

# Keysight PathWave RF Synthesis (Genesys) Install manual

Murata Manufacturing Company, Ltd.  
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# 1. About this manual

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Murata Manufacturing Co., Ltd. ("Murata") provides the simulation library for Keysight PathWave RF Synthesis (Genesys). This manual describes how to install this simulation library ("Library") and how to use it.

This manual describes valid procedures, but depending on your environment, please note that some operations may differ partially.

In this manual, PathWave RF Synthesis (Genesys) is simply referred to as Genesys.

## 2. Operation environment

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- This manual describes procedures based on the following environment. Please refer to the manuals for the PC, etc. used in the actual environment.
  - OS: Windows 10
    - It is necessary to have the administrative right to install the library.
  - Genesys version: 2018, 2020

### 3.The type of Genesys library

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There are two types of Genesys libraries.

- [1]. Library built into Genesys in advance
- [2]. Library obtained from Murata website

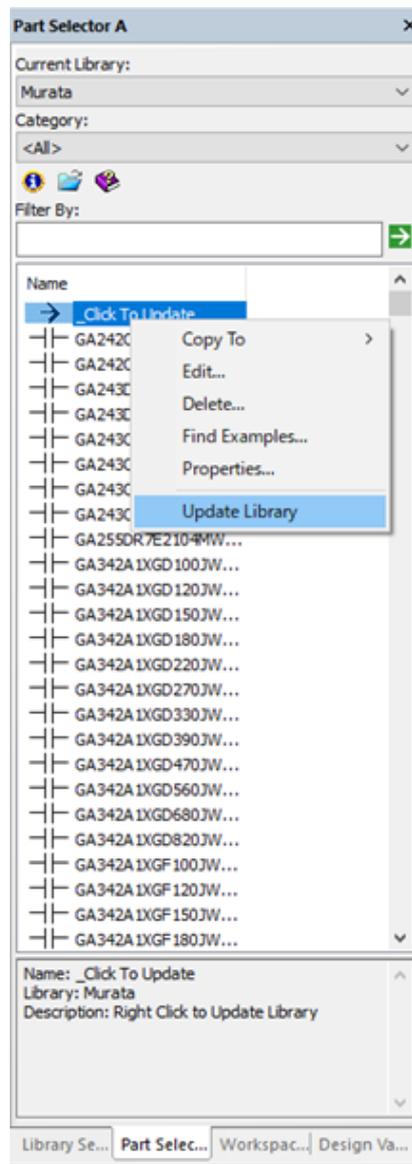
After here, we call [1] the built-in library, and [2] the update library.

The built-in libraries can NOT update. If you continue to use the built-in library, you have a risk of simulating with the information of the product that has been discontinued.

For this reason, we highly recommend you to use the latest update library.

\*Be sure to read the notes in Chapter 5 when installing the update library.

## 4. How to get the update library



There are two ways to install the update library.

[1] Get from Murata library page

Open a browser and get the library from the following address:

<https://www.murata.com/en-us/tool/librarydata/library-key sight3>

[2] Get it from the Genesys menu

Select Murata on Current Library.

Right-click the "\_Click To Update" at the top of the Part Selector menu.

Left-click "Update Library" in the pull-down menu. The browser will be launched and the same site as [1] will open. Please download the desired library.

Read the notes on the following page when installing the update library that was obtained.

## 5.Note:Cautions when installing

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After here, we'll describe procedures in Genesys 2018. If you use Genesys 2020, please replace Genesys2018 into Genesys2020.

