

Datasheet of SAW Device

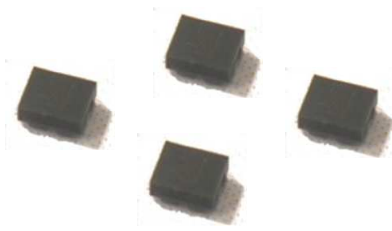
SAW Dual Filter

for Band8_Band20 / 1in2out Unbalanced / LH /1511

Murata PN: SAWFD806MAA0F0A

■ Feature

- For Band8+20 CA
- High TX Attenuation
- 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.

Revision
G

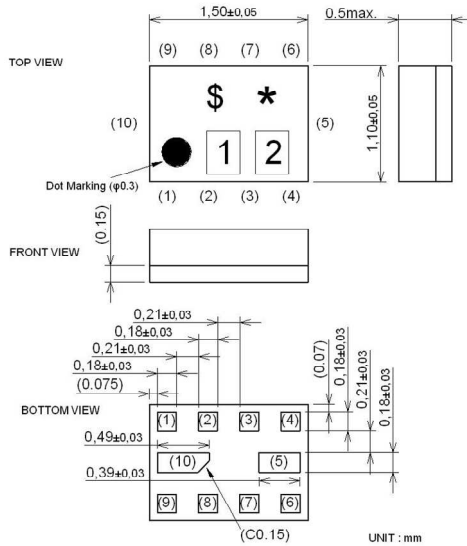
SAWFD806MAA0F0A (Band8_Band20 / 1in2out Unbalanced / LH / 1511)

- Operating temperature : -20 to +85 deg.C
- Storage temperature : -40 to +85 deg.C
- Input Power : +15 dBm 2000 h
- 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
- \$: Date code
- 1 : 2
- 2 : 2

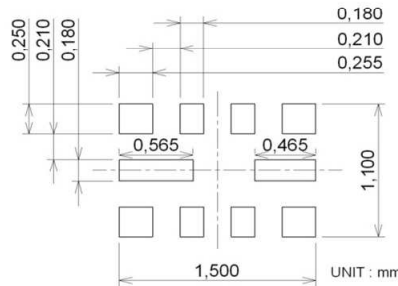
Terminal Number

- (1) : Unbalanced port-Lch/Hch
- (9) : Unbalanced port-Lch
- (6) : Unbalanced port-Hch

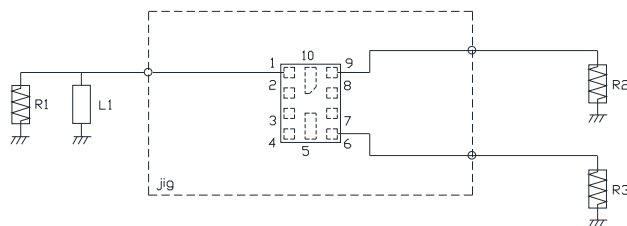
Others : GND

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

Land Pattern



Measurement Circuit (Top Thru View)



(Lch)

(Hch)

R1 : 50 ohm	L1 :10nH(Ideal inductor)
R2 : 50 ohm	
R3 : 50 ohm	
R4 : 50 ohm	L2 :10nH(Ideal inductor)
R5 : 50 ohm	
R6 : 50 ohm	

SAWFD806MAA0F0A (Band8_Band20 / 1in2out Unbalanced / LH / 1511)

