TAIYO YUDEN Component Library for Keysight PathWave ADS

- Installation manual -

Contents

System requirement

This library is available under the following environment.

OS	**:**	**All operating systems that PathWave ADS supports**
PathWave ADS	**:**	**Above 2011**

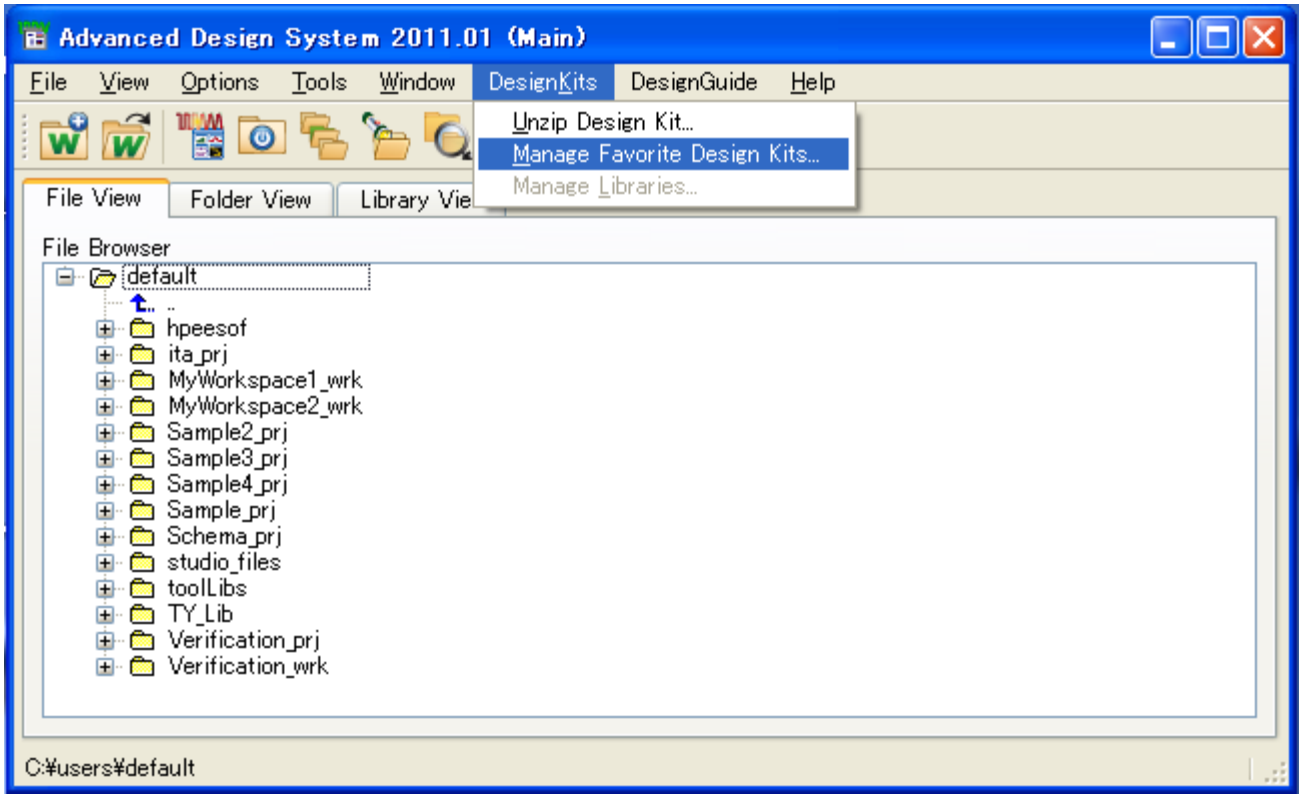
How to install Component Library

Step 1. **Unzip “AG_TY**.zip”.**

Step 2. **Place “TY_Lib” folder in a location where you want to install the Library.**

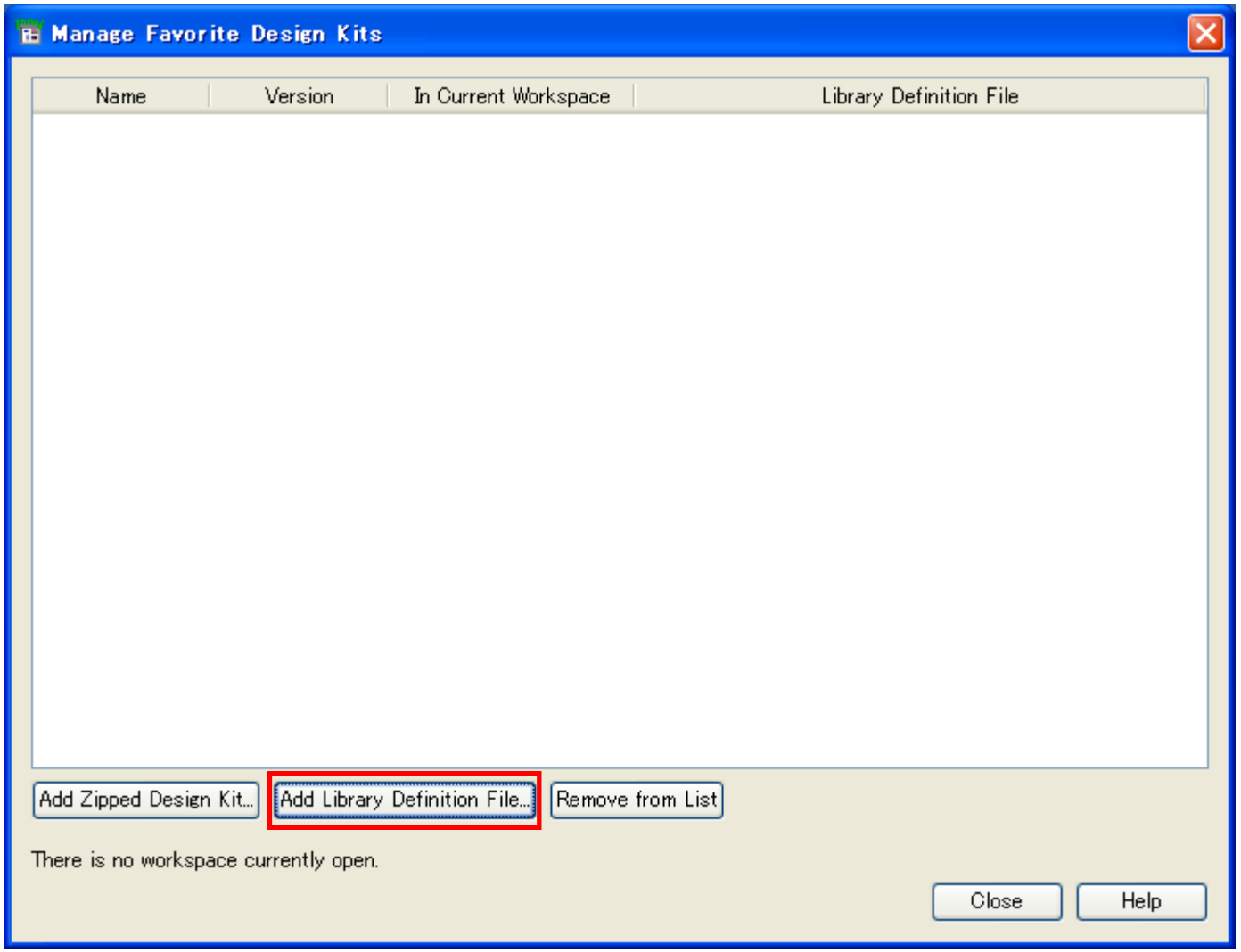
Step 3. **Launch PathWave ADS.**

Step 4. **Select [DesignKits] > [Manage Favorite Design Kits…] from the menu bar of the main window.**



