Innovator in Electronics

Datasheet of SAW Device

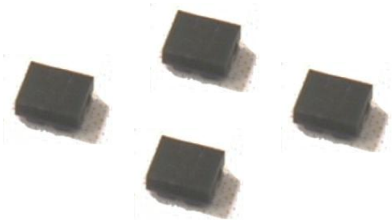
SAW Single Filter

for DCS(CMCC) / Unbalanced / 5pin /1411

Murata PN: SACEA1G81TA0F0A

■ Feature

- Band34/39 Post-PA Filter
- High rejection at DCS(CMCC)
-



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

SACEA1G81TA0F0A (DCS(CMCC) / Unbalanced / 5pin / 1411)

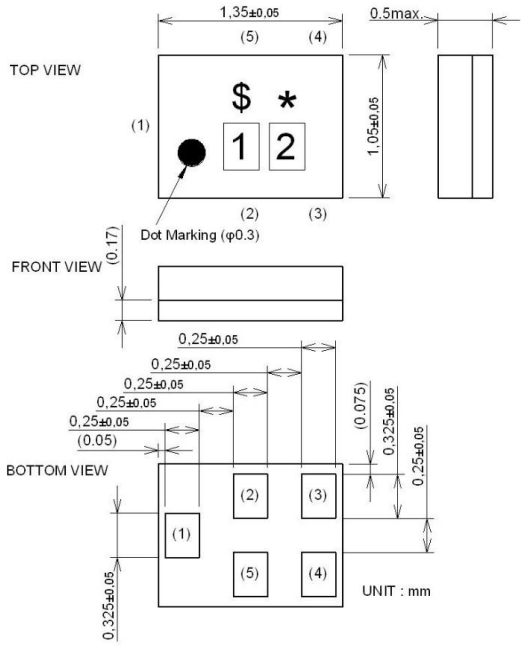
Revision No.	Date	Discription
SACEA1G81TA0F0A_rev. A	Feb-25-2013	■ Initial Release
SACEA1G81TA0F0A_rev. B	Apr-01-2013	

- Operating temperature : -30 to +85 deg.C
- Storage temperature : -40 to +85 deg.C
- Input Power : +30 dBm 10000 h 55 deg.C
- D.C. Volatage between the terminals : 3V (25+/-2 deg.C)
- Minimum Resistance betweem the terminals : 10M ohm
- RoHS compliance : Yes

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 : Y

Terminal Number

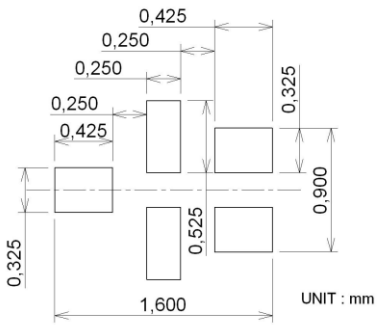
(1) : Unbalance Port(PA side /ANT side)

(4) : Unbalance Port(ANT side /PA side)

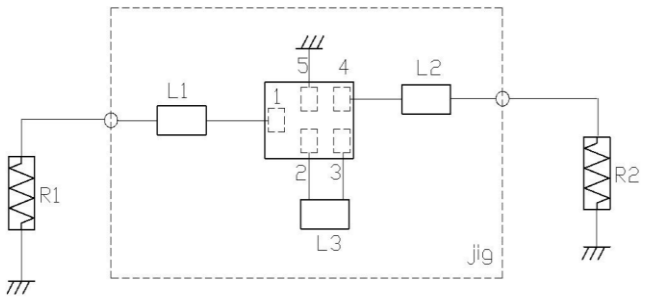
(2)(3) : connected to coil

(5) : GND

Land Pattern



Measurement Circuit (Top View)



R1 : 50 ohm L1 : 2.9 nH(LQW15AN)

R2 : 50 ohm L2 : 2.9 nH(LQW15AN)

L3 : 5.8 nH(LQW15AN)