Electrical Characteristic < Low Freq. Filter >

Low Freq. Filter	Characteristics (-20 to +85 deg.C)			Unit	Note	
	min.	typ.*	max.			
	Center Frequency		806			
Insertion Loss	791.25 to 820.75 MHz	2.6	3.5	dB		
	793.5 to 818.5 MHz	2.2	3.4	dB _{INT}	Any 4.5MHz	
Ripple Deviation	791. to 821. MHz	1.4	2.8	dB		
VSWR	791. to 821. MHz	1.8	2.1			
Absolute Attenuation	1. to 731. MHz	40	50	dB		
		41. MHz	50	93	dB	Tx - Rx
	760. to 770. MHz	40	45	dB		
	832.25 to 861.75 MHz	36	42	dB	+25 to +85deg.C, Tx	
	834.5 to 859.5 MHz	35	43	dB _{INT}	TX, Any 4.5MHz	
	834.5 to 859.5 MHz	36	43	dB _{INT}	+25 to +85deg.C, Any 4.5MHz	
	880. to 915. MHz	40	52	dB	B8 Tx	
	1710. to 1785. MHz	37	42	dB	B3 Tx	
	2373. to 2463. MHz	33	38	dB	3f	
	2400. to 2500. MHz	33	38	dB	ISM2.4	
	2500. to 2570. MHz	33	35	dB	B7 Tx	
	4900. to 5950. MHz	24	29	dB	ISM 5G	
	6328. to 6568. MHz	24	29	dB	8f	
	7119. to 7389. MHz	20	28	dB	9f	
	7910. to 8210. MHz	20	27	dB	10f	
	8701. to 9031. MHz	15	28	dB	11f	
	9492. to 9852. MHz	15	27	dB	12f	
	10283. to 10673. MHz	15	24	dB	13f	
11074. to 11494. MHz	15	21	dB	14f		
11865. to 12315. MHz	14	19	dB	15f		
12656. to 12750. MHz	14	19	dB	16f		

* Typical value at 25±2deg.C

SAWFD806MAA0F0A (Band8_Band20 / 1in2out Unbalanced / LH / 1511)

