

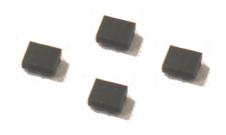
Datasheet of SAW Device

SAW Single Filter for Band12 / Unbalanced / 5pin /1109

Murata PN: SAFFB737MAA0F0A

Feature

- > For Diversity
- > Small Size



Note: Murata SAW Component is applicable for Cellular /Cordless phone (Terminal) relevant market only.

Please also read caution at the end of this document.



| Revision Number | Date | Description | | | | | |
|------------------------|-------------|-------------------------------------|--|--|--|--|--|
| SAFFB737MAA0F0A_rev. A | Jan-11-2013 | ■ Initial Release | | | | | |
| SAFFB737MAA0F0A_rev. B | Oct-11-2013 | ■ Updated Electrical Characteristic | | | | | |
| SAFFB737MAA0F0A_rev. C | Nov-22-2013 | ■ Updated for MP | | | | | |
| SAFFB737MAA0F0A_rev. D | Aug-19-2016 | ■ Updated General Information | | | | | |
| SAFFB737MAA0F0A_rev. E | Jul-28-2017 | ■ Updated General Information | | | | | |
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Operating temperature : -30 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)

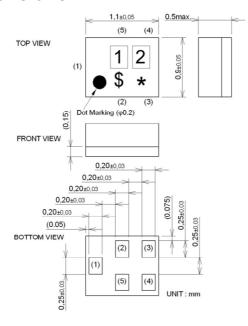
Minimum Resistance between the terminals : 10M ohm
 RoHS compliance : Yes
 ESD (ElectroStatic Discharge) sensitive device



Package Dimensions & Recommended Land Pattern

unit: mm

Dimensions



Marking: Laser Printing

*: Month code(Refer to the table A)

\$: Date code(Refer to the table B)

1 : X

2 : U

Terminal Number

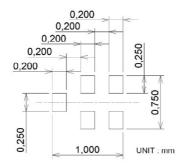
(1): Unbalanced port

(4): Unbalanced port

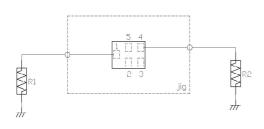
Others: GND

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

Land Pattern



Measurement Circuit (Top Thru View)



| R1 : 50 ohm | |
|-------------|--|
| R2 : 50 ohm | |
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Electrical Characteristic < Single Filter >

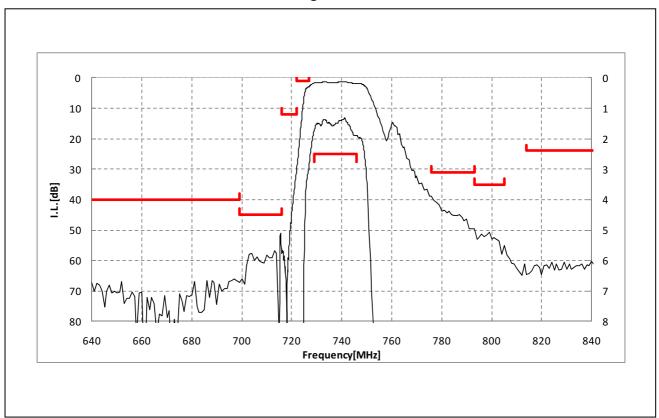
| Electrical Characteristic > Single Filter > | | | | | | | | | | | |
|---|-------------|-----------|-----|-----------------|--|------|-----|---|--|--|--|
| | | | | Characteristics | | | | | | | |
| | ltem | Item | | | (-30 to +85 deg.C) | | | Note | | | |
| | | | | | typ.* | max. | | | | | |
| Center Frequency | | | | min. | 737.5 | | MHz | | | | |
| Insertion Loss | 729. | to 746. | MHz | | 1.9 | 2.5 | dB | | | | |
| | 729. | to 746. | MHz | | 1.9 | 2.4 | dB | -20 to +85deg.C | | | |
| | 729. | to 746. | MHz | | 1.9 | 2.2 | dB | +23 to +27deg.C | | | |
| Ripple Deviation | 729. | to 746. | MHz | | 0.6 | 1.5 | dB | 1 | | | |
| VSWR | 729. | to 746. | MHz | | 1.8 | 2.0 | | | | | |
| Absolute Attenuation | 1. | to 699. | MHz | 40 | 60 | | dB | | | | |
| | | 30. | MHz | 50 | 72 | | dB | Rx -Tx | | | |
| | 699. | to 716. | MHz | 45 | 52 | | dB | Tx | | | |
| | 716. | to 722. | MHz | 12 | 31 | | dB | U700 Tx Jammer | | | |
| | 722. | to 727. | MHz | 1.0 | 2.1 | | dB | Cell Tx Jammer, IM2 | | | |
| | 776. | to 793. | MHz | 31 | 38 | | dB | Upper 700 MHz Tx Jammer | | | |
| | 793. | to 805. | MHz | 35 | 49 | | dB | | | | |
| | 814. | to 6000. | MHz | 24 | 30 | | dB | | | | |
| | 1710. | to 1755. | MHz | 43 | 49 | | dB | B4 Tx CA | | | |
| | 1850. | to 1910. | MHz | 41 | 47 | | dB | B2 Tx CA | | | |
| | 2187. | to 2238. | MHz | 40 | 44 | | dB | 3f | | | |
| | 2400. | to 2500. | MHz | 39 | 44 | | dB | ISM2.4 | | | |
| | 4900. | to 5950. | MHz | 25 | 31 | | dB | ISM 5G | | | |
| | 6561. | to 6714. | MHz | 18 | 24 | | dB | 9f | | | |
| | 7290. | to 7460. | MHz | 12 | 17 | | dB | 10f | | | |
| | 8019. | to 8206. | MHz | 5.0 | 11.0 | | dB | 11f | | | |
| | 8748. | to 8952. | MHz | 5.0 | 9.0 | | dB | 12f | | | |
| | 9477. | to 9698. | MHz | 6.0 | 11.0 | | dB | 13f | | | |
| | 10206. | to 10444. | MHz | 8.0 | 12.0 | | dB | 14f | | | |
| | 10935. | to 11190. | MHz | 9.0 | 13.0 | | dB | 15f | | | |
| | 11664. | to 11936. | MHz | 10 | 14 | | dB | 16f | | | |
| | 12393. | to 12682. | MHz | 10 | 14 | | dB | 17f | | | |
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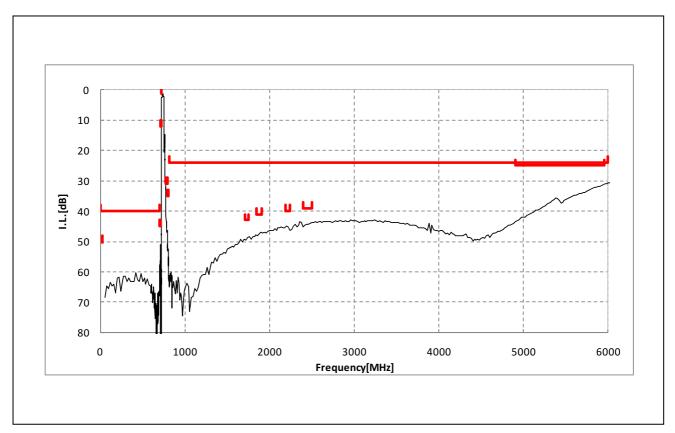
^{*} Typical value at 25±2deg.C