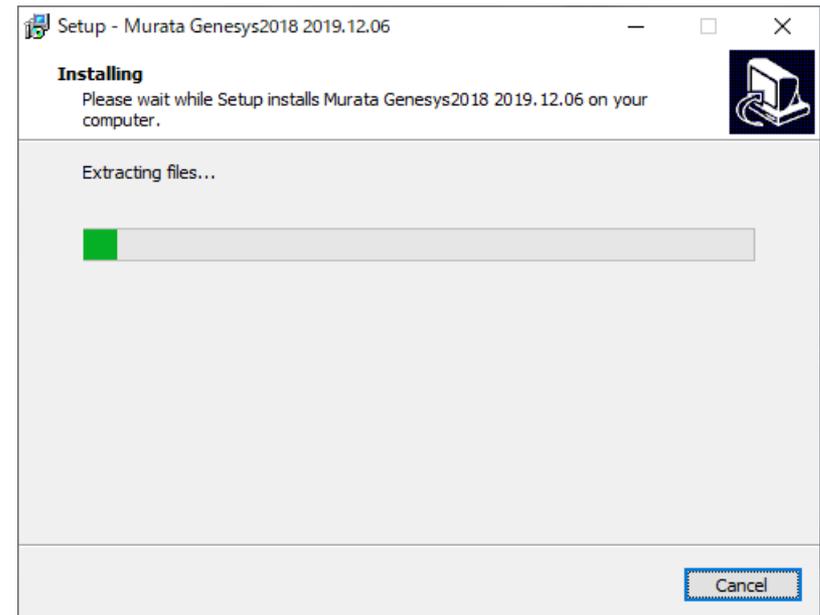
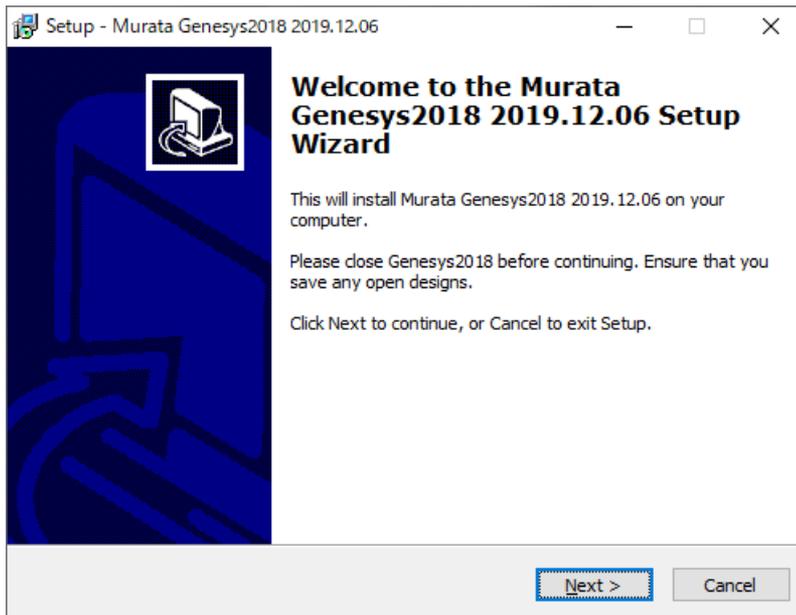
The Genesys library is put in the following folders. But when you install the update library, these folders are made to delete. If you already put customized models in these folders, please be sure to copy them before installing.

C:\Users\<User>\AppData\Local\Keysight\Genesys2018\Data\Murata

C:\Users\< User >\AppData\Local\Keysight\Genesys2018\Library Files\Murata

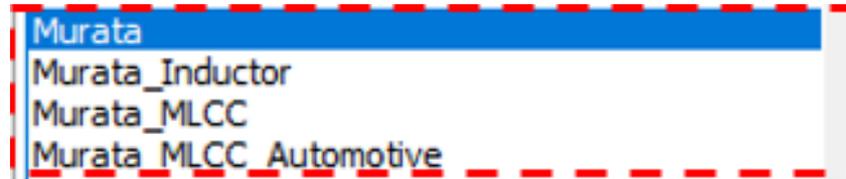
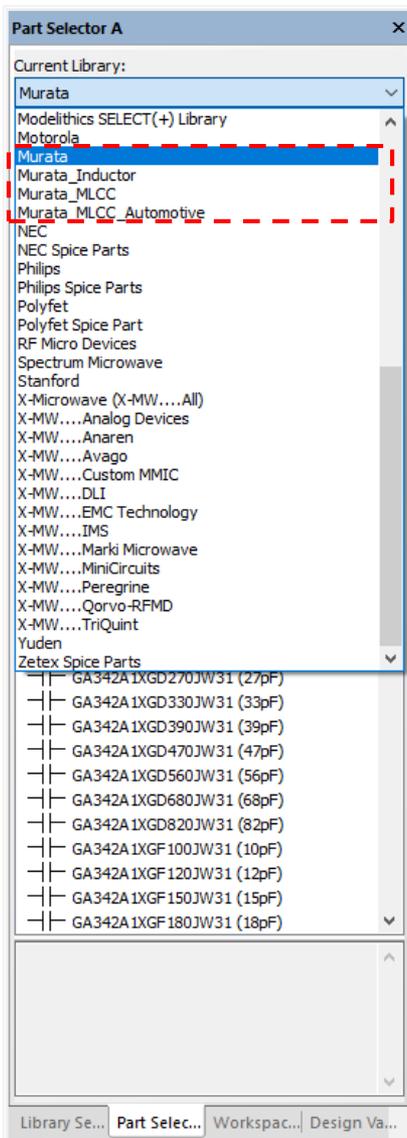
## 6. How to install the update library

