

# USER GUIDE

UGXXX | WE ADS Library



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## 1. Introduction

ADS (Advanced Design System) is developed by PathWave Design of Keysight Technologies, which is an electronic design automation software system and provides an integrated design environment to designers of RF electronic products. Keysight ADS supports every step of the design process—schematic capture, layout, design rule checking, frequency-domain and time-domain circuit simulation, and electromagnetic field simulation.

Würth Elektronik has a growing portfolio of models available for use in ADS. These models allow ADS users to accurately simulate, troubleshoot and solve RF issues before going to production.

For any new users of a tool, the basic functionalities must be learned before the tool can be put to use. For ADS, knowing how to correctly install and find the models is crucial. Our models can be installed via two ways: Würth Electronics homepage, GitHub repository.

Note: The following instructions pertain to ADS versions 2012 or higher.

## 2. Install from website

Note: ADS models on homepage are always the latest.

### 2.1 Download from Würth homepage

Browse [www.we-online.com](http://www.we-online.com) >> Components >> Find the product unit according to the catalog.

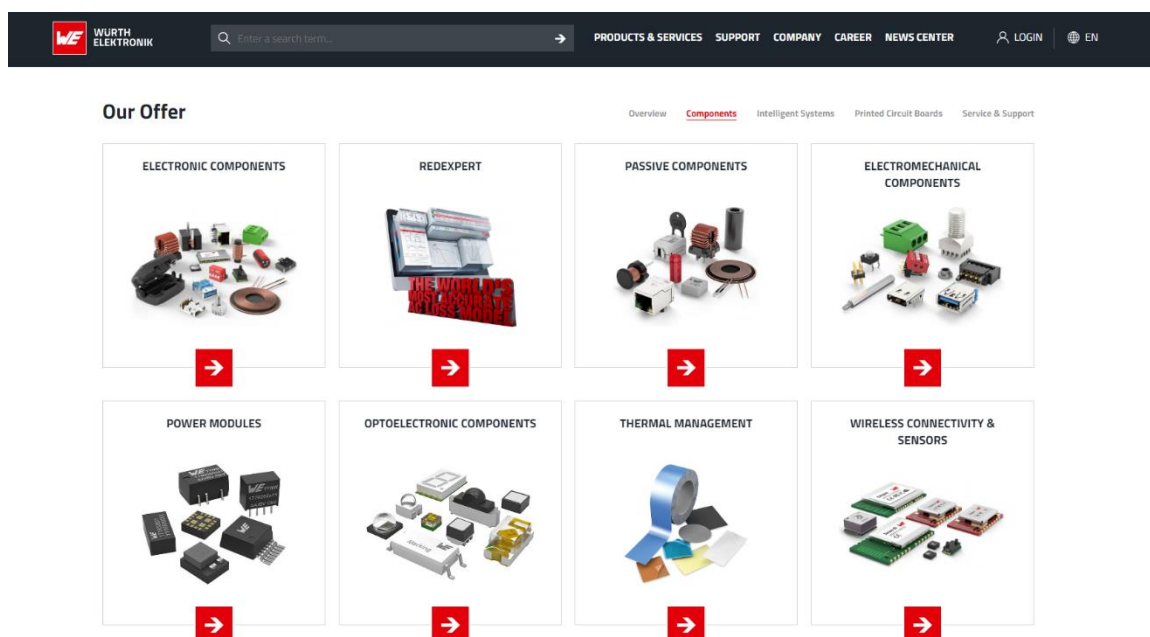


Figure 1: Würth Elektronik Homepage

# USER GUIDE

UGXXX | WE ADS Library

Or search for the part number or series you are interested in. For example, search part number 744910016 or series WE-CAIR, this search result shows 744910016 has an ADS zipped library.

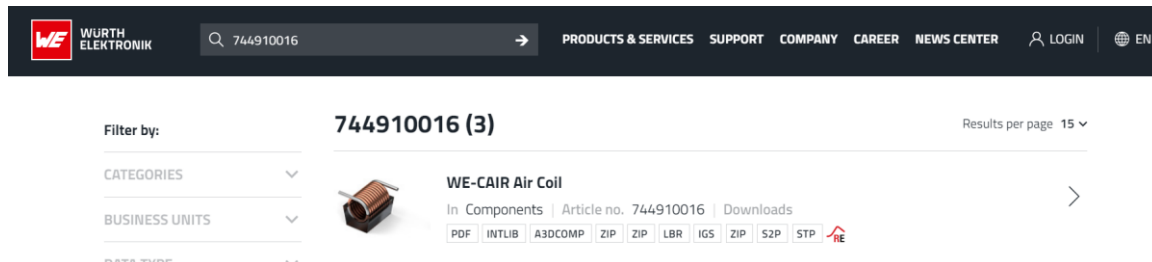


Figure 2: Search part number or series

For the desired part number, expand the Downloads dropdown, select and click the ADS zipped file to download it.