SACEA1G81TA0F0A (DCS(CMCC) / Unbalanced / 5pin / 1411)

Electrical Characteristic < Single Filter >

Matching Impedance (nominal)

- : Unbalance Port : 50 ohm // 2.9 nH(LQW15AN2N9)
- : Unbalance Port : 50 ohm // 2.9 nH(LQW15AN2N9)

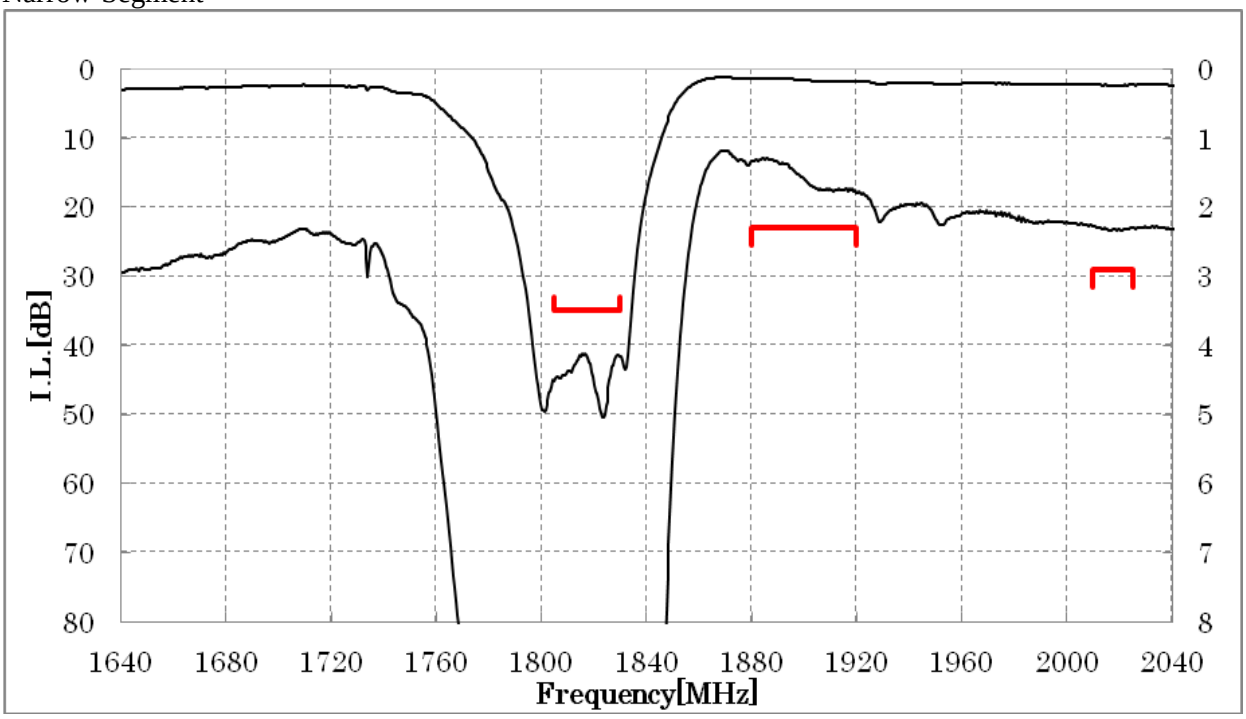
Item					Characteristics (-30 to +85 deg.C)			Unit	Note
					min.	typ.	max.		
Center Frequency						1817.5		MHz	
Insertion Loss	1880.	to	1920.	MHz		1.8	2.3	dB	
	1880.	to	1920.	MHz		1.8	2.1	dB	+23 to +27deg.C
	2010.	to	2025.	MHz		2.4	2.9	dB	
	2010.	to	2025.	MHz		2.4	2.7	dB	+23 to +27deg.C
Ripple Deviation	1880.	to	1920.	MHz		0.5	1.0	dB	
	2010.	to	2025.	MHz		0.2	0.5	dB	
VSWR	1880.	to	1920.	MHz		1.6	2.3		
	1880.	to	1920.	MHz		1.6	2.2		+23 to +27deg.C
	2010.	to	2025.	MHz		1.3	2.3		
	2010.	to	2025.	MHz		1.3	2.2		+23 to +27deg.C
Absolute Attenuation	10.	to	1559.	MHz	0.5	3.5		dB	
	1559.	to	1606.	MHz	0.5	3.1		dB	
	1805.	to	1830.	MHz	35	40		dB	
	1805.	to	1830.	MHz	37	40		dB	+23 to +27deg.C
	3760.	to	4050.	MHz	15	19		dB	
	5640.	to	6075.	MHz	20	23		dB	