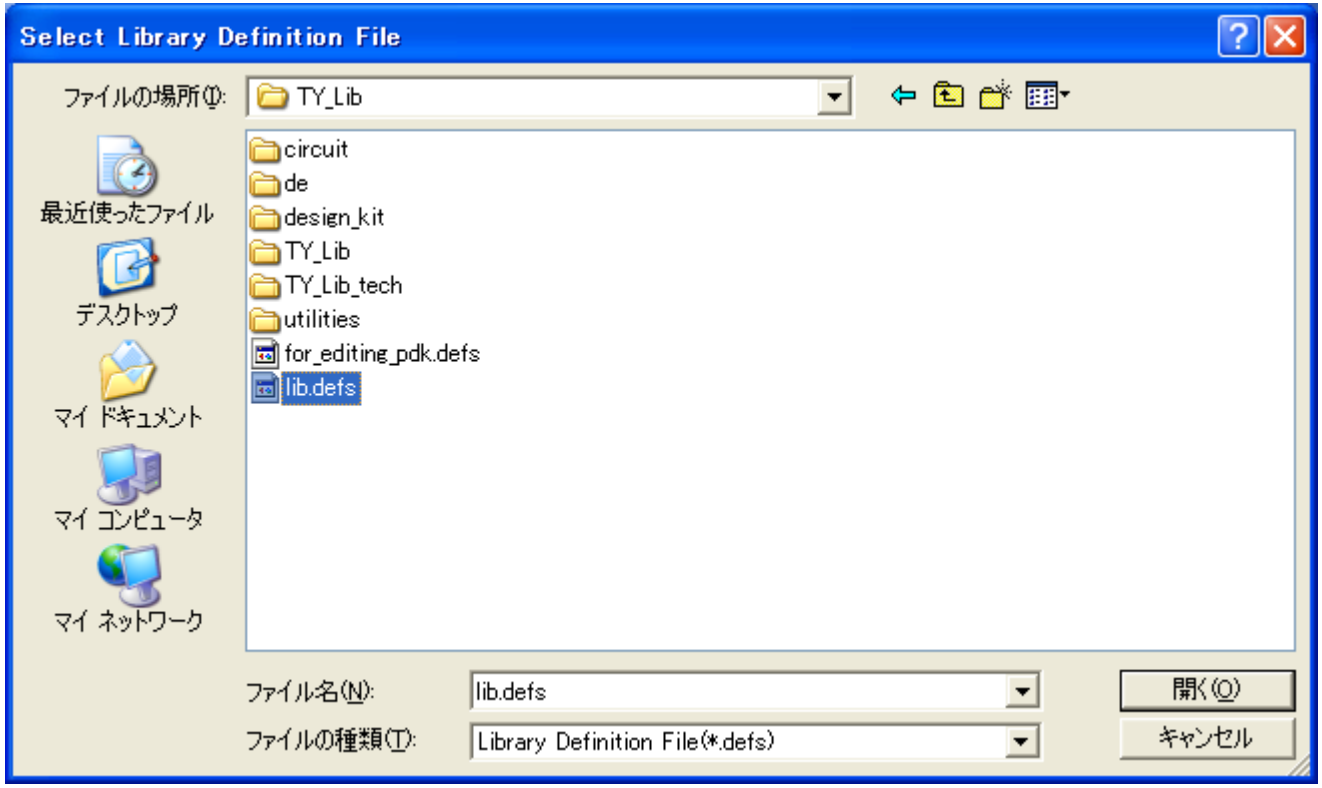
How to install Component Library

Step 5. Click on [Add Library Definition File...] button.



