

Library for NI AWR Design Environment™ (Microwave Office®)

User Manual





0. Contents

1. About this manual
2. Operation environment
3. How to install
4. How to use
5. Contact

1. About this manual

- This manual is for users of the design kit (the "library") that provides the parameters of Murata Manufacturing Co., Ltd. ("Murata"). It describes the operations from library installation to using the library in the schematic window.
 - Although operating the Library in accordance with this manual can basically perform the required operations, some operations may differ partially depending on the environment used.

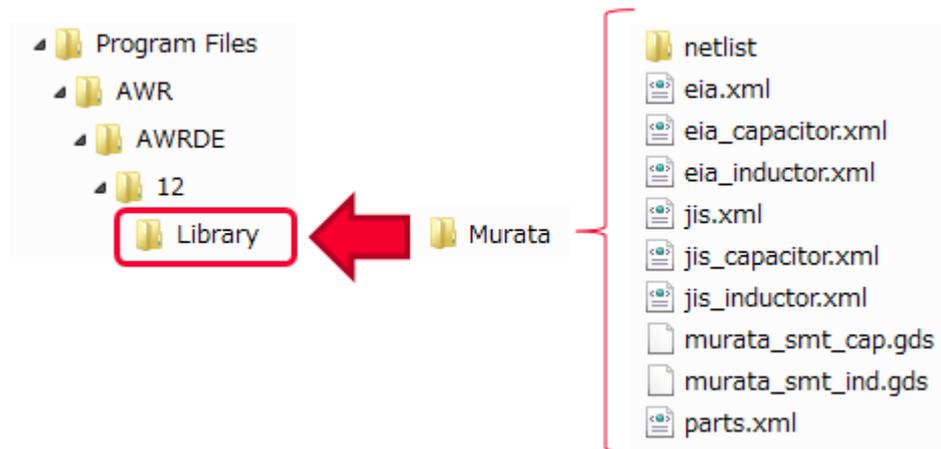
2. Operation environment



- This manual is described based on the following environment. See the manuals for the PC, etc. used in the actual environment.
 - OS: Windows 10, 8, 7 SP1
 - It is necessary to have the administrative right to install the library.
 - MWO version: 12.0 or later (only for 64 bit version)

3. How to install (1)

- Unzip the downloaded file (murata_library_mwo_***.zip) to any folder (ex. C:\temp). After unzipping, "Murata" folder will be made in C:\temp.
- Move the unzipped files into MWO install folder (C:\Program Files\AWR\AWRDE\12\Library) as following. (If the previous version is already installed, move the new "Murata" folder after deleting the previous "Murata" folder.)



3. How to install (2)

- Open lib.xml in "Microwave Office folder"/Library using a text editor such as NotePad and confirm the following line shown in the second line from the bottom.

```
<FILE Name="Murata">Murata¥parts.xml</FILE>
```

- If there is no this line, add it and save. (Restart MWO if it is already running).
- If there is this line, you don't need change the lib.xml file.

```
<?xml version="1.0"?>
<XML_COMPONENT_DATA xmlns="urn:awr-lib-data">
  <COPYRIGHT>AWR</COPYRIGHT>
  <SUMMARY>Entry point XML file for circuit libraries</SUMMARY>
  <FILE Name="* AWR web site">http://www.awrcomp.com/weblibs/9\_0/top\_v9.xml</FILE>
  <FILE Name="Murata">Murata¥parts.xml</FILE>
</XML_COMPONENT_DATA>
```

4. How to use

- Open Murata category in Element browser .There are 2 types for part number , one is for EIA and the other is for JIS. (the red frame in the figure below), and use one of them. (They are all the same in the Inductors.)
- Select the device to be simulated from the lower frame of the element browser and drag it to the schematic.

The screenshot displays the Microwave Office interface. On the left, the 'Elements' browser shows a tree structure under 'Murata' with 'EIA' and 'JIS' categories highlighted by red boxes. A red arrow labeled 'Drug&Drop' points from the 'JIS' category to the schematic area. The schematic area shows a component labeled 'SMT:SMTgrm21' with a red arrow pointing to it. Below the schematic, a plot window titled 'Spara' shows a graph of 'DB(|S(2,1)|) (L) test1 AP' (blue line) and 'DB(|S(1,1)|) (R) test1 AP' (magenta line) versus 'Frequency (GHz)'. The plot shows a resonance dip at approximately 1.5 GHz.

5. Contact



- For inquiries concerning this library, please go to the following inquiry form on our website.
 - <https://www.murata.com/contactform>

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