Electrical Characteristic

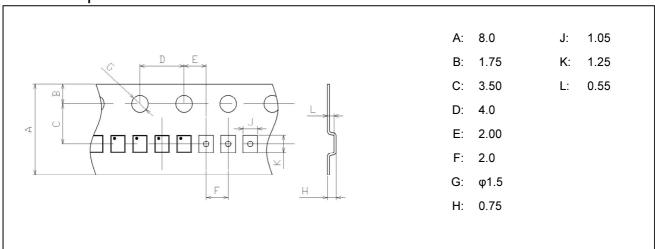
< Single Filter >



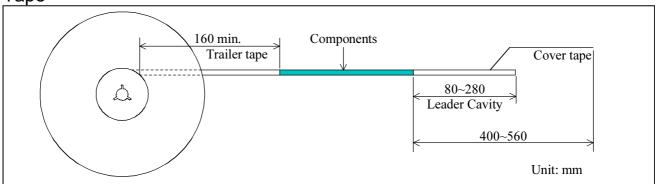


Dimensions of Tape & Reel unit: mm

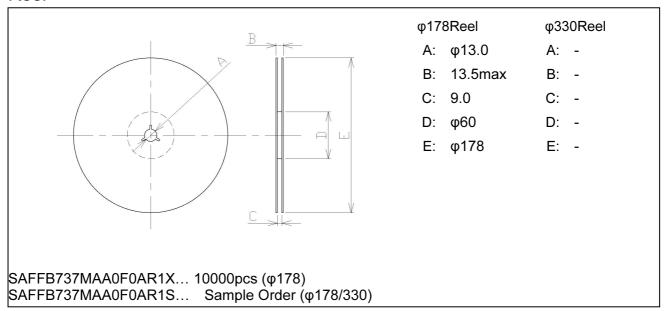
Carrier Tape



Tape



Reel





Marking Code

Table A: Month Code

| 2013 | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2017 2021 | Α | В | O | D | Е | F | G | Н | ٦ | К | ١ | М |
| 2014 | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| 2018 2022 | N | Р | Q | R | S | Т | U | V | W | Х | Υ | Z |
| 2015 | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| 2019 2023 | а | ь | 10 | đ | е | f | gg | h | j | k | Q | m |
| 2016 | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| 2020 2024 | n | P | G | r | 4 | t | э | Ú | 3 | æ | y | 3 |

Table B: Date Code

| date code | 21st W | 22nd X | 23rd | 24th | 25th a | 26th b | 27th | 28th | 29th e | 30th | 31st g |
|--------------|-----------|-----------|------|------|-----------|-----------|------|------|-----------|------|------------------|
| code | L | М | N | Р | Q | R | S | Т | U | V | |
| date | 11th | 12th | 13th | 14th | 15th | 16th | 17th | 18th | 19th | 20th | |
| code | Α | В | С | D | Е | F | G | Н | J | K | |
| date | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | |

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- Undersea equipment.
- Power plant control equipment Medical equipment.
- Transportation equipment (vehicles, trains, ships, elevator, etc.).
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- 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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