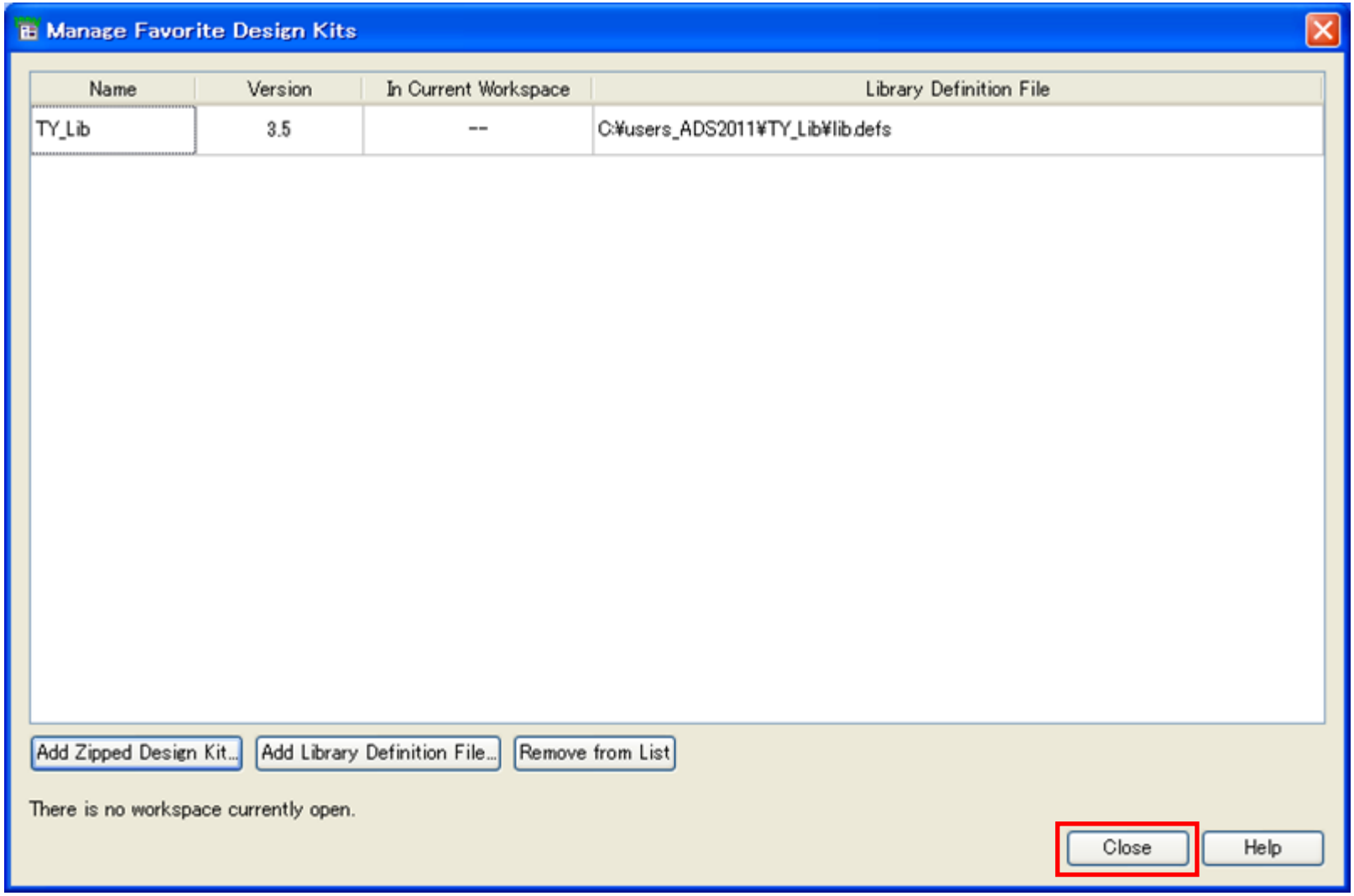
How to install Component Library

Step 6. **Select “lib.defs” file in “TY_Lib” that you placed in Step 2.**



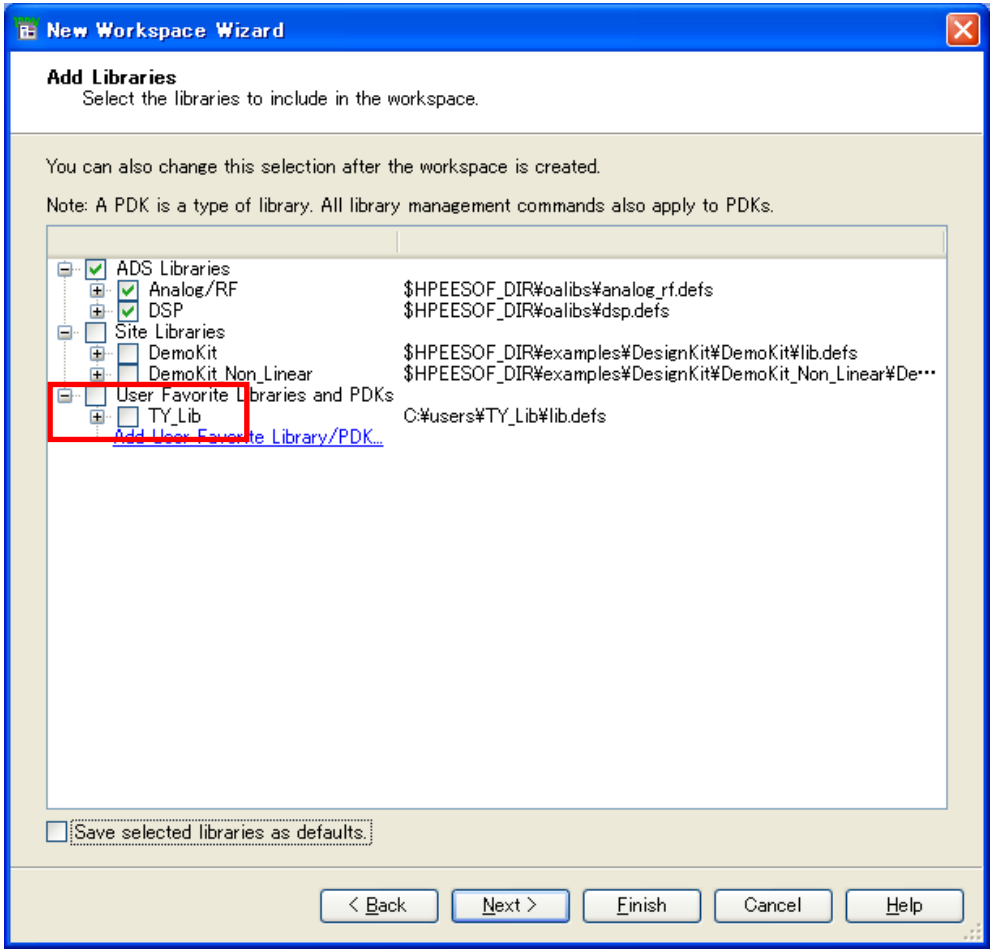
How to install Component Library

Step 7. Make sure that “TY_Lib” is added to the list and click on [Close] button.



How to install Component Library

Step 8. **When you make a new workspace, a dialog box appears during Wizard so that you select whether you use “TY_Lib” Library or not.**
You can use “TY_Lib” Library after checking the check box of “TY_Lib”.

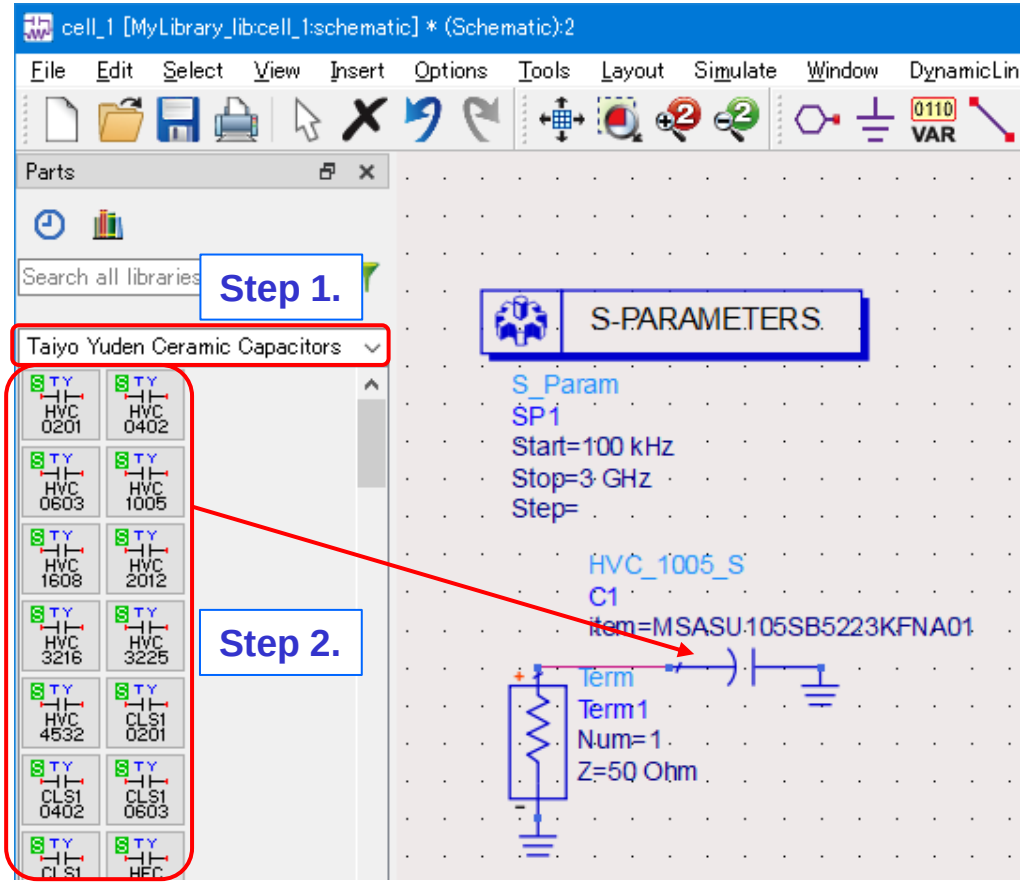


How to use Component Library

*** Please refer to “About component category” in this manual from P12-21 about component category written on the palette picture.**

Step 1. **Select “Taiyo_Yuden_**” from the component palette list.**

Step 2. **Select the component from the palette and drop it onto your schematic.**

