

# Datasheet of SAW Device

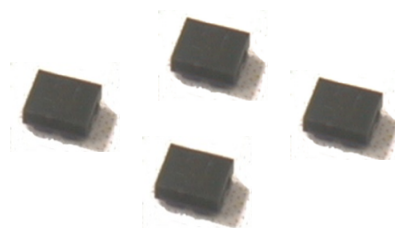
## SAW Single Filter

for Band28B / Unbalanced / 5pin /1109

Murata PN: SAFFB788MAA0F0A

### ■ Feature

- Small Package
- Low Insertion Loss
- High Tx Rejection



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

**SAFFB788MAA0F0A ( Band28B / Unbalanced / 5pin / 1109 )**

| Revision Number        | Date        | Description                   |
|------------------------|-------------|-------------------------------|
| SAFFB788MAA0F0A_rev. A | Oct-07-2013 | ■ Initial Release             |
| SAFFB788MAA0F0A_rev. B | Feb-14-2014 | ■ Updated for MP              |
| SAFFB788MAA0F0A_rev. C | Jul-29-2016 | ■ Updated General Information |
| SAFFB788MAA0F0A_rev. D | Aug-31-2017 | ■ Updated General Information |
|                        |             |                               |
|                        |             |                               |
|                        |             |                               |
|                        |             |                               |

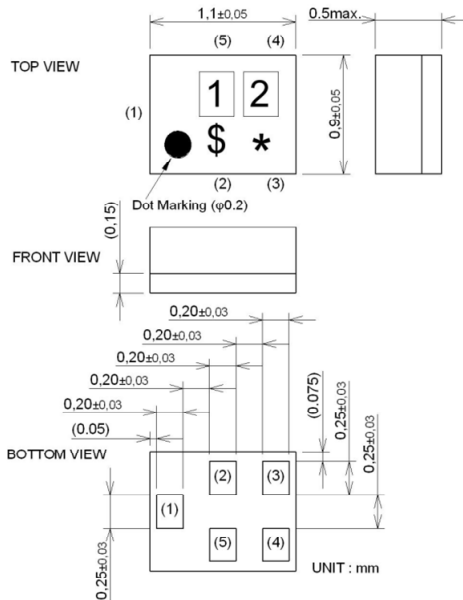
- Operating temperature : -20 to +85 deg.C
- Storage temperature : -40 to +85 deg.C
- Input Power : +15 dBm 2000 h
- D.C. Volatage between the terminals : 3V (25+/-2 deg.C)
- Minimum Resistance between the terminals : 10M ohm
- RoHS compliance : Yes
- ESD (ElectroStatic Discharge) sensitive device

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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 : 1

2 : Z

Terminal Number

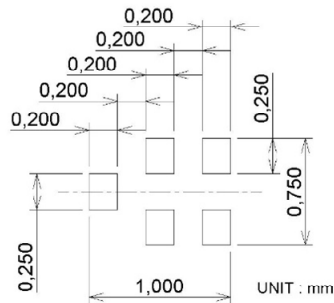
(1) : Unbalanced port

(4) : Unbalanced port

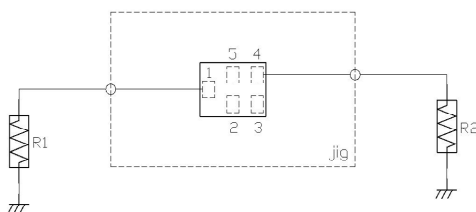
Others : GND

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

Land Pattern



Measurement Circuit (Top Thru View)



|             |  |
|-------------|--|
| R1 : 50 ohm |  |
| R2 : 50 ohm |  |
|             |  |
|             |  |
|             |  |
|             |  |
|             |  |

SAFFB788MAA0F0A ( Band28B / Unbalanced / 5pin / 1109 )