Electrical Characteristic < High Freq. Filter >

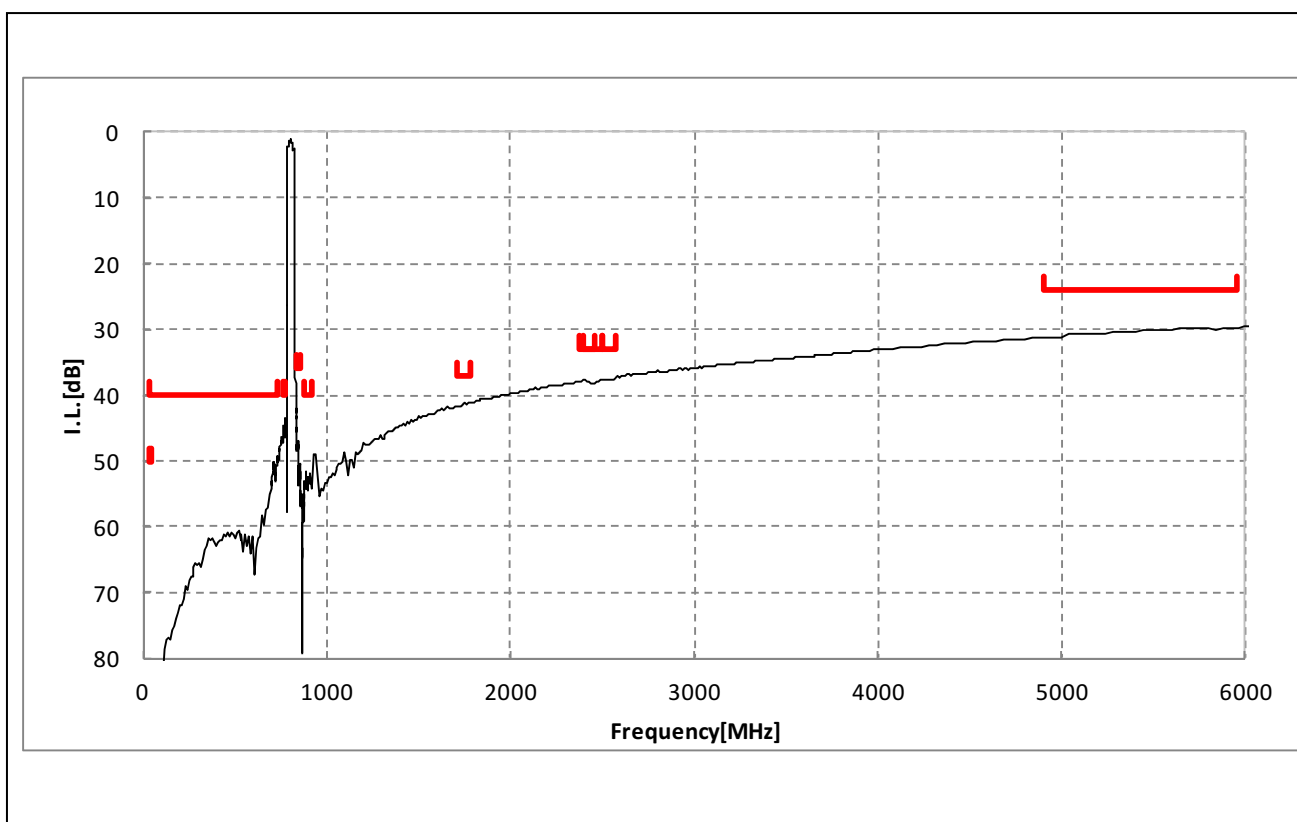
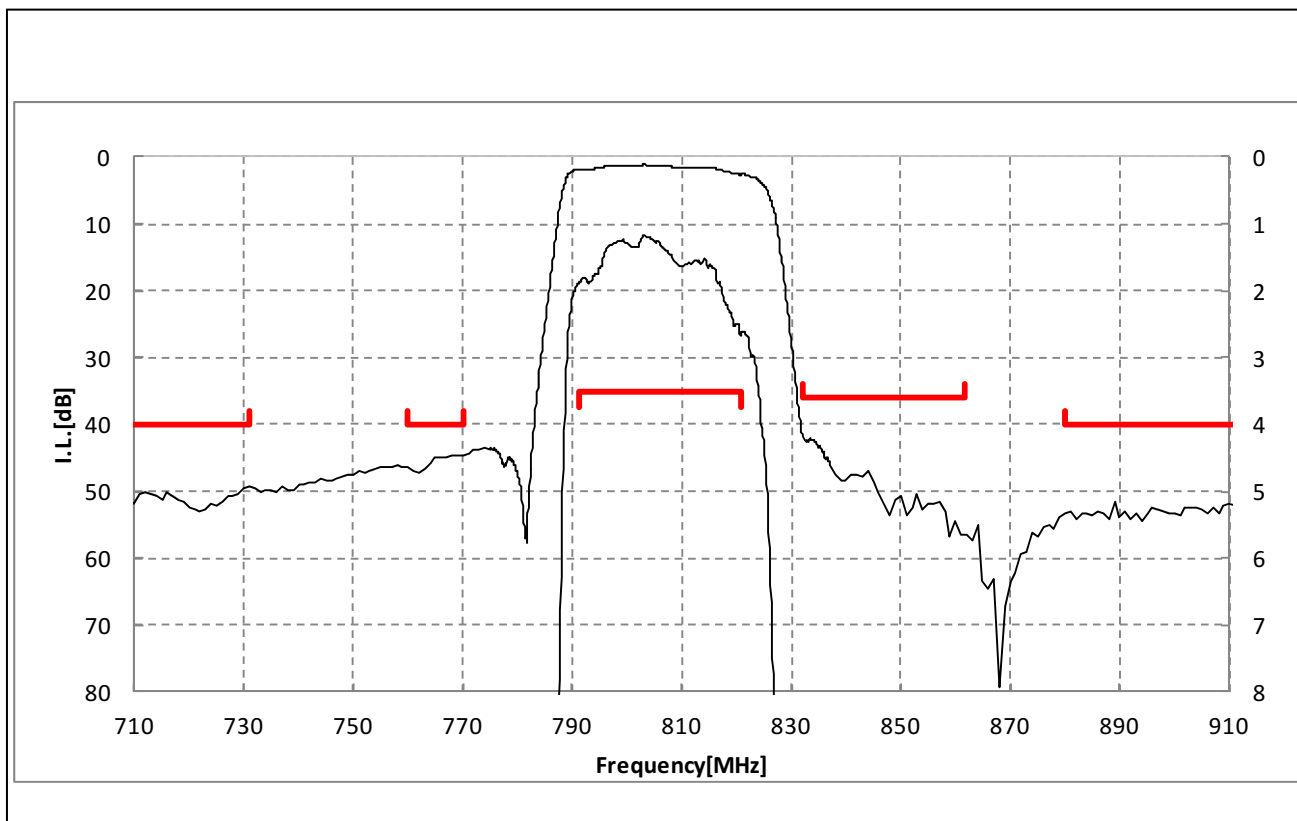
High Freq. Filter		Characteristics (-20 to +85 deg.C)			Unit	Note
		min.	typ.*	max.		
		Center Frequency		942.5		
Insertion Loss	925. to 960. MHz		2.1	3.0	dB	Any 4.5MHz
	927.5 to 957.5 MHz		1.8	2.8	dB _{INT}	
Ripple Deviation	925. to 960. MHz		0.8	1.9	dB	
VSWR	925. to 960. MHz		1.6	2.0		
Absolute Attenuation	10. to 880. MHz	33	41		dB	
		45. MHz	50	87	dB	Rx - Tx
	834.5 to 859.5 MHz	37	42		dB	B20 TX
	835. to 870. MHz	37	42		dB	2Tx - Rx
	880. to 915. MHz	37	45		dB	Tx
	882.5 to 912.5 MHz	38	50		dB _{INT}	Tx, Any 4.5MHz
	902.5 to 910. MHz	40	50		dB	(Rx + Tx) / 2
	1710. to 1785. MHz	40	55		dB	B3 Tx
	1805. to 1920. MHz	40	54		dB	Rx + Tx, 2f
	1920. to 1980. MHz	40	54		dB	B1 Tx
	2400. to 2500. MHz	40	48		dB	ISM2.4
	2685. to 2790. MHz	40	45		dB	Rx + 2Tx
	2775. to 2880. MHz	40	46		dB	2f
	3700. to 3840. MHz	35	42		dB	4f
	4625. to 4800. MHz	35	39		dB	5f
	4900. to 5950. MHz	30	35		dB	ISM 5G
	5550. to 5725. MHz	30	36		dB	6f
	6475. to 6720. MHz	20	34		dB	7f
	7400. to 7680. MHz	15	36		dB	8f
	8325. to 8640. MHz	15	40		dB	9f
	9250. to 9600. MHz	15	48		dB	10f
10175. to 10560. MHz	15	36		dB	11f	
11100. to 11520. MHz	15	27		dB	12f	
12025. to 12480. MHz	15	27		dB	13f	

