

Datasheet of SAW Device

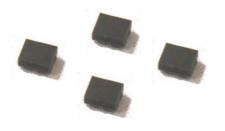
SAW Dual Filter

for Band12/26 / 1in2out Unbalanced / LH /1511

Murata PN: SAWFD737MAA1F0A

Feature

- ➤ For Band26+12 CA
- Low Insertion Loss
- High TX Attenuation



Note: This Murata SAW Component is Consumer grade product and applicable for Cellular phone or similar end devices.

Please also read Important Notice at the end of this document.





General Information

Operating temperature
 Storage temperature
 Input Power
 D.C. Volatage between the terminals
 -20 to +85 deg.C
 +40 to +85 deg.C
 +15 dBm 2000 h
 3V (25+/-2 deg.C)

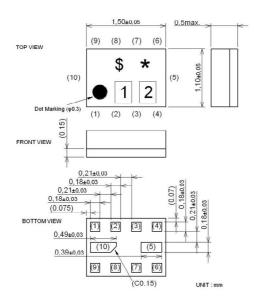
Minimum Resistance between the terminals : 10M ohm
 RoHS compliance : Yes
 ESD (ElectroStatic Discharge) sensitive device



Package Dimensions & Recommended Land Pattern

unit: mm

Dimensions



Marking: Laser Printing

*: Month code

\$: Date code

1:0

2:Q

Terminal Number

(1): Unbalanced port-Lch/Hch

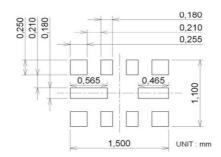
(9): Unbalanced port-Lch

(6): Unbalanced port-Hch

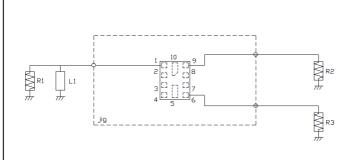
Others: GND

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

Land Pattern



Measurement Circuit (Top Thru View)



R1:50 ohm	L1 :10nH(Ideal inductor)
R2:50 ohm	
R3:50 ohm	



Electrical Characteristic < Low Freq. Filter >

Electrical Characteristic < Low i										
					Characteristics				Note	
Low Freq. Filter						(-20 to +85 deg.C)		Unit		
						typ.*		Offic	14010	
Cantag Fraguenay							max.			
Center Frequency						737.5		MHz		
Insertion Loss	729.	to	746.	MHz		2.0	2.9	dB		
	729.	to	746.	MHz		2.0	2.4	dB	+23 to +27deg.C	
Ripple Deviation	729.	to	746.	MHz		0.5	1.6	dB		
VSWR	729.	to	746.	MHz		1.6	2.0			
Absolute Attenuation	10.	to	699.	MHz	40	58		dB		
			30.	MHz	50	104		dB	Rx -Tx	
	699.	to	716.	MHz	48	53		dB	Tx	
	716.	to	722.	MHz	8.0	41.0		dB	U700 Tx Jammer	
	722.	to	727.	MHz	1.0	3.1		dB	Cell Tx Jammer, IM2	
	776.		793.	MHz	35	42		dB	Upper 700 MHz Tx Jammer	
	793.	to	805.	MHz	35	52		dB	Opper 700 WHZ 1x barriner	
	814.	to	849.	MHz	52	57		dB	DE TVCA	
		to							B5 TxCA	
	849.		6000.	MHz	36	41		dB	DAT OA	
	1710.		1755.	MHz	44	49		dB	B4 Tx CA	
1	1850.		1910.	MHz	43	48		dB	B2 Tx CA	
1	2187.		2238.	MHz	40	46		dB	3f	
	2400.		2500.	MHz	40	45		dB	ISM2.4	
	4900.		5950.	MHz	36	41		dB	ISM 5G	
	6561.		6714.	MHz	25	34		dB	9f	
	7290.	to	7460.	MHz	20	27		dB	10f	
	8019.	to	8206.	MHz	18	23		dB	11f	
	8748.	to	8952.	MHz	13	18		dB	12f	
	9477.		9698.	MHz	7.0	12.3		dB	13f	
	10206.		0444.	MHz	4.0	9.9		dB	14f	
	10935.		1190.	MHz	6.0	11.1		dB	15f	
	11664.		1936.	MHz	6.0	11.9		dB	16f	
	12393.		2682.	MHz	7.0	12.1		dB	17f	
	12000.	10			7.0			•		
					 	 				
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^{*} Typical value at 25±2deg.C



