

Datasheet of SAW Device

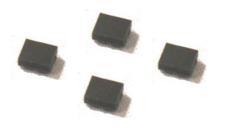
SAW Dual Filter

for Band26_Band29 / 1in2out Unbalanced / LH /1511

Murata PN: SAWFD722MAA1F0A

Feature

- > for CA
- > DRx
- > Low Insertion Loss



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
 Winimum Resistance between the terminals
 1-20 to +85 deg.C
 +15 dBm 2000 h
 3V (25+/-2 deg.C)
 Minimum Resistance between the terminals
 10M ohm

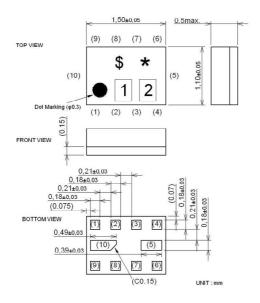
- RoHS compliance : Yes
- ESD (ElectroStatic Discharge) sensitive device



Package Dimensions & Recommended Land Pattern

unit: mm

Dimensions



Marking: Laser Printing

*: Month code

\$: Date code

1:7

2:L

Terminal Number

(1): Unbalanced port-Lch/Hch

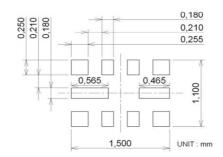
(9): Unbalanced port-Lch

(6): Unbalanced port-Hch

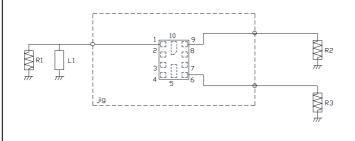
Others: GND

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

Land Pattern



Measurement Circuit (Top Thru View)



R1:50 ohm	L1 :15nH(Ideal inductor)
R2:50 ohm	
R3:50 ohm	



Electrical Characteristic < Low Freq. Filter >

Electrical Characteristic < Low i								
				Characteristics				
Low From Filter					(-20 to +85 deg.C)			Nete
Low Freq. Filter						Unit	Note	
			min.	typ.*	max.			
Center Frequency					722.5		MHz	
	717.05 .	707 75	N /II / -			0.4	dB	
Insertion Loss	717.25 to	727.75			1.6	2.1		
	719.5 to	725.5	MHz		1.4	2.0	dB _{INT}	Any 4.5MHz
Ripple Deviation	717.25 to	727.75	MHz		0.4	1.4	dB	_
VSWR	717.25 to	727.75			1.5	2.1		
Absolute Attenuation		698.	MHz	35	42	2.1	dB	
Absolute Attenuation	10. to							
	739. to	746.	MHz	8.0	21.0		dB	
	746. to	6000.	MHz	17	25		dB	
	814. to	849.	MHz	36	44		dB	B26 TX for CA
	824. to	849.	MHz	36	44		dB	B5 TX for CA
					37			DA TY (- :: OA
	1710. to	1755.	MHz	30			dB	B4 TX for CA
	1850. to	1910.	MHz	30	36		dB	B2 TX for CA
	2151.75 to	2183.25	MHz	29	34		dB	3f
	2400. to	2500.	MHz	26	33		dB	ISM2.4
		5950.	MHz	17	25		dB	ISM 5G
								IOIVI JG
		12750.	MHz	5.0	17.0		dB	
	698. to	704.	MHz	30	39		dB	Average over ch52
	704. to	710.	MHz	20	31		dB	Average over ch53
	734. to	739.	MHz	5.0	11.0		dB	Average
	, , , ,	, 55.	IVII IZ	0.0			<u> </u>	rivolago
				<u> </u>	<u> </u>			
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^{*} Typical value at 25±2deg.C