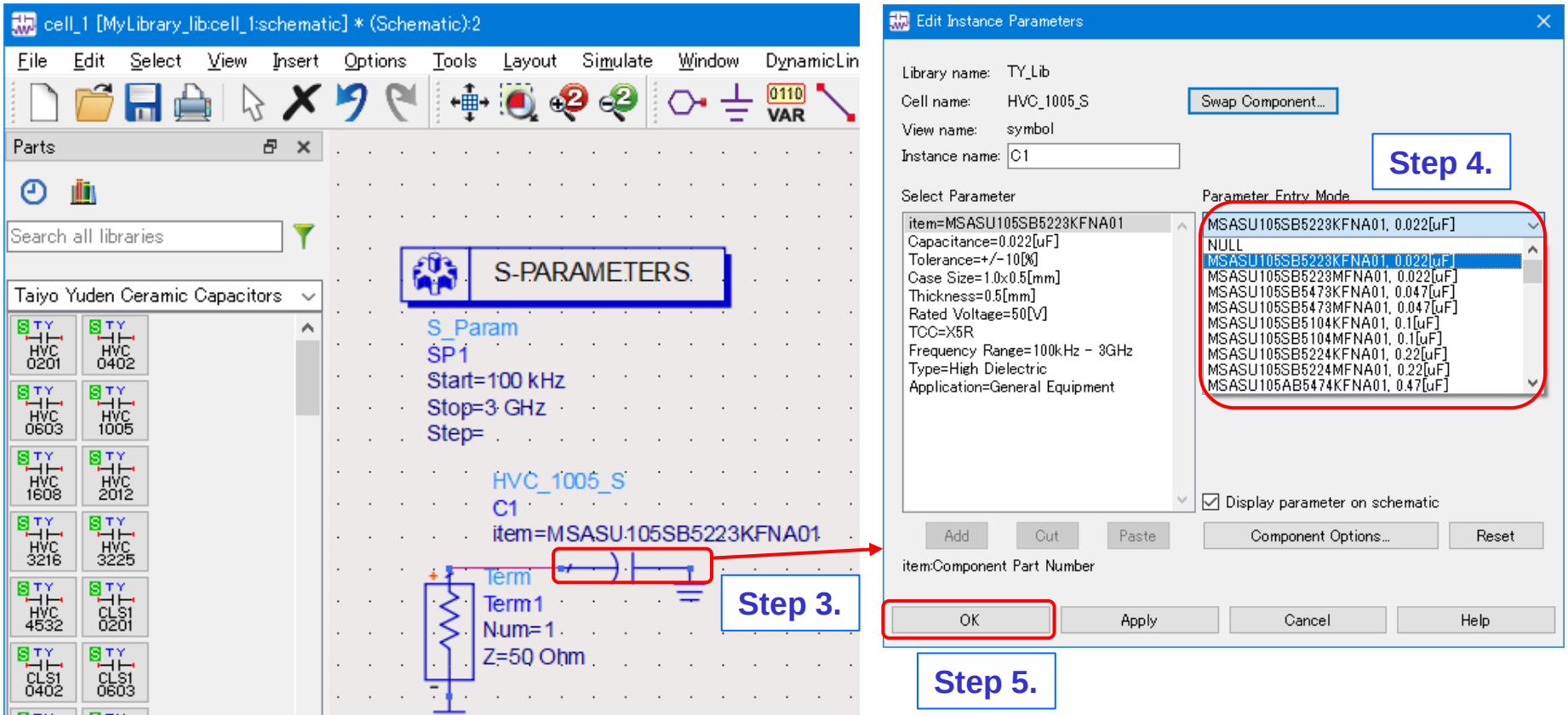


How to use Component Library

Step 3. Double-click the component on the schematic.

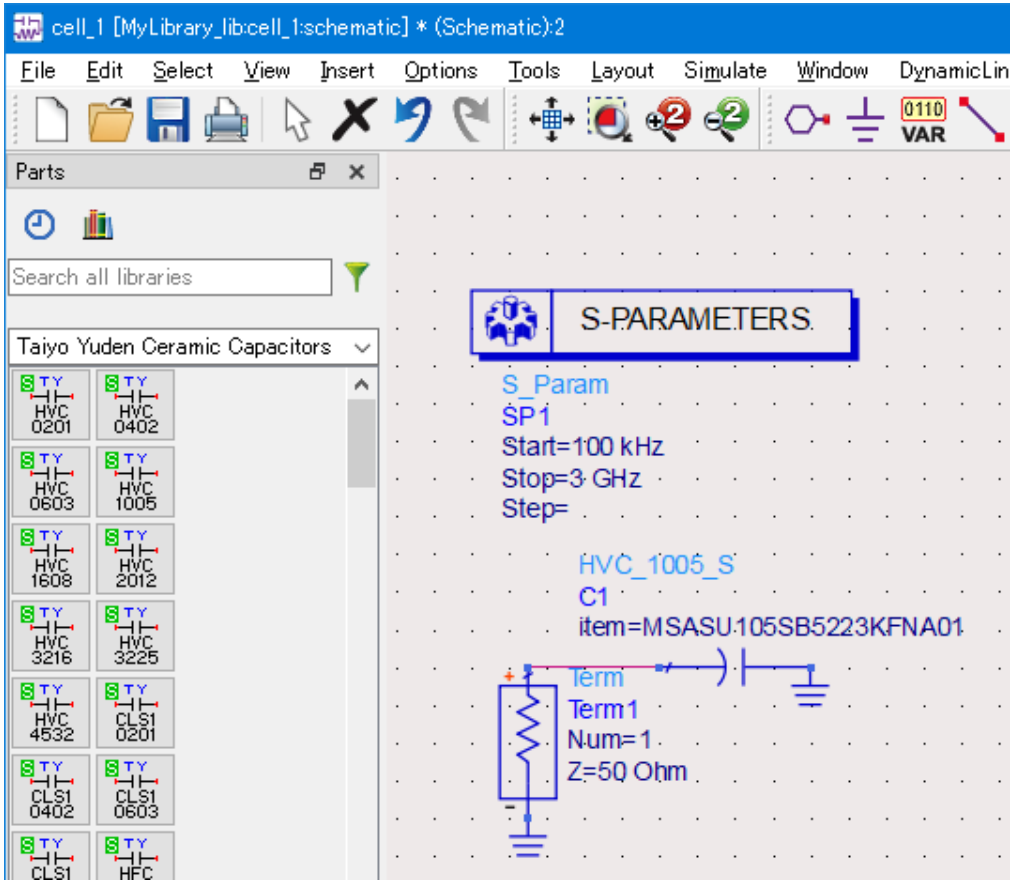
Step 4. Select the item from “Parameter Entry Mode” pane on the dialog box.

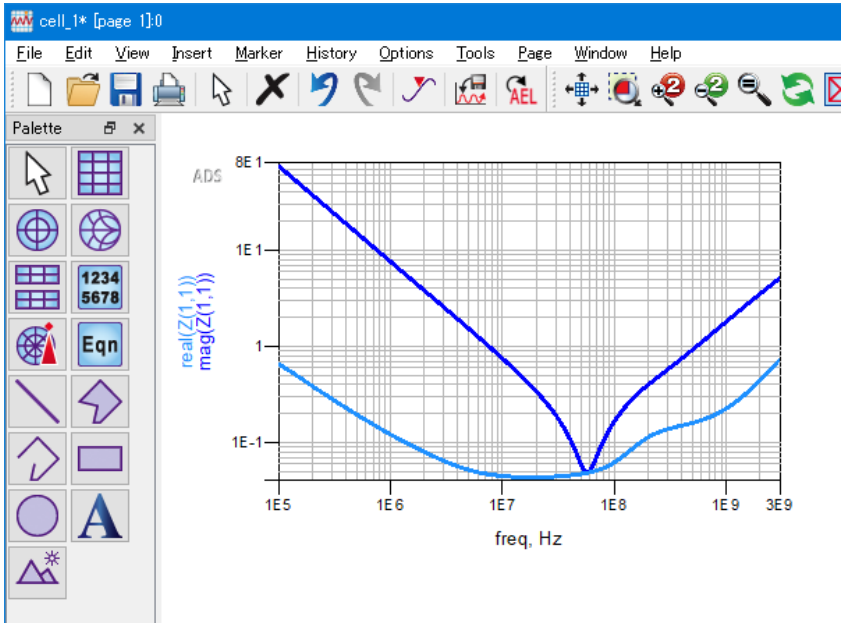
Step 5. Click OK button.