Electrical Characteristic < Single Filter >

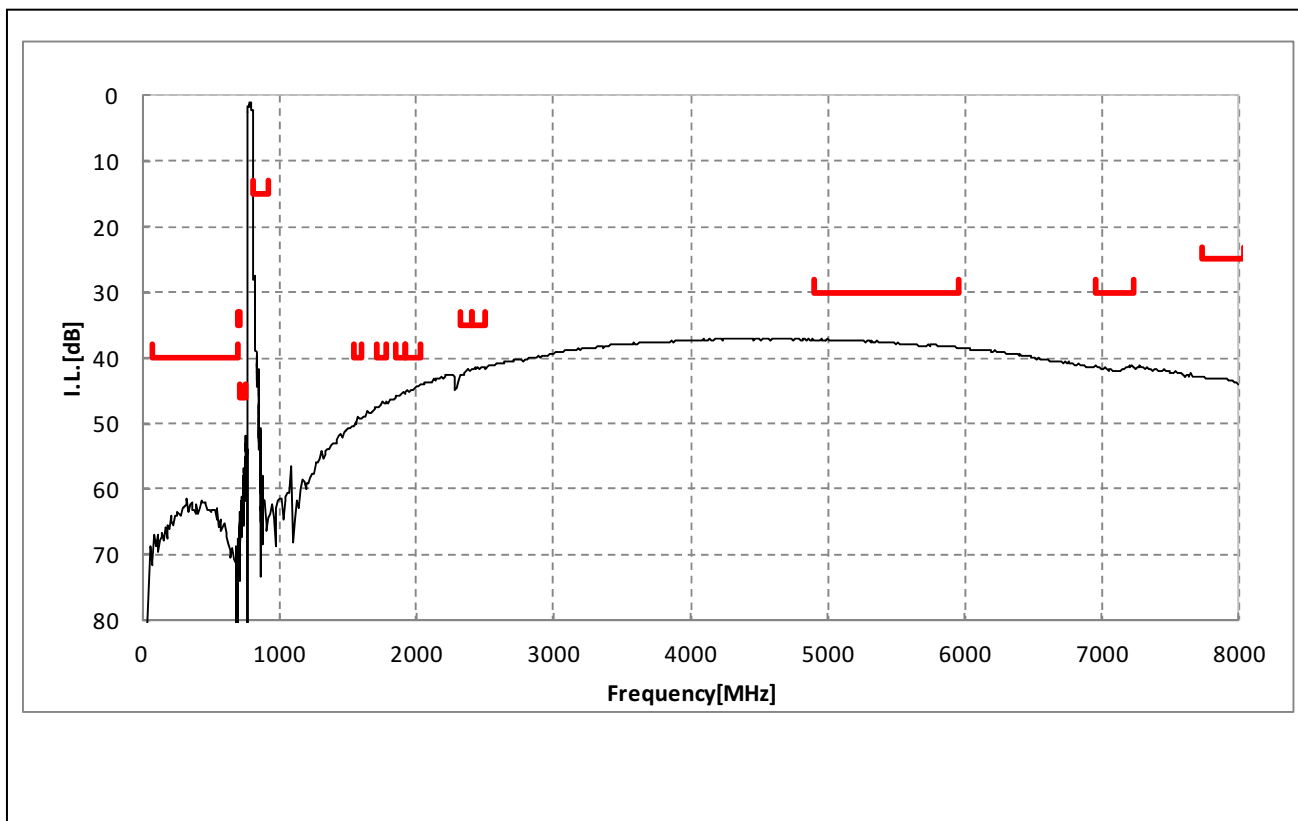
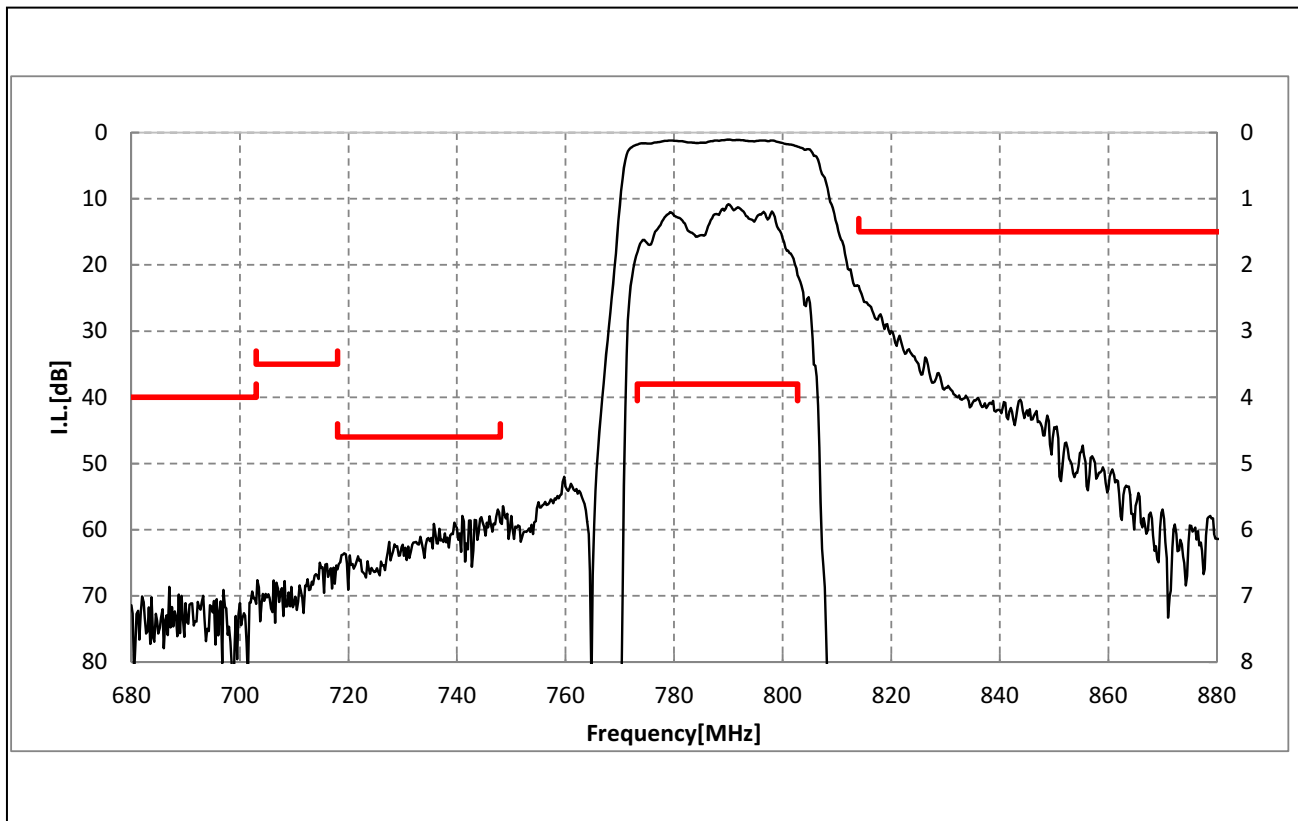
| Item                 | Characteristics      |       |      | Unit              | Note                          |
|----------------------|----------------------|-------|------|-------------------|-------------------------------|
|                      | (-20 to +85 deg.C)   |       |      |                   |                               |
|                      | min.                 | typ.* | max. |                   |                               |
| Center Frequency     |                      | 788   |      | MHz               |                               |
| Insertion Loss       | 773.25 to 802.75 MHz | 2.1   | 3.8  | dB                |                               |
|                      | 773.25 to 802.75 MHz | 2.1   | 2.6  |                   |                               |
|                      | 775.5 to 800.5 MHz   | 1.7   | 2.4  | dB <sub>INT</sub> | +23 to +27deg.C<br>Any 4.5MHz |
|                      | 775.5 to 800.5 MHz   | 1.7   | 2.0  |                   |                               |
| Ripple Deviation     | 773.25 to 802.75 MHz | 1.1   | 3.0  | dB                | +23 to +27deg.C               |
|                      | 773.25 to 802.75 MHz | 1.1   | 1.5  |                   |                               |
| VSWR                 | 773.25 to 802.75 MHz | 1.9   | 2.3  |                   |                               |
|                      | 773.25 to 802.75 MHz | 1.9   | 2.2  |                   |                               |
| Absolute Attenuation | 10. to 703. MHz      | 40    | 61   | dB                |                               |
|                      | 703. to 718. MHz     | 35    | 63   |                   |                               |
|                      | 718. to 748. MHz     | 46    | 57   | dB                | B28-A TX<br>B28-B TX          |
|                      | 814. to 915. MHz     | 15    | 23   |                   |                               |
|                      | 814. to 915. MHz     | 20    | 23   | dB                | +23 to +27deg.C B5/8 TX       |