Electrical Characteristic < High Freq. Filter >

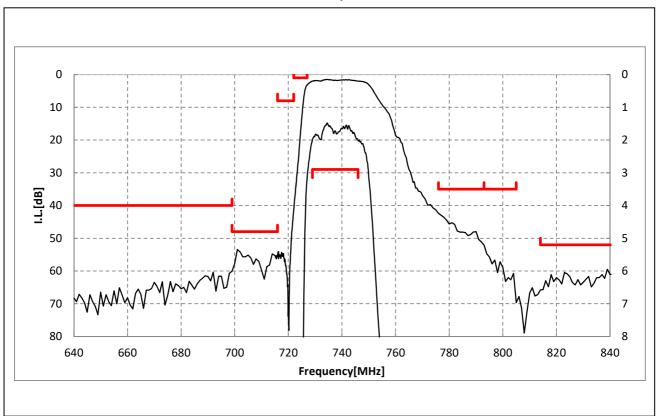
Electrical Characteristic < High					Freq. Filler >				
					Characteristics			Unit	Note
High Freq. Filter						(-20 to +85 deg.C)			
					min.	typ.*	max.]	
Center Frequency						876.5	maxi	MHz	1
Insertion Loss	859.	to	894.	MHz		2.2	3.4	dB	
linsertion Loss	859.	to	894.	MHz		2.2	2.6	dB	+23 to +27deg.C
Ripple Deviation	859.		894.	MHz		0.8	2.3	dB	+23 to +27deg.0
VSWR	859.	to	894.			2.1	2.5	иь	
Absolute Attenuation		<u>to</u>		MHz	00		2.5	4D	
Absolute Attenuation	10.	to	824.	MHz	33	40		dB	D. T.
	000		45.	MHz	50	87		dB	Rx - Tx
	699.	to	716.	MHz	40	47		dB	B12 Tx CA
	779.	to	804.	MHz	38	43		dB	2Tx - Rx
	814.	to	849.	MHz	37	44		dB	Tx
	849.	to	854.	MHz	2.0	11.7		dB	(Rx + Tx)/2
	909.	to	979.	MHz	25	30		dB	
	979.	to	6000.	MHz	27	32		dB	
	1693.	to	1788.	MHz	45	50		dB	Rx + Tx, 2f
	1710.	to	1785.	MHz	45	50		dB	B3 / B4 Tx CA
	1850.	to	1910.	MHz	43	48		dB	B2 Tx CA
	1920.	to	2400.	MHz	39	44		dB	B1 Tx CA
	2400.	to	2500.	MHz	37	42		dB	ISM2.4
	2517.	to	2592.	MHz	37	42		dB	Rx + 2Tx
	2607.	to	2682.	MHz	37	42		dB	3f
	3476.	to	3576.	MHz	33	38		dB	4f
	4345.	to	4470.	MHz	30	35		dB	5f
	4900.	to	5950.	MHz	27	32		dB	ISM 5G
	5214.	to	5364.	MHz	28	33		dB	6f
	6083.	to	6258.	MHz	20	32		dB	7f
	6952.	to	7152.	MHz	15	27		dB	8f
	7821.	to	8046.	MHz	15	25		dB	9f
	8690.	to	8940.	MHz	15	22		dB	10f
	9559.	to	9834.	MHz	13	18		dB	11f
	40428.		10728.	MHz	15	20		dB	12f
	11297.		11622.	MHz	15	26		dB	13f
	12166.		12516.	MHz	15	26		dB	14f
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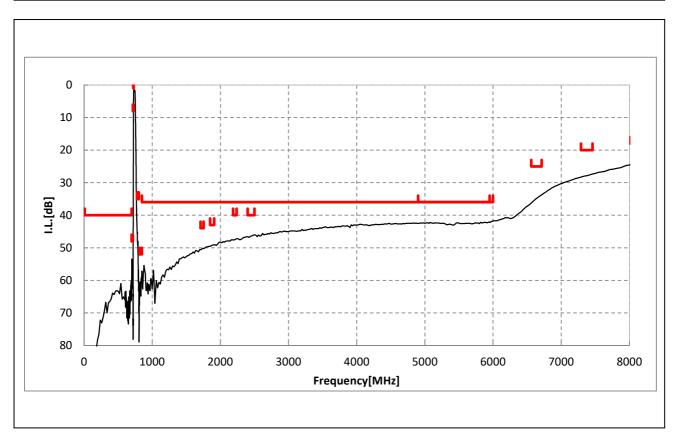
^{*} Typical value at 25±2deg.C