How to use Component Library

Step 6. Perform the simulation.

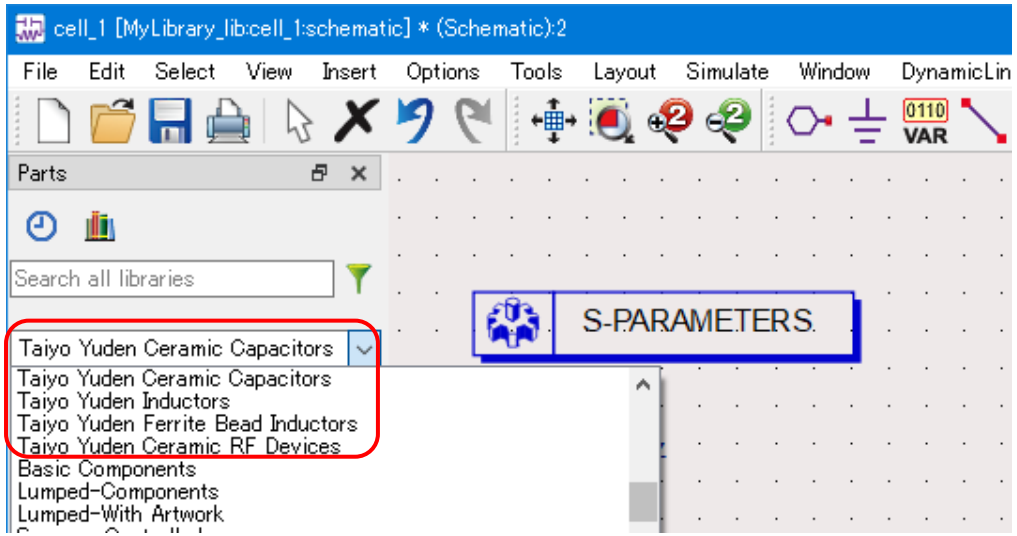




About component category

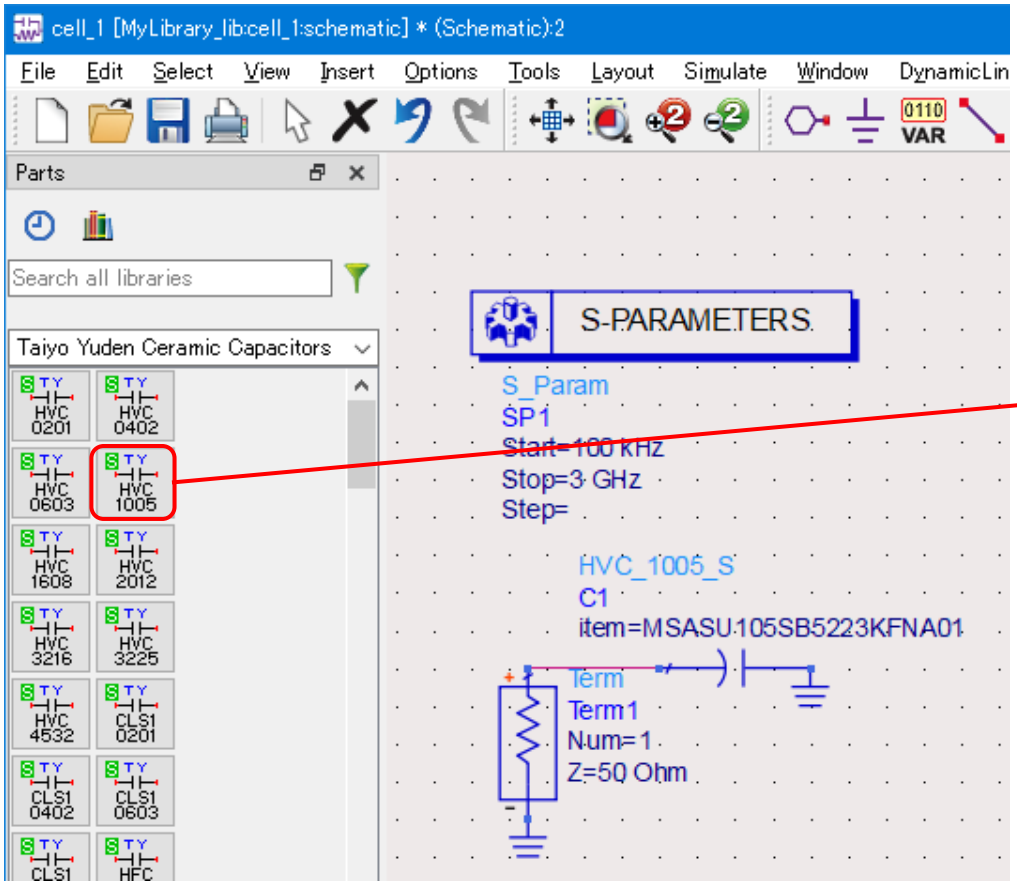
There are 4 Taiyo Yuden product categories on the component palette list. The following chart shows those product categories.

Categories on the palette list	Product categories
Taiyo Yuden Ceramic Capacitors	Ceramic Capacitors
Taiyo Yuden Inductors	Inductors
Taiyo Yuden Ferrite Bead Inductors	Ferrite Bead Inductors
Taiyo Yuden Ceramic RF Devices	Multilayer Ceramic Devices

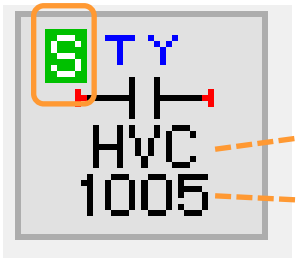


About component category

The palette icons show the following category information.



Application symbol



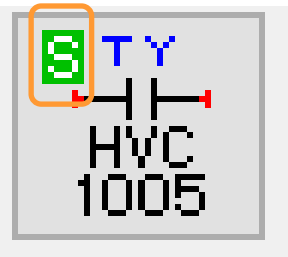
Series abbreviation

Size number

About component category

Application symbols describe the categories where the components are intended to use according to the following chart.
Please confirm our product catalog or product specification for details.

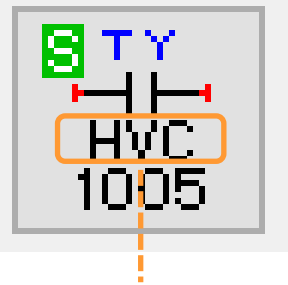
Application symbol



Application symbol	Application	Equipment
A	Automotive	Automotive Electronic Equipment (POWERTRAIN, SAFETY)
C		Automotive Electronic Equipment (BODY & CHASSIS, INFOTAINMENT)
B	Industrial	Telecommunications Infrastructure and Industrial Equipment
M	Medical	Medical Devices classified as GHTF Class C (Japan Class III)
L		Medical Devices classified as GHTF Classes A or B (Japan Classes I or II)
S	Consumer	General Electronic Equipment
E		Only for Mobile Devices

About component category

Series abbreviations describe the following product series.
Please confirm our product catalog or product specification for details.

