

# **Datasheet of SAW Device**

# SAW Single Filter

for Band29 (FLO) / Unbalanced / 5pin /1109

# Murata PN: SAFFB722MAA0F0A

Feature

- Low Insertion Loss
- Small Size 1.1 x 0.9 mm



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                 |  |  |  |  |  |
|------------------------|-------------|-----------------------------|--|--|--|--|--|
| SAFFB722MAA0F0A_rev. A | Dec-12-2012 | ∎ Initial Release           |  |  |  |  |  |
| SAFFB722MAA0F0A_rev. B | Feb-13-2013 | ■ Updated for ES2.0         |  |  |  |  |  |
| SAFFB722MAA0F0A_rev. C | May-24-2013 | ■ Updated Final Version     |  |  |  |  |  |
| SAFFB722MAA0F0A_rev. D | Oct-25-2013 | Updated the Spec of VSWR    |  |  |  |  |  |
| SAFFB722MAA0F0A_rev. E | Sep-09-2016 | Updated General Information |  |  |  |  |  |
| SAFFB722MAA0F0A_rev. F | Jun-13-2017 | Updated General Information |  |  |  |  |  |
|                        |             |                             |  |  |  |  |  |
|                        |             |                             |  |  |  |  |  |

| <ul> <li>Operating temperature</li> </ul> | : -30 | to | +85 deg.C |
|---|-------|----|-----------|
|---|-------|----|-----------|

- Storage temperature : -40 to +85 deg.C

- Input Power

- : +15 dBm 2000 h : 3V (25+/-2 deg.C)
- D.C. Volatage between the terminals
- Minimum Resistance between the terminals : 10M ohm : Yes

- RoHS compliance

- ESD (ElectroStatic Discharge) sensitive device







# Electrical Characteristic < Single Filter >

|                      | ltem                 |               |            | (-301    | (-30 to +85 deg.C ) |            |          | Note                      |  |
|----------------------|----------------------|---------------|------------|----------|---------------------|------------|----------|---------------------------|--|
|                      |                      |               |            | min.     | typ.*               | max.       |          |                           |  |
| Center Frequency     |                      |               |            |          | 722.5               |            | MHz      |                           |  |
| nsertion Loss        | 717. to              |               | MHz        |          | 1.7                 | 2.5        | dB       |                           |  |
|                      | 717. to<br>717.3 to  | 728.<br>727.8 | MHz<br>MHz |          | 1.7<br>1.7          | 2.0<br>2.5 | dB<br>dB | +23 to +27deg.C           |  |
|                      | 717.3 to             | 727.8         | MHz        |          | 1.7                 | 2.5        | dB<br>dB | +23 to +27deg.C           |  |
| Ripple Deviation     | 717. to              |               | MHz        |          | 0.3                 | 1.0        | dB       | Any 5MHz                  |  |
|                      | 717. to              |               | MHz        |          | 0.3                 | 0.5        | dB       | +23 to +27deg.C, Any 5MHz |  |
|                      | 717.3 to             |               |            |          | 0.3                 | 1.0        | dB       | Any 5MHz                  |  |
|                      | 717.3 to             | 727.8         | MHz        |          | 0.3                 | 0.5        | dB       | +23 to +27deg.C, Any 5MHz |  |
| VSWR                 | 717. to              | 728.          | MHz        |          | 1.5                 | 2.0        |          |                           |  |
|                      | 717.3 to             | 727.8         | MHz        |          | 1.5                 | 2.0        |          |                           |  |
| Absolute Attenuation | 10. to               | 698.          | MHz        | 40       | 50                  |            | dB       |                           |  |
|                      | 739. to              |               | MHz        | 10       | 20                  |            | dB       |                           |  |
|                      | 746. to              |               | MHz        | 26       | 31                  |            | dB       |                           |  |
|                      | 1710. to             |               | MHz        | 35       | 41                  |            | dB       | B4 TX for CA              |  |
|                      | 1850. to             |               | MHz        | 33       | 39                  |            | dB       | B2 TX for CA              |  |
|                      | 2151.8 to            |               | MHz        | 28       | 36                  |            | dB       | 3f                        |  |
|                      | 2400. to<br>4900. to |               | MHz        | 30<br>26 | 36<br>31            |            | dB<br>dB | ISM2.4                    |  |
|                      |                      |               | MHz<br>MHz | 12       | 20                  |            | dB<br>dB | ISM 5G                    |  |
|                      |                      |               | MHz        | 30       | 41                  |            | dB       | Average over ch52         |  |
|                      | 698. to<br>704. to   |               | MHz        | 4.0      | 10.0                |            | dB       | Average over ch53         |  |
|                      | 734. to              |               | MHz        | 2.0      | 5.0                 |            | dB       | Average                   |  |
|                      |                      | 700.          |            | 2.0      | 0.0                 |            | 40       |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            | 1        |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
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|                      |                      |               |            |          |                     |            |          | 1                         |  |
|                      |                      |               |            | <u> </u> |                     |            |          |                           |  |
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|                      |                      |               |            | İ        |                     |            |          |                           |  |
|                      |                      |               |            |          |                     |            |          |                           |  |
|                      |                      |               |            | 1        |                     |            |          |                           |  |

\* 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

| ~ |              |      |      |      |      |      |      |      |      |      |      |      |      |
|---|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Γ | 2013         | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|   | 2017<br>2021 | Α    | В    | C    | D    | E    | F    | G    | н    | J    | ĸ    | L    | м    |
| Γ | 2014         | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|   | 2018<br>2022 | Ν    | Ρ    | Q    | R    | S    | Т    | U    | V    | ¥    | х    | Y    | Z    |
| Γ | 2015         | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|   | 2019<br>2023 | а    | b    | ic   | d    | е    | f    | g    | h    | j    | k    | l    | m    |
| Γ | 2016         | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|   | 2020<br>2024 | n    | p    | Ŷ    | r    | 4    | t    | a    | U    | ω    | ĸ    | y    | 8    |

#### Table B: Date Code

| date | 1st  | 2nd  | 3rd  | 4th  | 5th  | 6th  | 7th  | 8th  | 9th  | 10th |      |
|------|------|------|------|------|------|------|------|------|------|------|------|
| code | А    | В    | С    | D    | E    | F    | G    | Η    | J    | K    |      |
| date | 11th | 12th | 13th | 14th | 15th | 16th | 17th | 18th | 19th | 20th |      |
| code | L    | М    | Ν    | Р    | Q    | R    | S    | Т    | U    | V    |      |
| date | 21st | 22nd | 23rd | 24th | 25th | 26th | 27th | 28th | 29th | 30th | 31st |
| code | W    | Х    | Y    | Z    | а    | b    | ō    | d    | е    | f    | g    |

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