|                      | 1546. to 1606. MHz   | 40    | 49   |                   |                               |
|                      | 1705. to 1785. MHz   | 40    | 46   | dB                | B3 TX<br>B25 TX               |
|                      | 1850. to 1915. MHz   | 40    | 45   |                   |                               |
|                      | 1920. to 2025. MHz   | 40    | 44   | dB                | B1/34 tX<br>3f                |
|                      | 2319. to 2409. MHz   | 35    | 42   |                   |                               |
|                      | 2400. to 2500. MHz   | 35    | 41   | dB                | ISM2.4<br>ISM 5G              |
|                      | 4900. to 5950. MHz   | 30    | 37   |                   |                               |
|                      | 6957. to 7227. MHz   | 30    | 42   | dB                | 9f<br>10f                     |
|                      | 7730. to 8030. MHz   | 25    | 43   |                   |                               |
|                      | 8503. to 8833. MHz   | 20    | 39   | dB                | 11f<br>12f                    |
|                      | 9276. to 9636. MHz   | 20    | 32   |                   |                               |
|                      | 10049. to 10439. MHz | 15    | 26   | dB                | 13f<br>14f                    |
|                      | 10822. to 11242. MHz | 15    | 22   |                   |                               |
|                      | 11595. to 12045. MHz | 13    | 19   | dB                | 15f<br>16f                    |
|                      | 12368. to 12750. MHz | 10    | 15   |                   |                               |
|                      |                      |       |      |                   |                               |
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|                      |                      |       |      |                   |                               |
|                      |                      |       |      |                   |                               |