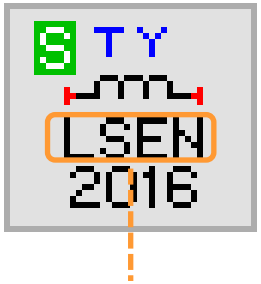


Series abbreviation

Ceramic Capacitors

Series abbreviation	Product series
HVC	Multilayer Ceramic Capacitors (High dielectric type)
CLS1	Multilayer Ceramic Capacitors (Temperature compensating type)
HFC	High frequency/Low loss Multilayer Ceramic Capacitors
HFMH	High frequency/Low loss Medium-High Voltage Multilayer Ceramic Capacitors
CFCAP	Low distortion design/Audible/Good bias Multilayer Ceramic Capacitors (CFCAP)
CFLD	Low distortion design/Audible/Good bias Multilayer Ceramic Capacitors (CF_LD)
MHV	Medium-High Voltage Multilayer Ceramic Capacitors
STC	Soft Termination Multilayer Ceramic Capacitors
LWDC	LW Reversal Decoupling Low ESL Capacitors (LWDC™)
HRC	High Reliability Multilayer Ceramic Capacitors

About component category



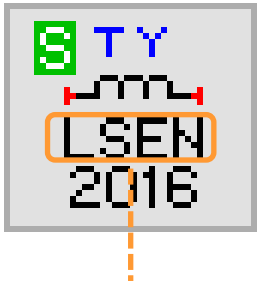
Series abbreviation

Inductors

Series abbreviation	Product series
L_EN	Wire-wound Metal Power Inductors MCOIL™ L_EN series
L_EP	Wire-wound Metal Power Inductors MCOIL™ L_EP series
L_EU	Wire-wound Metal Power Inductors MCOIL™ L_EU series
L_CN	Wire-wound Metal Power Inductors MCOIL™ L_CN series
L_DN	Wire-wound Metal Power Inductors MCOIL™ L_DN series
L_AN	Wire-wound Metal Power Inductors MCOIL™ L_AN series
L_AP	Wire-wound Metal Power Inductors MCOIL™ L_AP series
L_BH	Wire-wound Metal Power Inductors MCOIL™ L_BH series
L_XN	Wire-wound Ferrite Power Inductors L_XN series
L_XP	Wire-wound Ferrite Power Inductors L_XP series
L_XH	Wire-wound Ferrite Power Inductors L_XH series
L_XA	Wire-wound Ferrite Power Inductors L_XA series
L_XBH10050	Wire-wound Ferrite Power Inductors L_XBH10050
L_RN	Wire-wound Ferrite Power Inductors L_RN series
L_YP	Wire-wound Ferrite Power Inductors L_YP series

* “_” in the series abbreviation should be replaced by the character representing the application of the product either “A”, “C”, “B”, “M”, “L” or “S”.

About component category



Series abbreviation

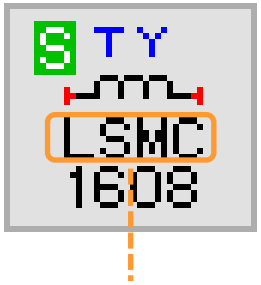
Inductors

Series abbreviation	Product series
L_QPB	Wire-wound Ferrite Power Inductors L_QPB series
L_QN	Wire-wound Ferrite Power Inductors L_QN series
L_QPA	Wire-wound Ferrite Power Inductors L_QPA series
L_QB	Wire-wound Ferrite Inductors L_QB series
L_QBA	Wire-wound Ferrite Inductors L_QB series
L_QBB	Wire-wound Ferrite Inductors L_QB series
L_QC	Wire-wound Ferrite Inductors L_QC series
L_QE	Wire-wound Ferrite Inductors L_QE series
L_QM	Wire-wound Ferrite Inductors for Signal Lines L_QM series

* “_” in the series abbreviation should be replaced by the character representing the application of the product either “A”, “C”, “B”, “M”, “L” or “S”.

About component category

Ferrite Bead Inductors

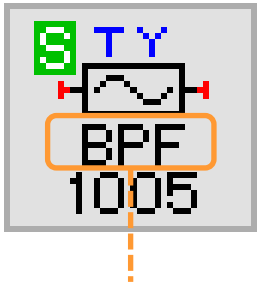


Series abbreviation

Series abbreviation	Product series
L_MC	Wire-wound Ferrite Bead Inductors for Power Lines L_MC series
L_MG	Wire-wound Ferrite Bead Inductors for Power Lines L_MG series

* "_" in the series abbreviation should be replaced by the character representing the application of the product either "A", "C", "B", "M", "L" or "S".

Multilayer Ceramic Devices

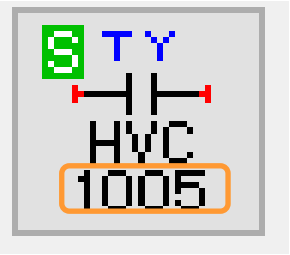


Series abbreviation

Series abbreviation	Product series
BPF	Multilayer Ceramic Devices (Band Pass Type)
LPF	Multilayer Ceramic Devices (Low Pass Type)
HPF	Multilayer Ceramic Devices (High Pass Type)
DPX	Multilayer Ceramic Devices (Diplexer)
TPX	Multilayer Ceramic Devices (Triplexer)
CPL	Multilayer Ceramic Devices (Coupler)
DCPL	Multilayer Ceramic Devices (2 Branch Coupler)

About component category

Size numbers describe the component size of length(L) and width(W) according to the following chart.
Please confirm our product catalog or product specification for details.



Size number

Ceramic Capacitors

Size number	L [mm]	W [mm]
0201	0.25	0.125
0402	0.4	0.2
0603	0.6	0.3
1005	1.0	0.5
1608	1.6	0.8
2012	2.0	1.25
3216	3.2	1.6
3225	3.2	2.5
4532	4.5	3.2
0510	0.52	1.0
0816	0.8	1.6
1220	1.25	2.0

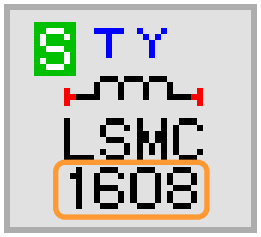
About component category

Size number

Inductors

Size number	L [mm]	W [mm]	Size number	L [mm]	W [mm]
1005	1.0	0.5	3218	3.2	1.8
1006	1.0	0.6	3225	3.2	2.5
1210	1.25	1.05	4040	4.0	4.0
1412	1.4	1.2	5050	5.0	5.0
1608	1.6	0.8	6060	6.0	6.0
1616	1.6	1.6	8080	8.0	8.0
2012	2.0	1.2 or 1.25	10050	10.0	9.8
2016	2.0	1.6	060	6.3	6.0
2020	2.0	2.0	100	10.1	10.0
2424	2.4	2.4	101	10.1	10.1
2518	2.5	1.8	125	12.5	12.5
2520	2.5	2.0			
3030	3.0	3.0			

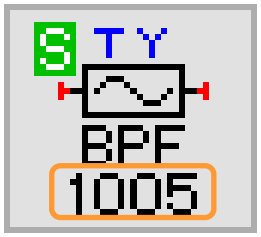
About component category



Size number

Ferrite Bead Inductors

Size number	L [mm]	W [mm]	Size number	L [mm]	W [mm]
1608	1.6	0.8	3225	3.2	2.5
2012	2.0	1.2	4516	4.5	1.6
2016	2.0	1.6	4525	4.5	2.5
3216	3.2	1.6	6060	4.5	3.2