Please double-click Murata\_Genesys2018\_(date)\_Installer.exe, and then the installer will be launched as shown on the left.



After clicking Next -> Install, the progress bar will be displayed in a couple of minutes as shown on the right. When the progress bar finishes, please click Finish button. The installation is now complete.

# 7. Part Selector(1/2)



(1) The built-in library  
Murata\_Inductor  
Murata\_MLCC  
Murata\_MLCC\_Automotive

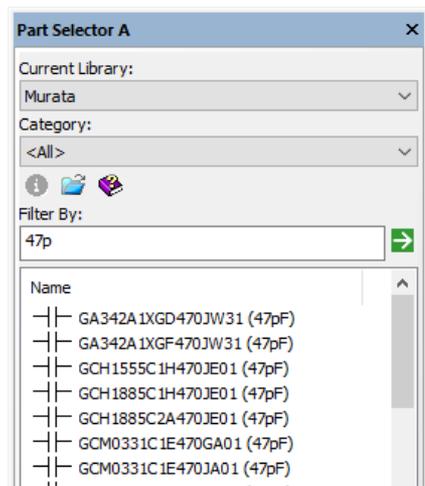
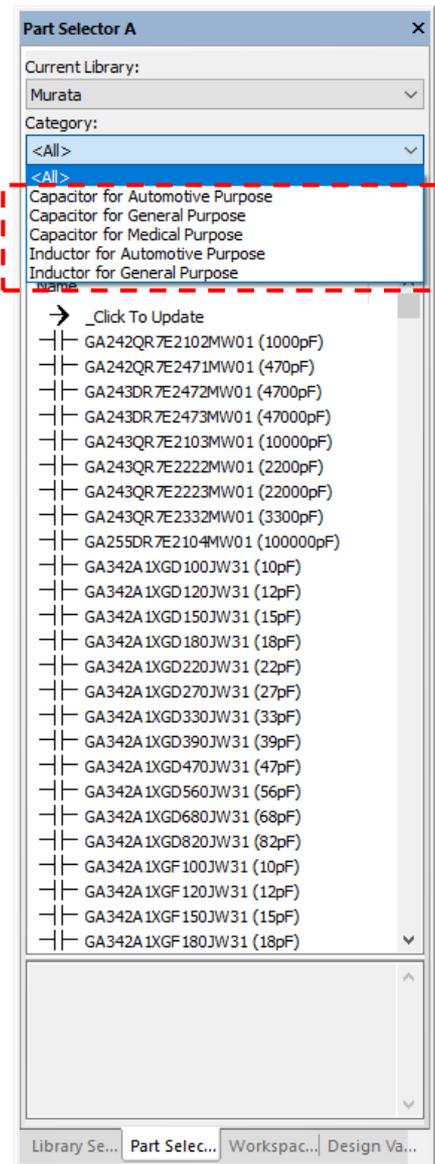
(2) The update library  
Murata

Please select Murata and find the model number you want.