* Typical value at 25±2deg.C

SAWFD806MAA0F0A (Band8_Band20 / 1in2out Unbalanced / LH / 1511)

Electrical Characteristic

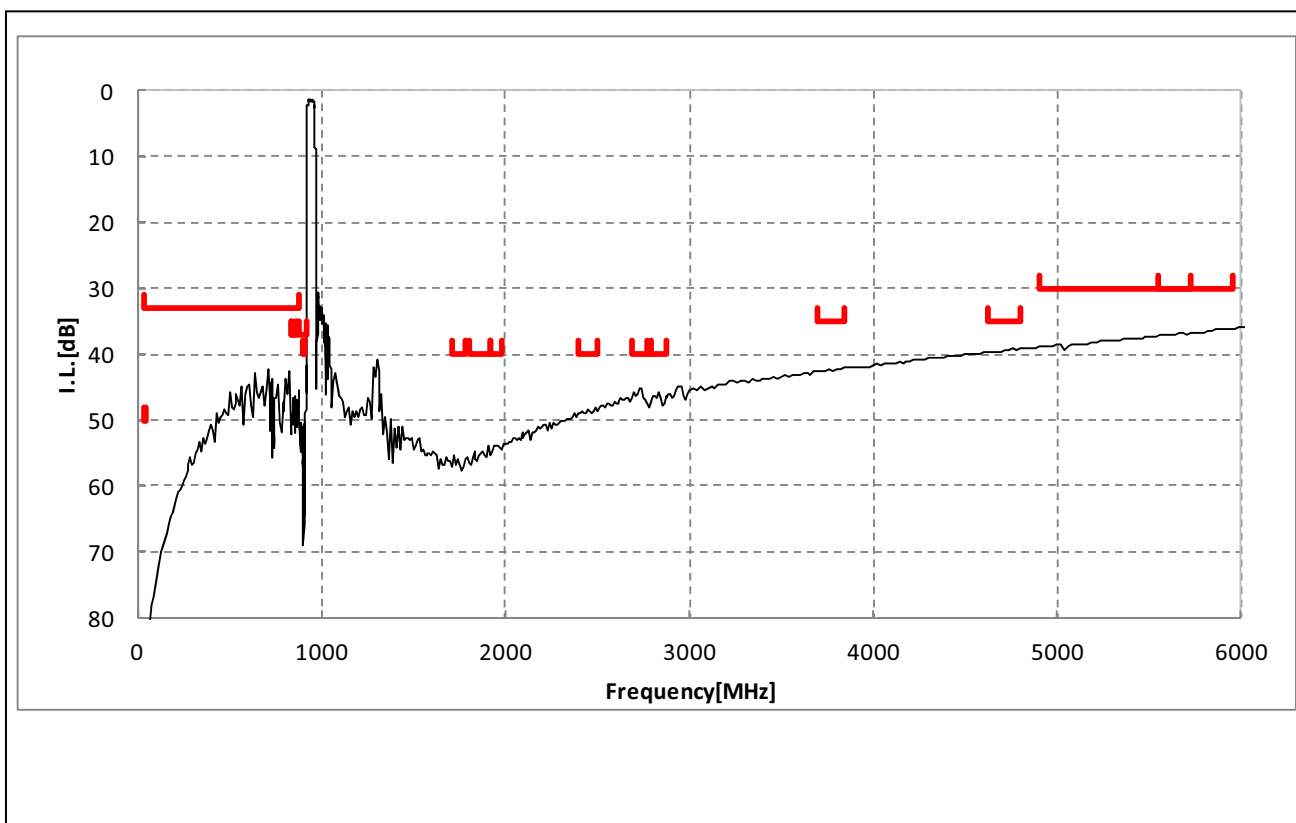
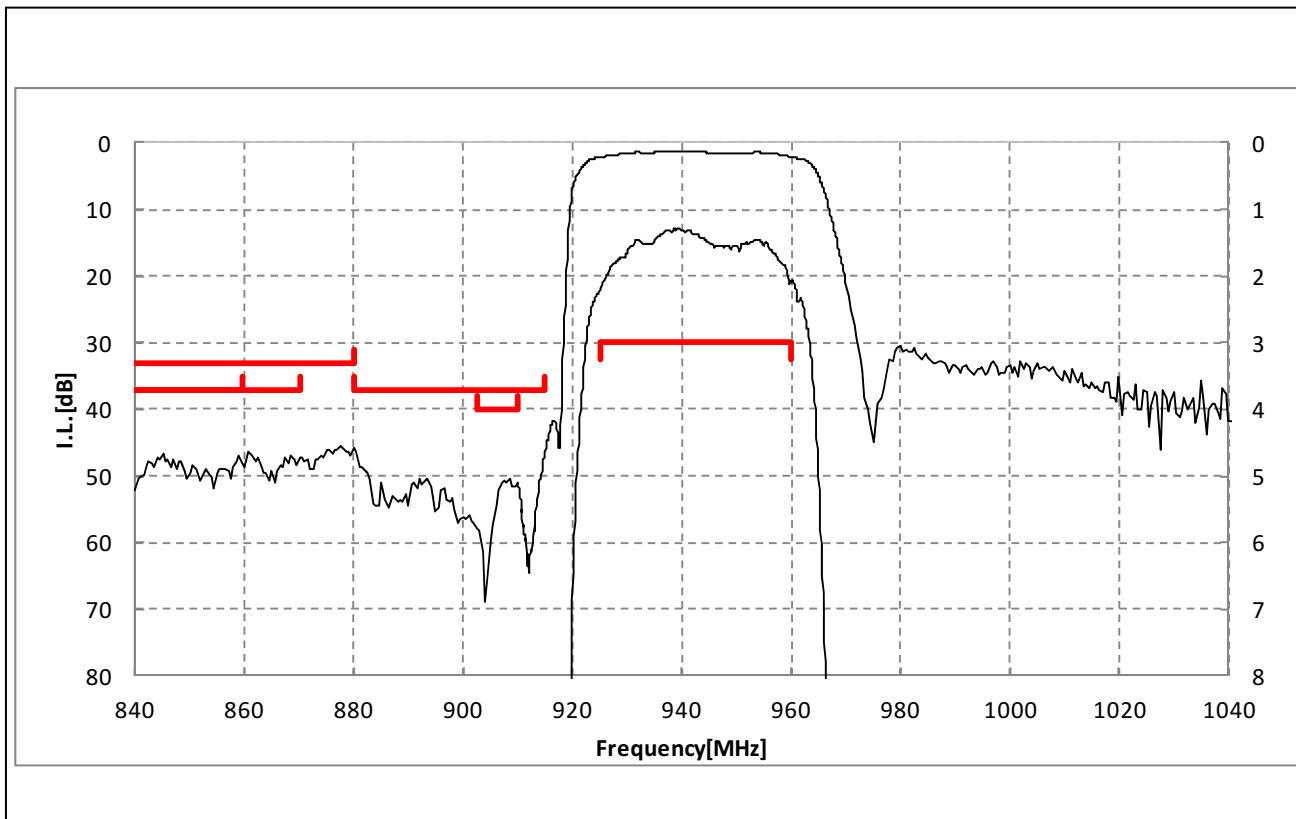
< Low Freq. Filter >