Electrical Characteristic < High Freq. Filter >

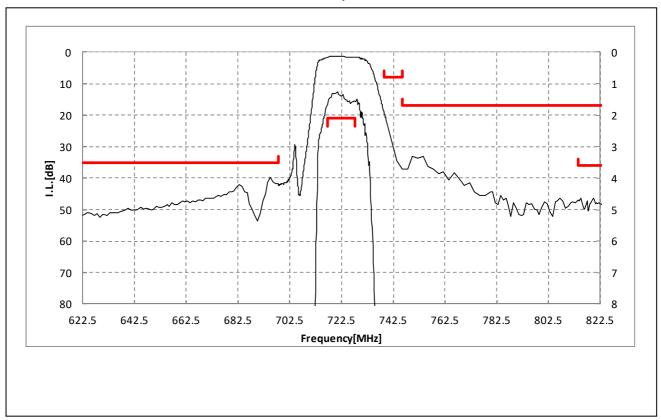
<u>Electrical Characteristic < High</u>						<u>></u>			
High Freq. Filter					Characteristics (-20 to +85 deg.C)				
					(-20		eg.C)	Unit	Note
				min.	typ.*	max.			
Center Frequency						876.5		MHz	
Insertion Loss	859.25	to	893.75	MHz		2.3	2.9	dB	B26
		to	891.5	MHz		1.4	2.4	dB _{INT}	Any 4.5MHz, B26
	869.25	to	893.75	MHz		2.3	2.9	dB	B5
	871.5	to	891.5	MHz		1.5	2.4	dB _{INT}	Any 4.5MHz, B5
Ripple Deviation	859.25	to	893.75	MHz		1.2	3.0	dB	B26
прристеменной	869.25	to	893.75	MHz		1.2	3.0	dB	B5
VSWR	859.25	to	893.75	MHz		2.0	2.3		
Absolute Attenuation	10.	to	824.	MHz	35	41		dB	
			45.	MHz	50	88		dB	Rx - Tx
	699.	to	716.	MHz	35	45		dB	B12 TX CA
	779.	to	804.	MHz	40	47		dB	2TX - RX
	814.	to	849.	MHz	40	46		dB	B26 TX
	816.5	to	846.5	MHz	45	51		dB _{INT}	Any 4.5MHz, B26 TX
	824.	to	849.	MHz	40	46		dB	B5 TX
	826.5	to	846.5	MHz	45	56		dB _{INT}	Any 4.5MHz, B5 TX
	849.	to	854.	MHz	2.0	24.0		dB	(RX + TX)/2
	909.	to	979.	MHz	27	34		dB	<u> </u>
	979.	to	6000.	MHz	25	31		dB	
	1693.	to	1788.	MHz	43	48		dB	RX + TX, 2f
	1710.	to	1785.	MHz	43	48		dB	B3 / B4 TX CA
	1850.	to	1910.	MHz	41	46		dB	B2 TX CA
	1920.	to	2400.	MHz	37	41		dB	B1 TX CA
	2400.	to	2500.	MHz	36	41		dB	ISM2.4
	2517.	to	2592.	MHz	34	40		dB	RX + 2TX
	2577.	to	2682.	MHz	34	40		dB	3f
	3436.	to	3576.	MHz	31	36		dB	4f
	4295.	to	4470.	MHz	28	34		dB	5f
	4900.	to	5950.	MHz	25	31		dB	ISM 5G
	5154.	to	5364.	MHz	25	32		dB	6f
	6013.	to	6258.	MHz	23	31		dB	7f
	6872.	to	7152.	MHz	23	31		dB	8f
	7731.	to	8046.	MHz	20	32		dB	9f
	8590.	to	8940.	MHz	15	27		dB	10f
	9449.	to	9834.	MHz	13	23		dB	11f
	10308.		10728.	MHz	10	21		dB	12f
	11167.	to	11622.	MHz	10	21		dB	13f
	12026.	to	12516.	MHz	10	20		dB	14f
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					l				* Typical value at 25±2dag C