Electrical Characteristic

< Low Freq. Filter >

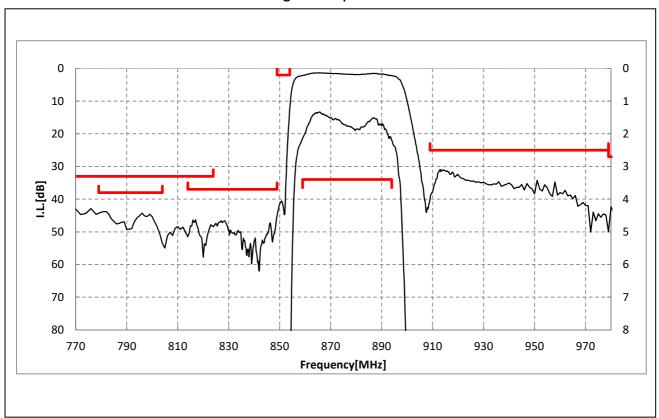


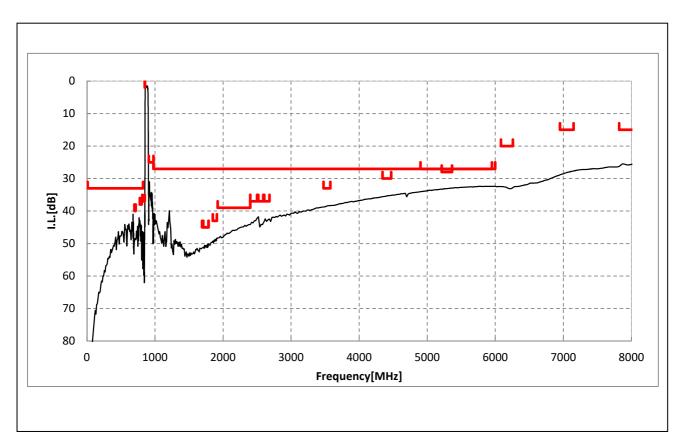




Electrical Characteristic

< High Freq. Filter >

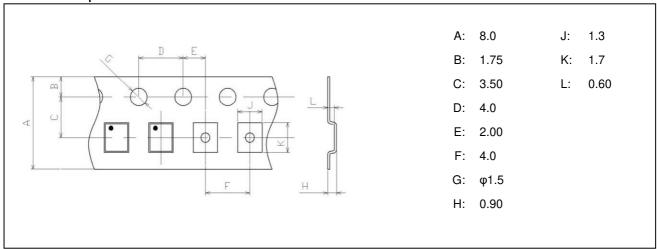




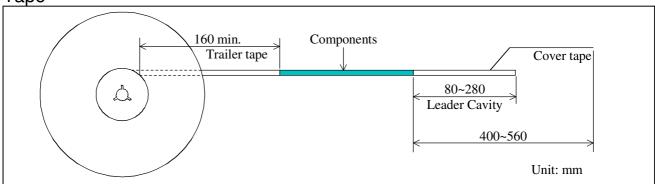


Dimensions of Tape & Reel unit: mm

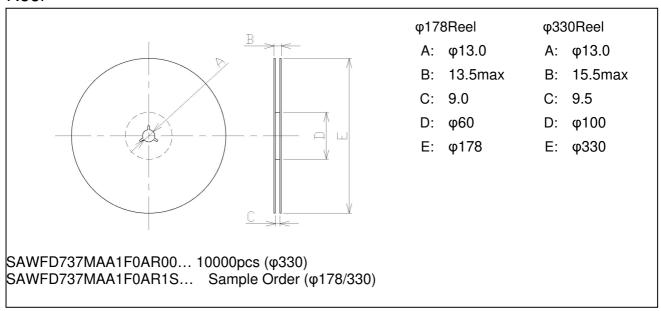
Carrier Tape



Tape



Reel



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 specified in the front page of this product specifications (the "Product" or "Products") 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 Product 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.

WE HEREBY DISCLAIMS ALL OTHER WARRANTIES REGARDING THE PRODUCTS, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, THAT THEY ARE DEFECT-FREE, OR AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS.

The Product shall not be used for any application which requires especially high reliability or accuracy in order to prevent defect which incurs high possibility of damage to the third party's life, body or property such as the applications listed below as item (a) to (j) (the "Prohibited Application"). You acknowledge and agree that, if you use our Products in the Prohibited Applications, we will not be responsible for any damage caused by such use.

Furthermore, YOU AGREE TO INDEMNIFY AND DEFEND US AND OUR AFFILIATES AGAINST ALL CLAIMS, DAMAGES, COSTS, AND EXPENSES THAT MAY BE INCURRED, INCLUDING WITHOUT LIMITATION, ATTORNEY FEES AND COSTS, DUE TO THE USE OF OUR PRODUCTS IN THE PROHIBITED APPLICATIONS.

- (a) Aircraft equipment.
- (b) Aerospace equipment
- (c) Undersea equipment.
- (d) Power plant control equipment
- (e) Medical equipment.
- (f) Transportation equipment (vehicles, automotive, trains, ships, etc.).
- (g)Traffic signal equipment.
- (h)Disaster prevention / crime prevention equipment.
- (i) Burning / explosion control equipment
- (j) Application of similar complexity and/ or reliability requirements to the applications listed in the above.

For the avoidance of doubt, the Product is not automotive grade, and will not support such requests for automotive as below, also not support other specific requests for automotive.

- AEC-Q200
- PPAP
- IATF16949, VDA6.3
- Zero Defect program
- Long product life cycle
- Automotive 8D failure analysis and report



Important Notice (2/2)

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.

Please do not use our Products, our technical information and other data provided by us for the purpose of developing of mass-destruction weapons and the purpose of military use.

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

Please note that we may discontinue the manufacture of our products, due to reasons such as end of supply of materials and/or components from our suppliers.

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).

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

Customer acknowledges that engineering samples may deviate from specifications and may contain defects due to their development status.

We reject any liability or product warranty for engineering samples.

In particular we disclaim liability for damages caused by

- •the use of the engineering sample other than for evaluation purposes, particularly the installation or integration in the Product to be sold by you,
 - deviation or lapse in function of engineering sample,
 - improper use of engineering samples.

We disclaim any liability for consequential and incidental damages.

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