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Electrical Characteristic

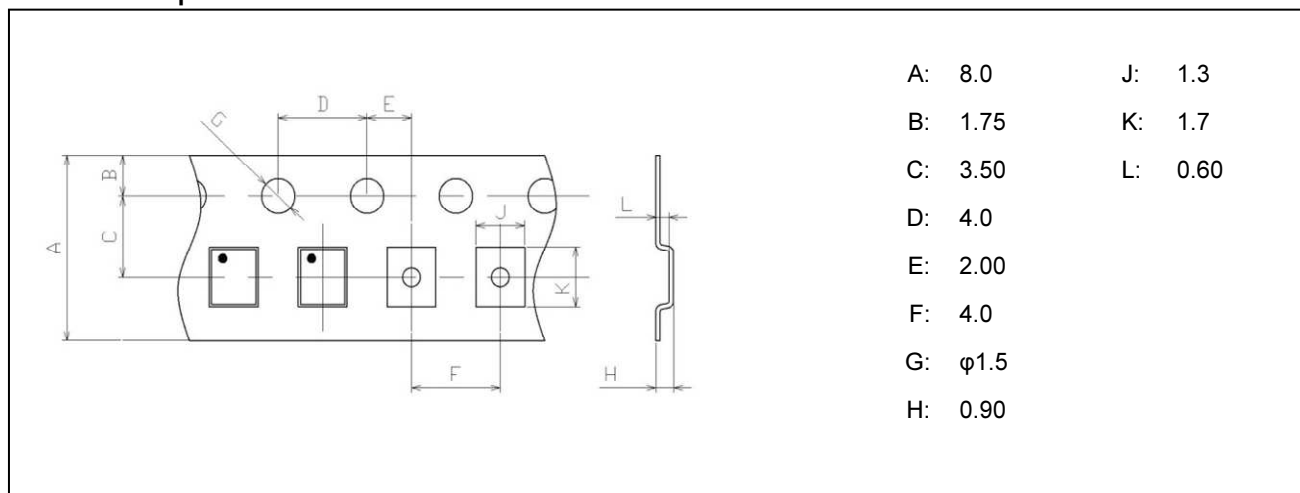
< High Freq. Filter >



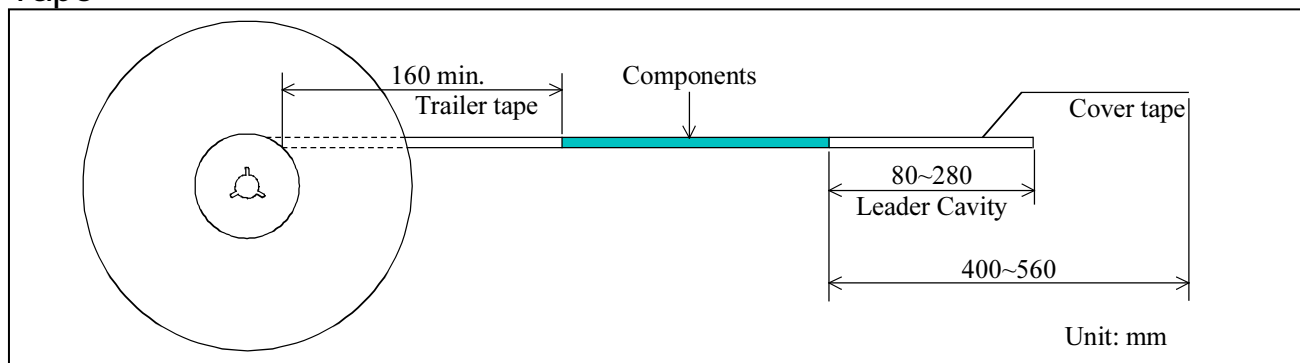
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Dimensions of Tape & Reel unit: mm

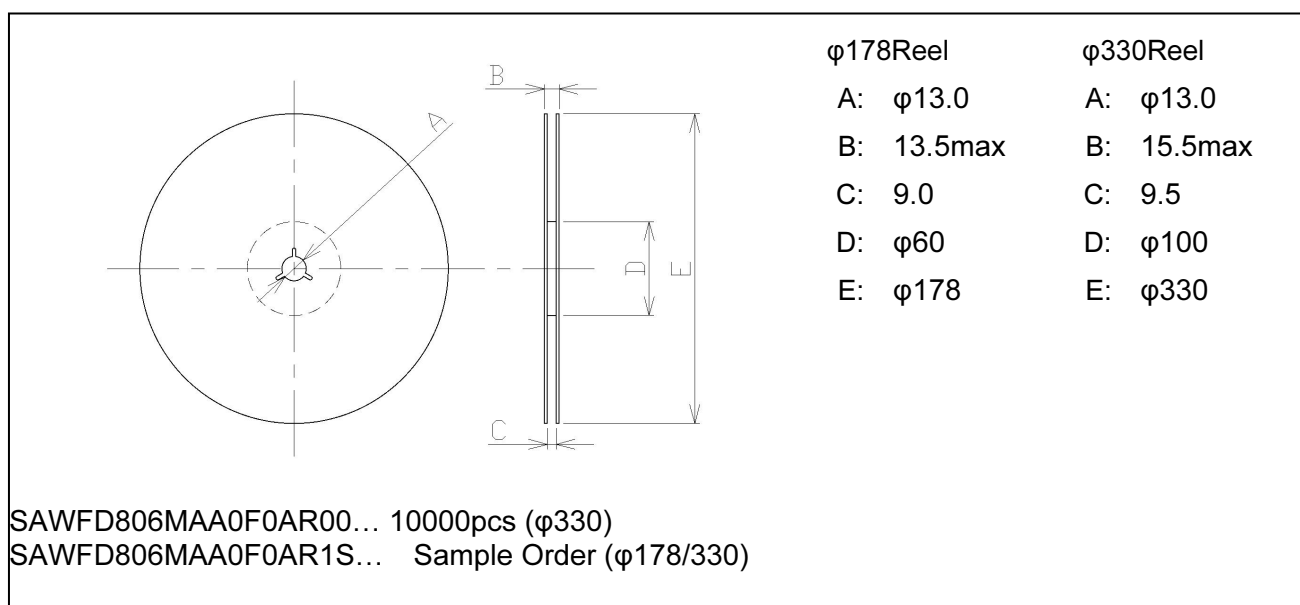
Carrier Tape



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 surge 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.

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