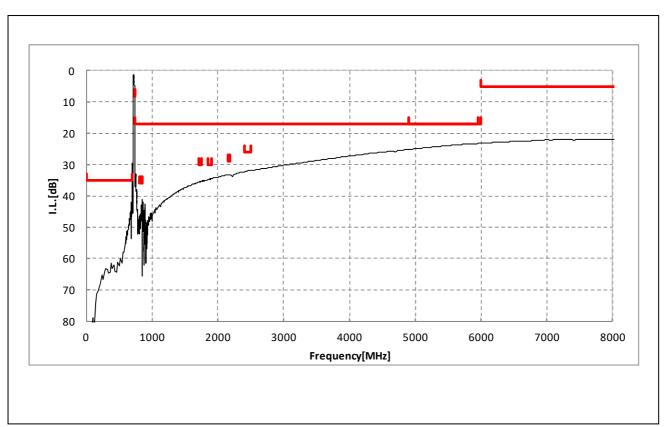
^{*} Typical value at 25±2deg.C



Electrical Characteristic

< Low Freq. Filter >

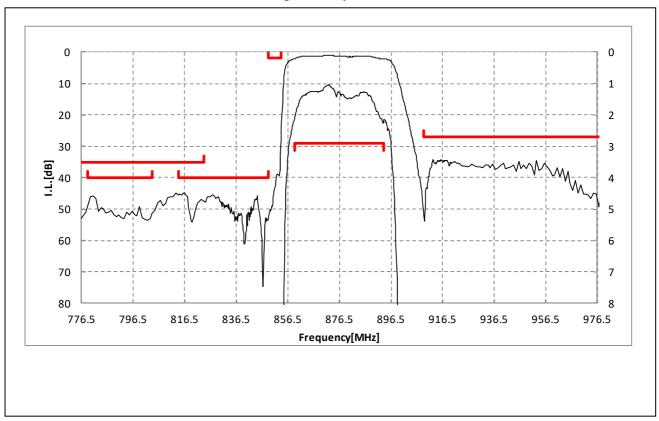


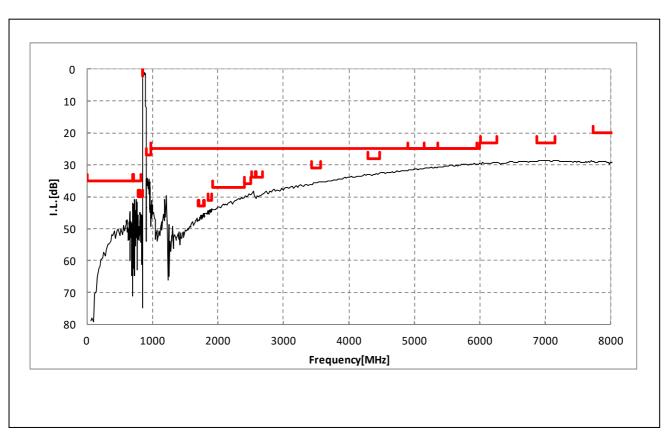




Electrical Characteristic

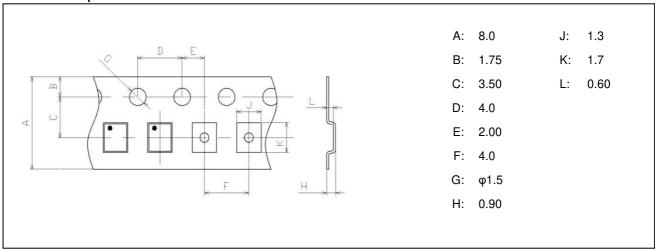
< High Freq. Filter >



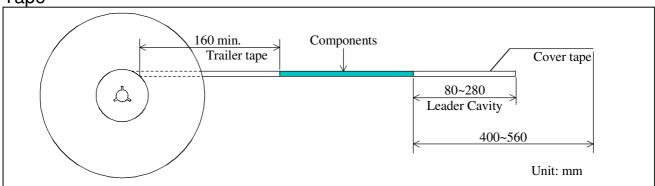


Dimensions of Tape & Reel unit: mm

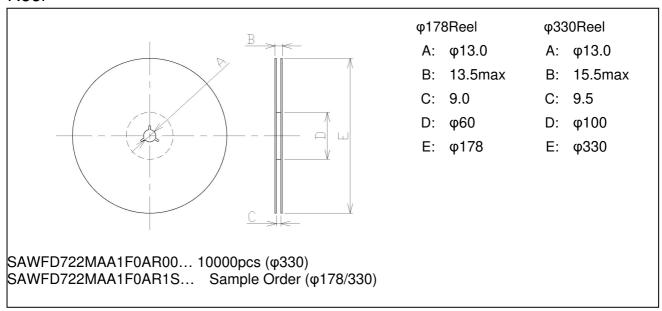
Carrier Tape



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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