\* Typical value at 25±2deg.C

SAFFB788MAA0F0A ( Band28B / Unbalanced / 5pin / 1109 )

Electrical Characteristic

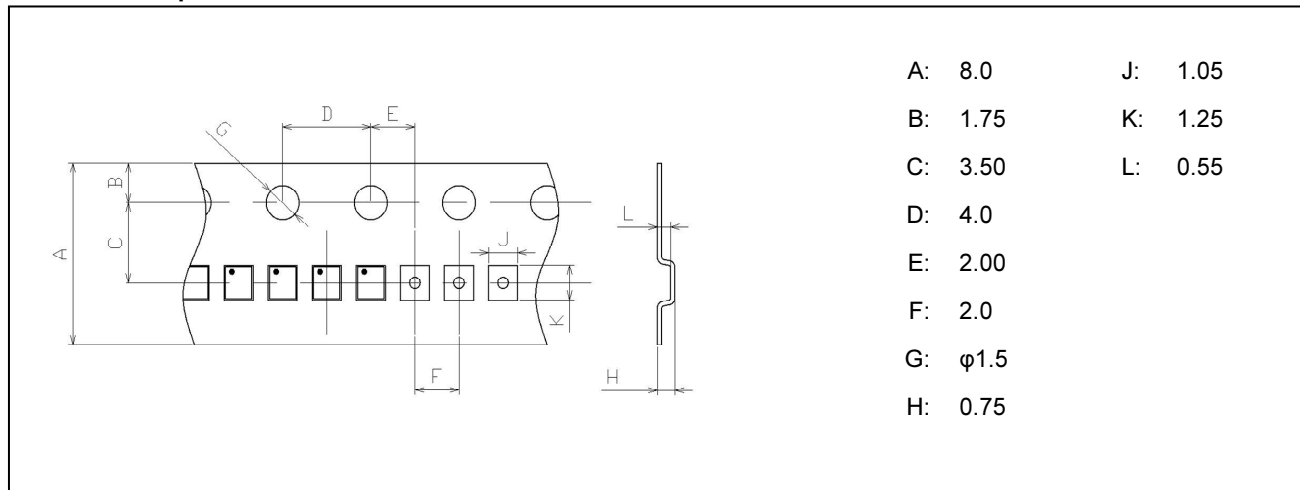
< Single Filter >



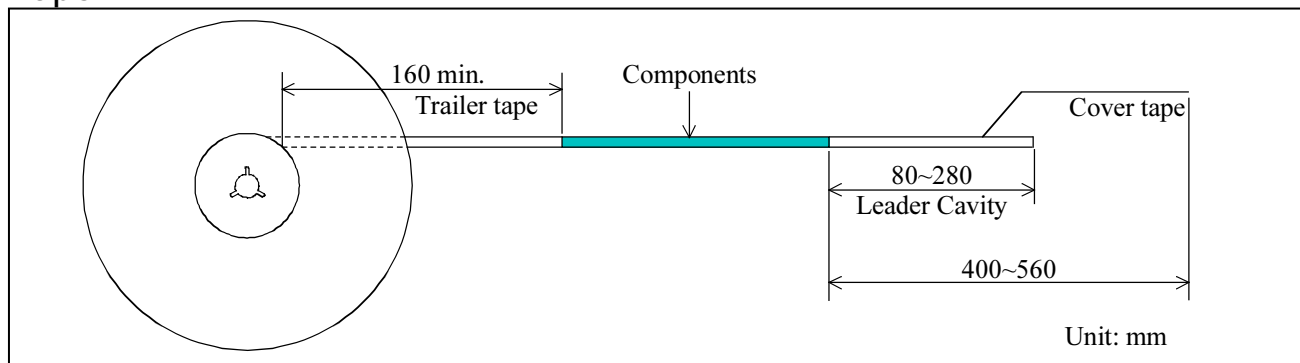
**SAFFB788MAA0F0A ( Band28B / Unbalanced / 5pin / 1109 )**

**Dimensions of Tape & Reel** unit: mm

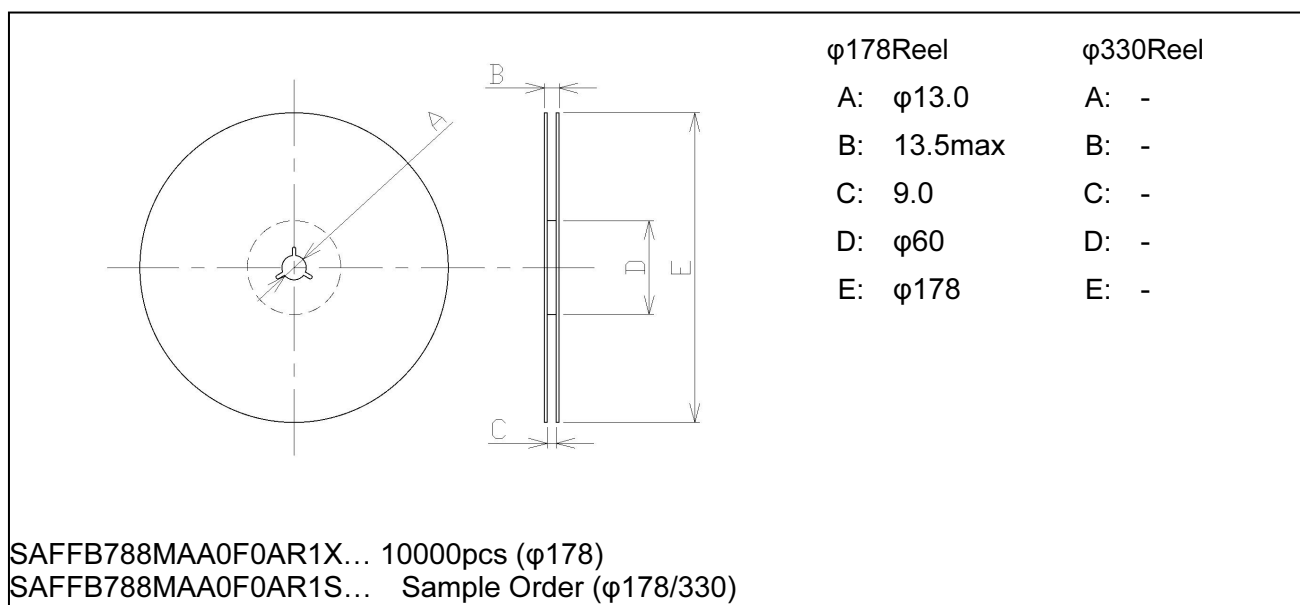
**Carrier Tape**



**Tape**



**Reel**



## Marking Code

Table A: Month Code

|                      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2013<br>2017<br>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<br>2018<br>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<br>2019<br>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<br>2020<br>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    |

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- Burning / explosion control equipment
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