# 7. Part Selector(2/2)



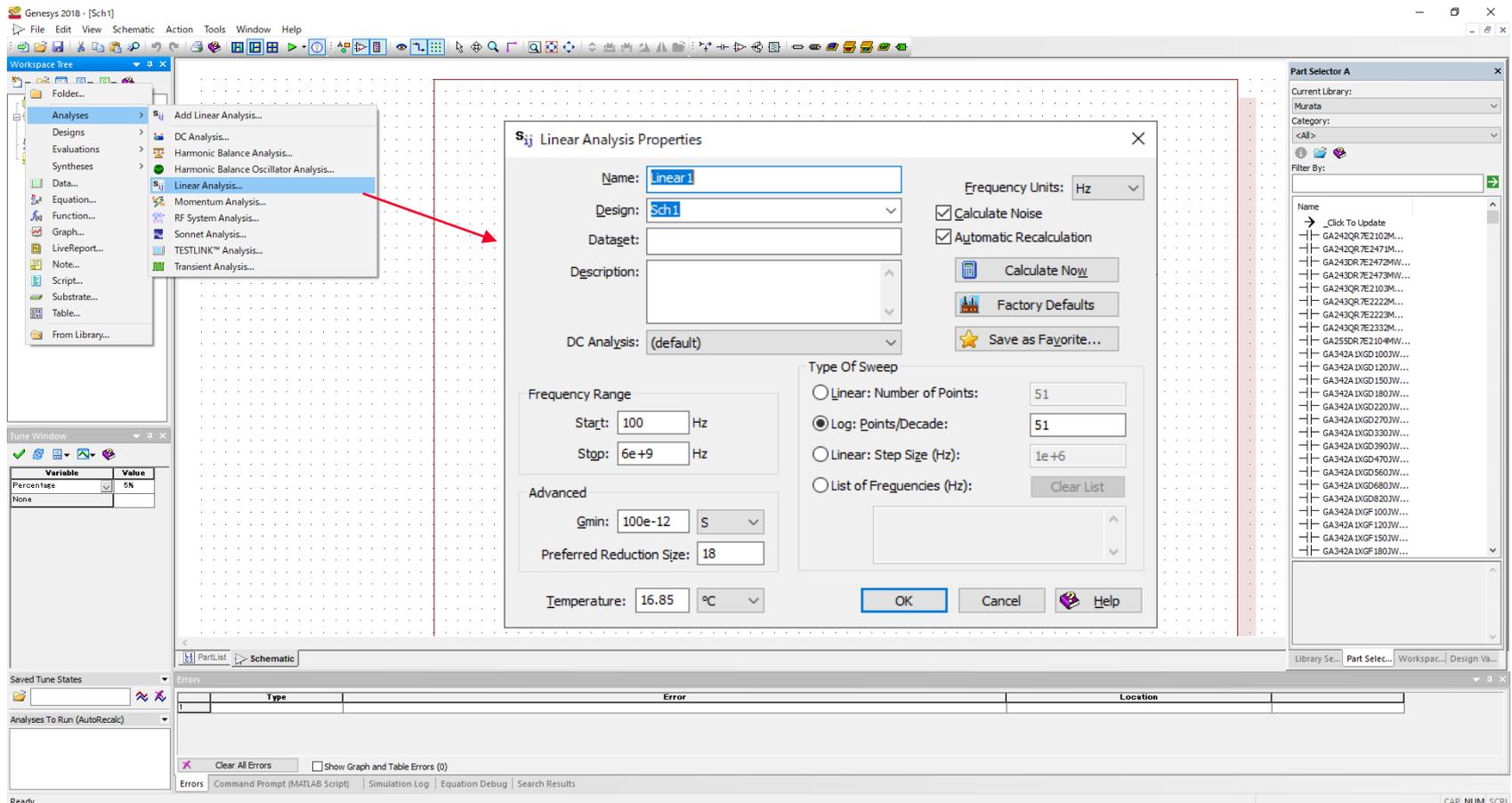
You can narrow down the list by purpose.  
Capacitor for Automotive Purpose  
Capacitor for General Purpose  
Capacitor for Medical Purpose  
Inductor for Automotive Purpose  
Inductor for General Purpose



You can also filter the list by capacitance or inductance.