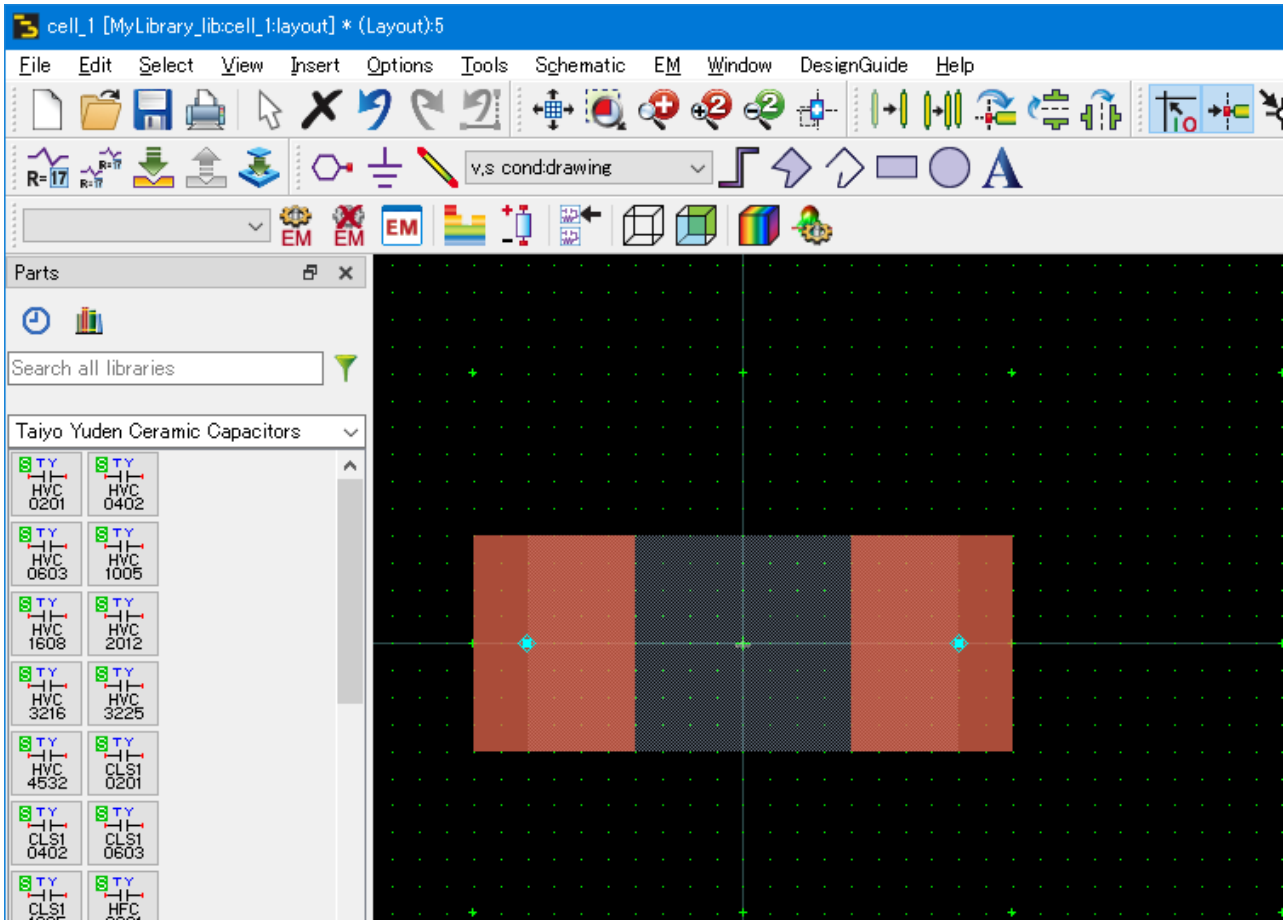
Size number

Multilayer Ceramic Devices

Size number	L [mm]	W [mm]
1005	1.0	0.5
1608	1.6	0.8
2012	2.0	1.25
2520	2.5	2.0

About component layout

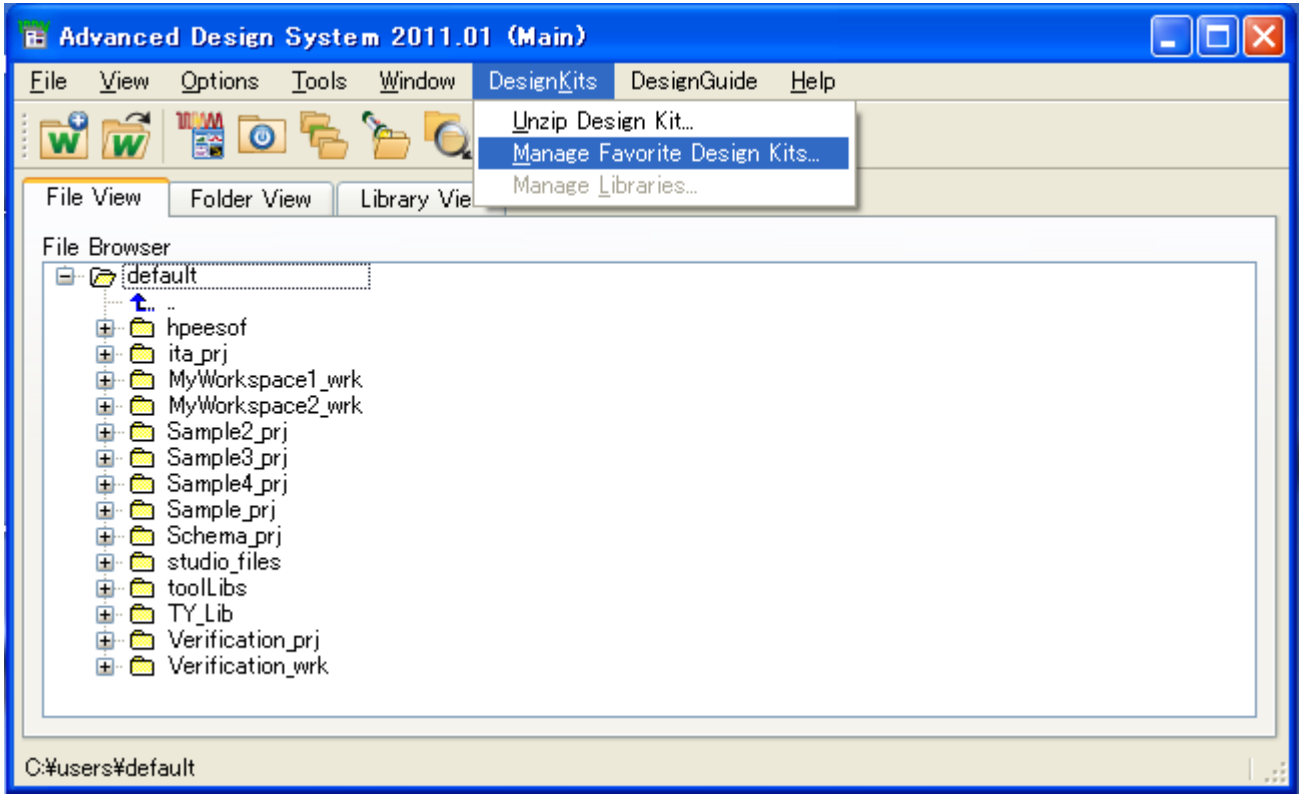
You can see the component layout of this library on the layout window.
On the default layer is drawn the component outline or the external square border around the component.
On the cond layer is drawn the recommended land pattern of the component.
Please refer to the PathWave ADS manual for layout descriptions.



