB	+23 to +27deg.C
Absolute Attenuation	10.	to	1559.	MHz	43	47		dB	
	1559.	to	1606.	MHz	42	46		dB	
	1710.	to	1785.	MHz	40	45		dB	
	1805.	to	1880.	MHz	40	44		dB	
	1850.	to	1990.	MHz	40	43		dB	
	2110.	to	2170.	MHz	40	44		dB	
	2300.	to	2320.	MHz	45	54		dB	
	2320.	to	2370.	MHz	37	44		dB	
	2370.	to	2380.	MHz	10	42		dB	
	2370.	to	2380.	MHz	16	42		dB	+23 to +27deg.C
	2570.	to	2620.	MHz	42	46		dB	
	2620.	to	2690.	MHz	40	44		dB	
	2690.	to	6000.	MHz	30	37		dB	

* Typical value at 25±2deg.C

Electrical Characteristic

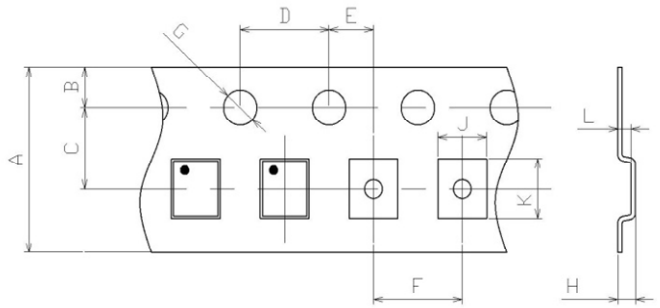
< Single Filter >





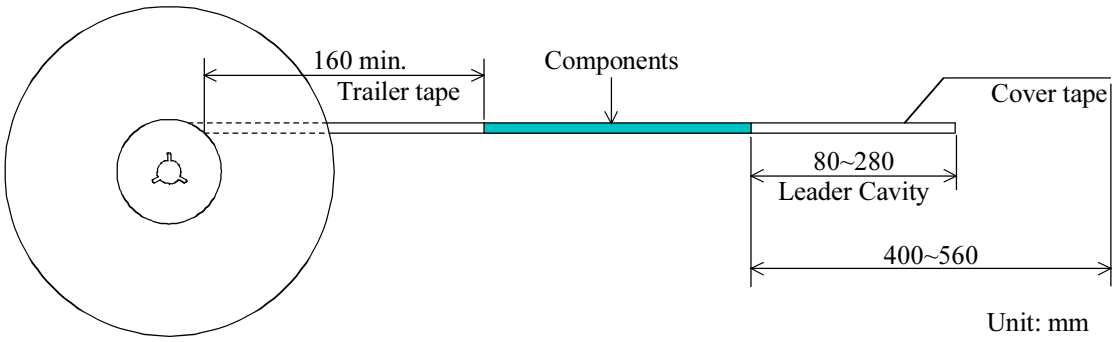
Dimensions of Tape & Reel unit: mm

Carrier Tape

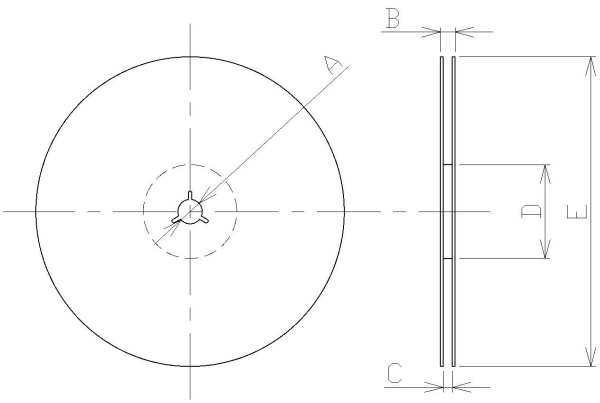


A:	8.0	J:	1.3
B:	1.75	K:	1.6
C:	3.50	L:	0.70
D:	4.0		
E:	2.00		
F:	4.0		
G:	φ1.5		
H:	1.00		

Tape



Reel



φ178Reel		φ330Reel	
A:	φ13.0	A:	φ13.0
B:	13.5max	B:	15.5max
C:	9.0	C:	9.5
D:	φ60	D:	φ100
E:	φ178	E:	φ330

SAFEA2G45MC0F0AR00… 10000pcs (φ330)
SAFEA2G45MC0F0AR15… 5000pcs (φ178)
SAFEA2G45MC0F0AR1S… 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)

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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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- 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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