# 8. How to use the library(analysis condition) *muRata* INNOVATOR IN ELECTRONICS

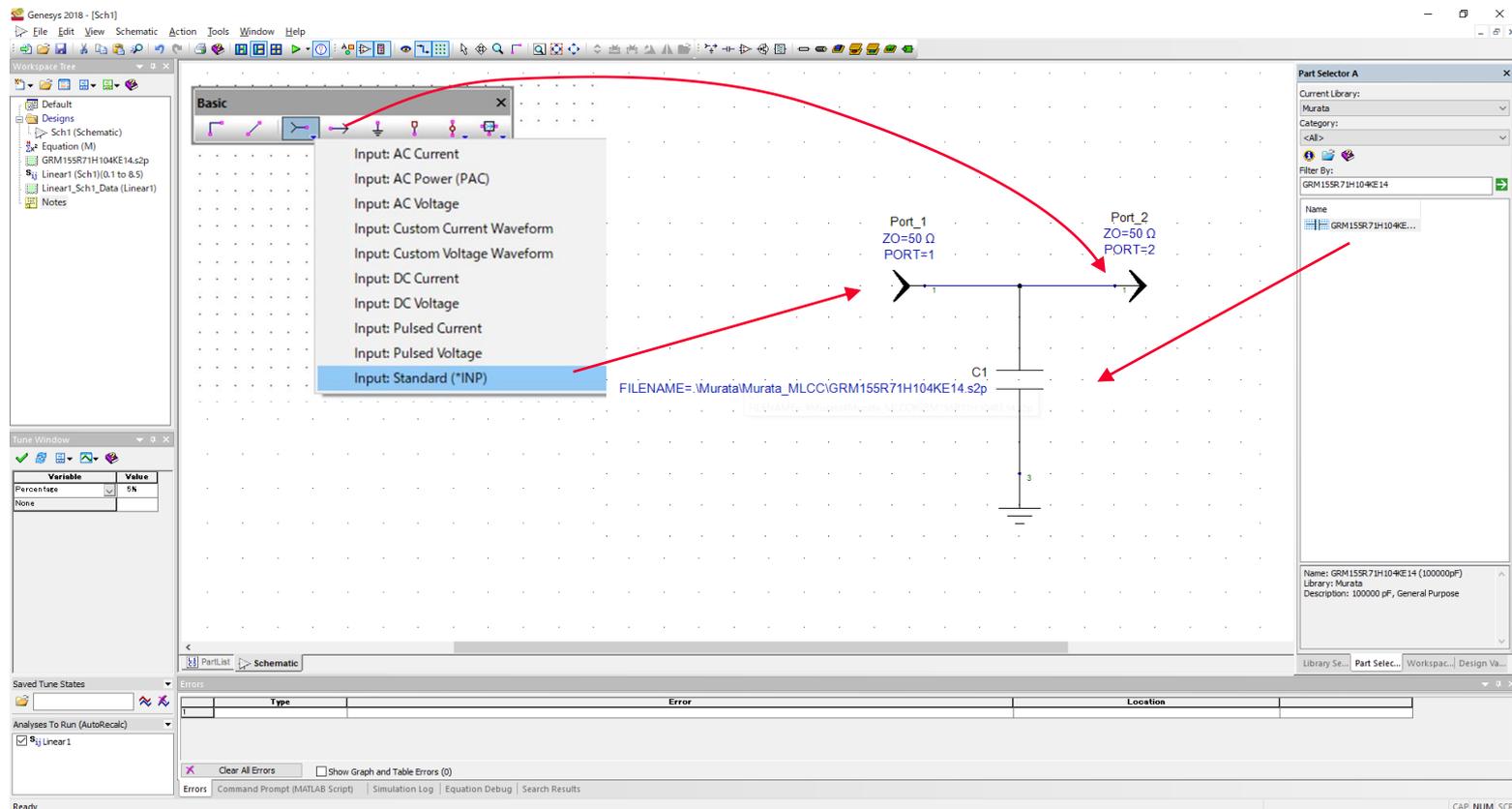
We will describe how to set up the analysis condition.  
Please select New Item in Workspace Tree->Analysis->Linear Analysis.  
After entering frequency range etc., please click OK button.



# 8. How to use the library (schematic)

You can put the element on the schematic by selecting component from Part Selector and operating drag-and-drop.

After putting Ports at both ends of the element, please click the  button.