* Typical value at 25±2deg.C

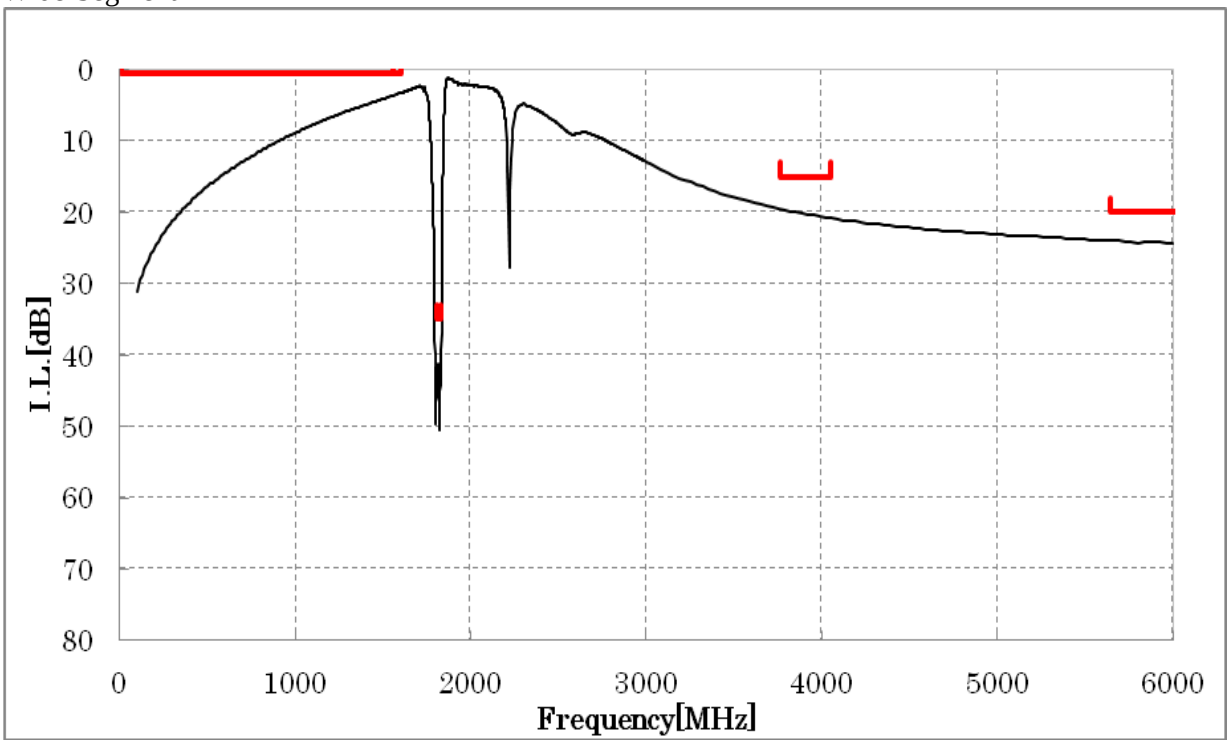
Electrical Characteristic

< Single Filter >

Narrow-Segment



Wide-Segment

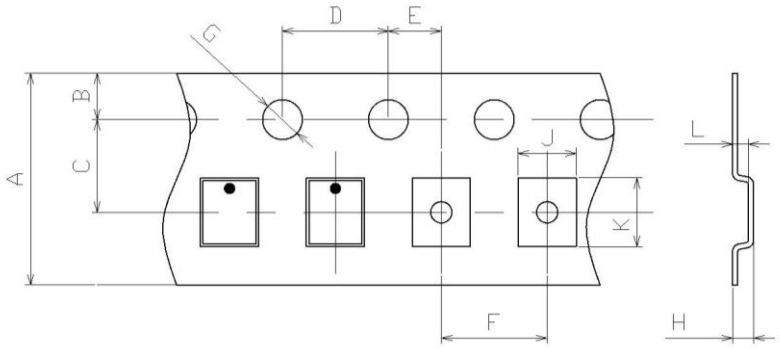


SACEA1G81TA0F0A (DCS(CMCC) / Unbalanced / 5pin / 1411)

Dimensions of Tape & Reel

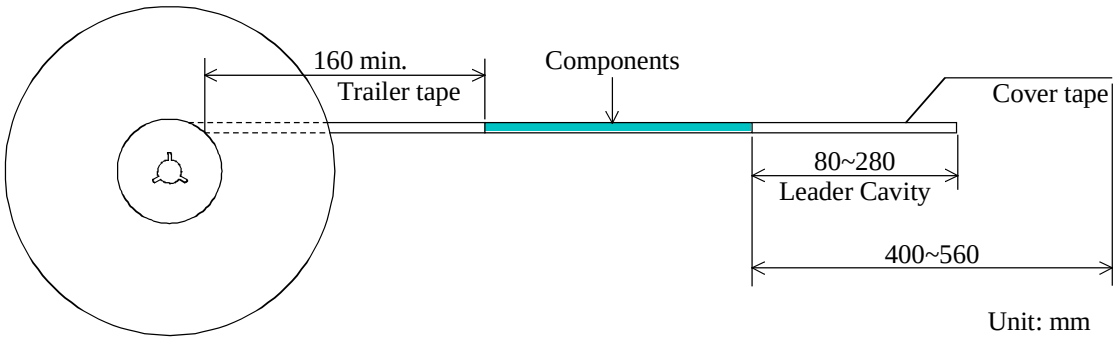
unit: mm

Carrier Tape



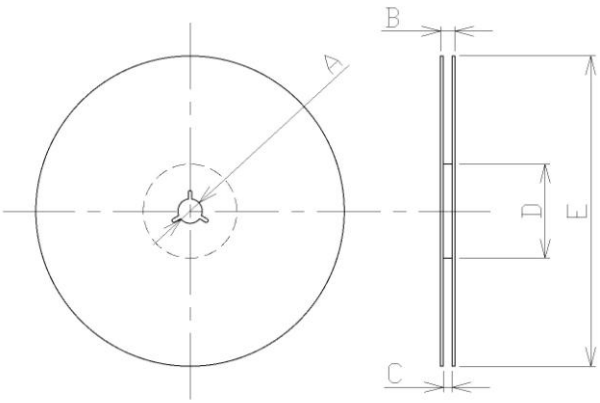
A:	8.0	J:	1.3
B:	1.75	K:	1.6
C:	3.50	L:	0.70
D:	4.0		
E:	2.00		
F:	4.0		
G:	φ1.5		
H:	1.00		

Tape



Unit: mm

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

SACEA1G81TA0F0AR00… 10000pcs (φ330)
SACEA1G81TA0F0AR15… 5000pcs (φ178)
SACEA1G81TA0F0AR1S… sample Order (φ178)

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

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.
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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- 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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Moreover, you must comply with "foreign exchange and foreign trade law", the "U.S. export administration regulations", etc.

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

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・deviation or lapse in function of engineering sample,

・improper use of engineering samples.

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