How to uninstall Component Library

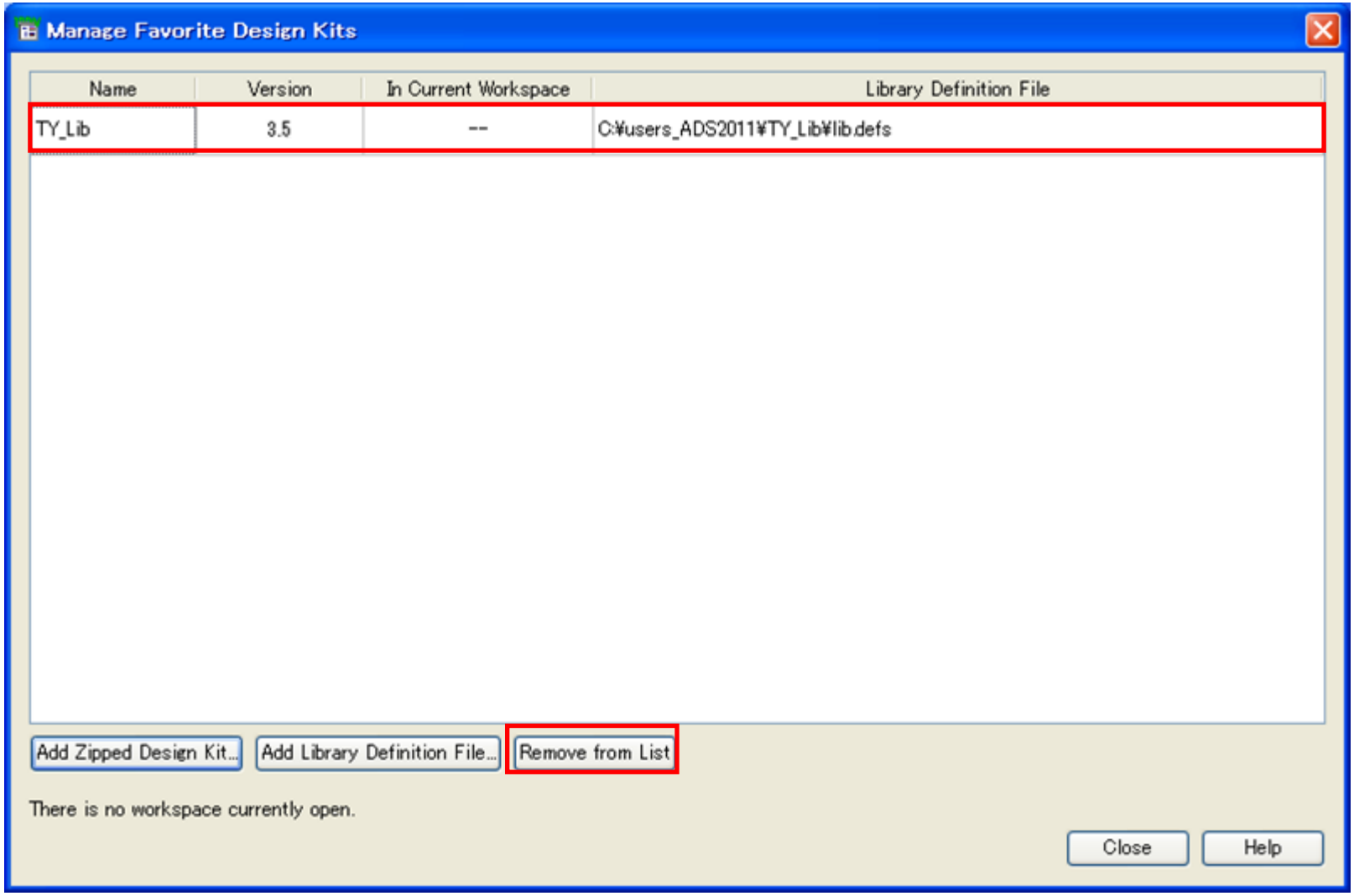
Step 1. **Launch PathWave ADS.**

Step 2. **Select [DesignKits] > [Manage Favorite Design Kits…] from the menu bar of the main window.**



How to uninstall Component Library

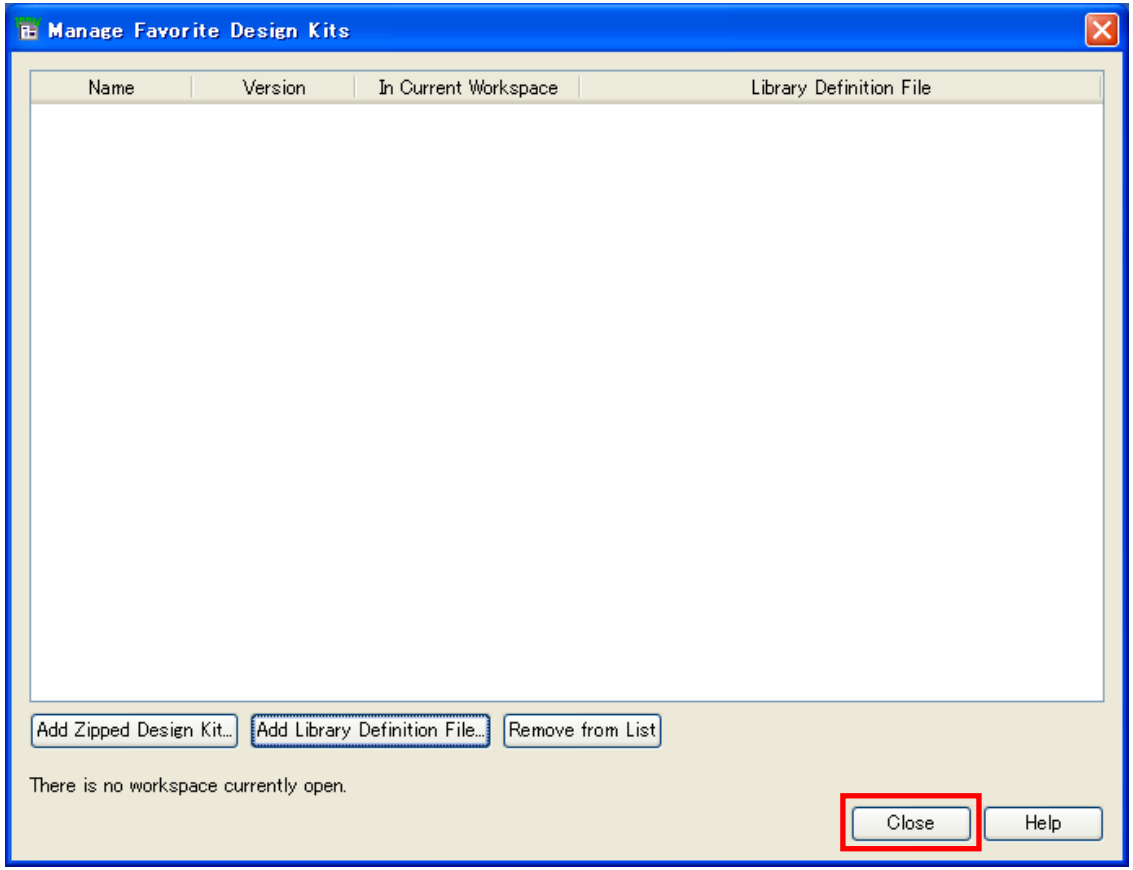
Step 3. **Select “TY_Lib” and click [Remove from List] button.**



How to uninstall Component Library

Step 4. **Make sure that “TY_Lib” is removed from the list and click [Close] button**

Step 5. **Delete “TY_Lib” folder.**
That is all for the uninstallation.



TAIYO YUDEN