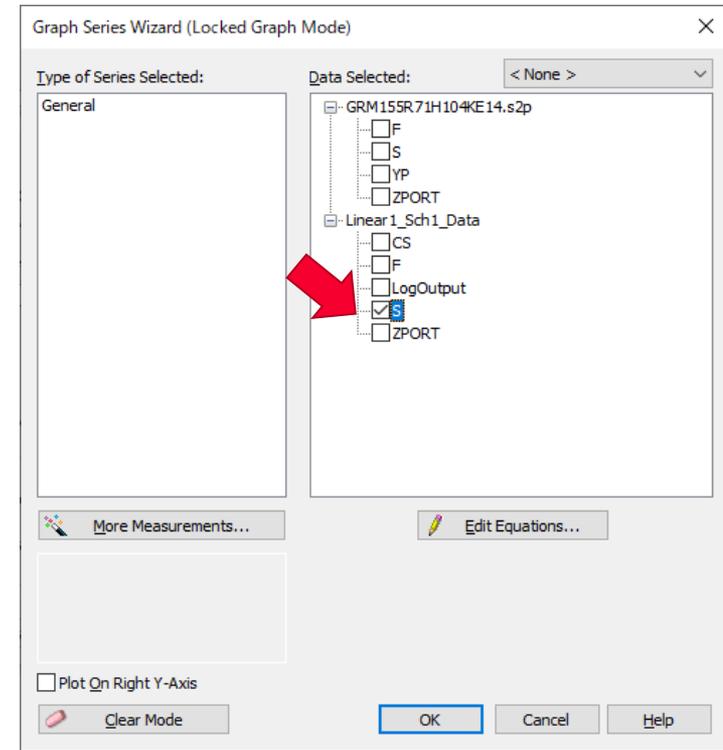
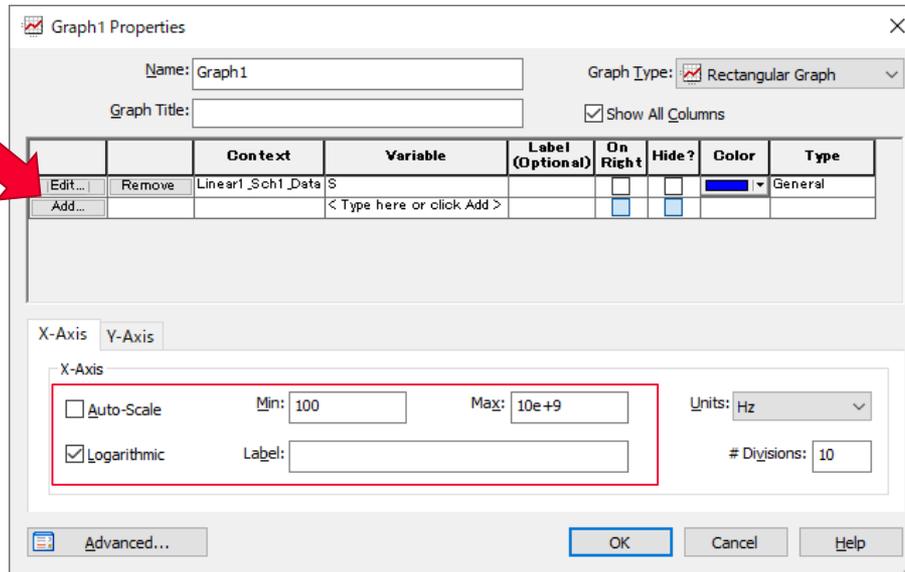


The screenshot shows the Genesys 2018 software interface. A schematic diagram is displayed in the center, featuring a capacitor component labeled 'C1' with the filename 'FILENAME= \\Murata\Murata\_MLCC\GRM155R71H104KE14.s2p'. The capacitor is connected to two ports: 'Port\_1' (ZO=50 Ω, PORT=1) and 'Port\_2' (ZO=50 Ω, PORT=2). A red arrow points from the 'Basic' menu to the 'Input: Standard (\*INP)' option, which is highlighted in blue. Another red arrow points from this menu option to the capacitor component. A third red arrow points from the 'Part Selector A' window to the capacitor component. The 'Part Selector A' window shows the current library as 'Murata' and the selected component as 'GRM155R71H104KE14'. The 'Name' field contains 'GRM155R71H104KE...' and the 'Description' field contains 'Name: GRM155R71H104KE14 (100000pF) Library: Murata Description: 100000 pF, General Purpose'. The bottom status bar shows 'Ready' and 'CAP. NUM. SCRL'.

# 8. How to use the library (describe the result)

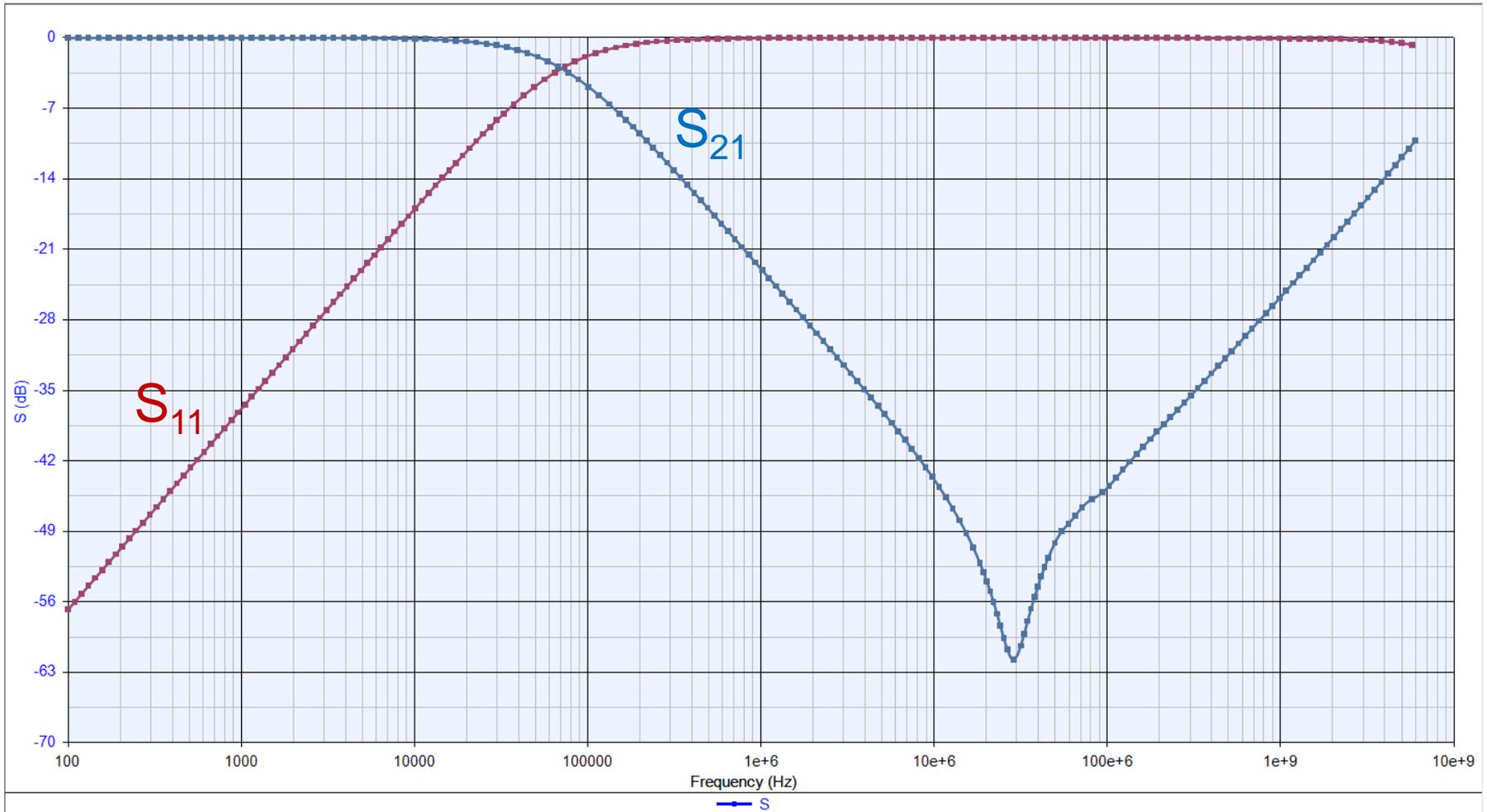
We'll show how to set up the graph properties.

Firstly, please click the New Item in the Workspace, and chose Graph. You can add a new graph by clicking Add button. And then you can adjust graph properties.



# 8. How to use the library (example)

Part Number : GRM155R71H104KE14



## 9. Contact us

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- If you have any questions about this library, please contact us through the links below.
  - <https://www.murata.com/en-us/contactform> (English)
  - <https://www.murata.com/zh-cn/support/contact> (中文)
  - <https://www.murata.com/ko-kr/contactform> (한국어 )
  - <https://www.murata.com/ja-jp/contactform> (日本語)



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