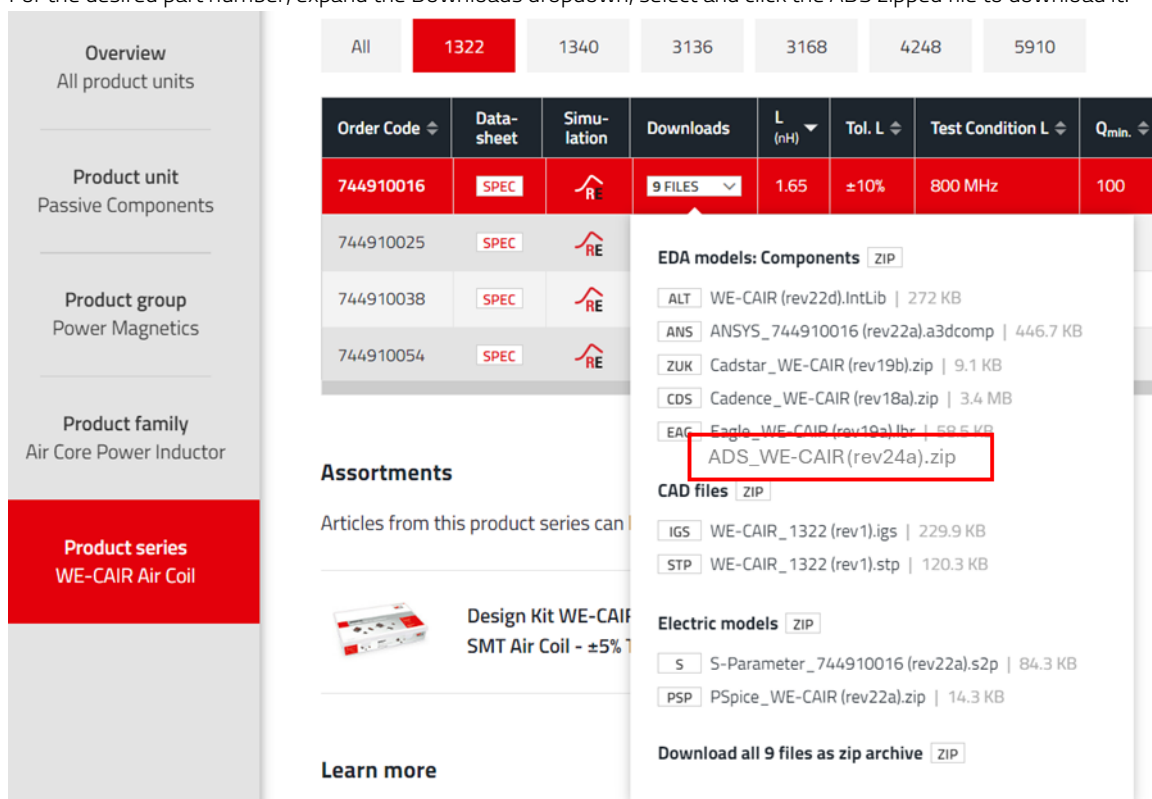


Figure 3: Download library

## 2.2 To install the model

# USER GUIDE

UGXXX | WE ADS Library

Unzip the downloaded file and you will see the overview as below:

Wurth_Elektronik_RF_Inductors		Search Wurth_Elektronik_RF_Inductors		
Name	Date modified	Type	Size	
circuit	6/13/2024 3:36 PM	File folder		
config	5/2/2024 4:06 PM	File folder		
de	6/13/2024 3:36 PM	File folder		
doc	6/13/2024 3:36 PM	File folder		
Wurth_Elektronik_RF_Inductors	6/13/2024 3:36 PM	File folder		
Disclaimer_READ_ME.txt	9/15/2022 1:55 PM	Text Document	4 KB	
for_editing_pdk.defs	5/2/2024 4:06 PM	DEFS File	1 KB	
lib.defs	5/2/2024 4:06 PM	DEFS File	1 KB	

Figure 4: Unzip library

Open ADS-DesignKits-Manage Libraries...

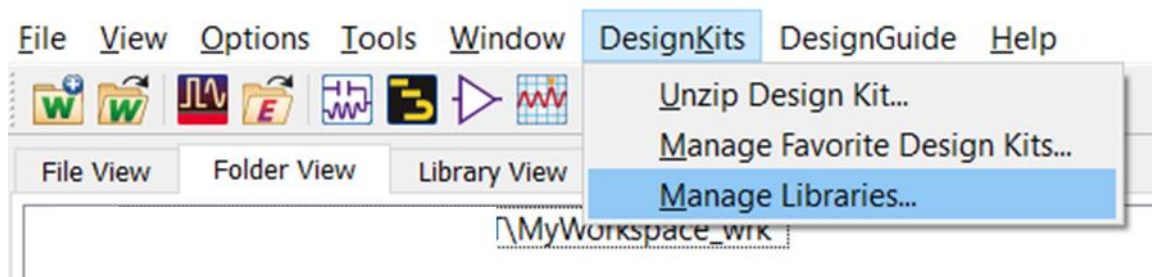


Figure 5: Manage Libraries

Click Add Library Definition File..., browse the unzipped folder and select file "lib.defs", then click "Open".

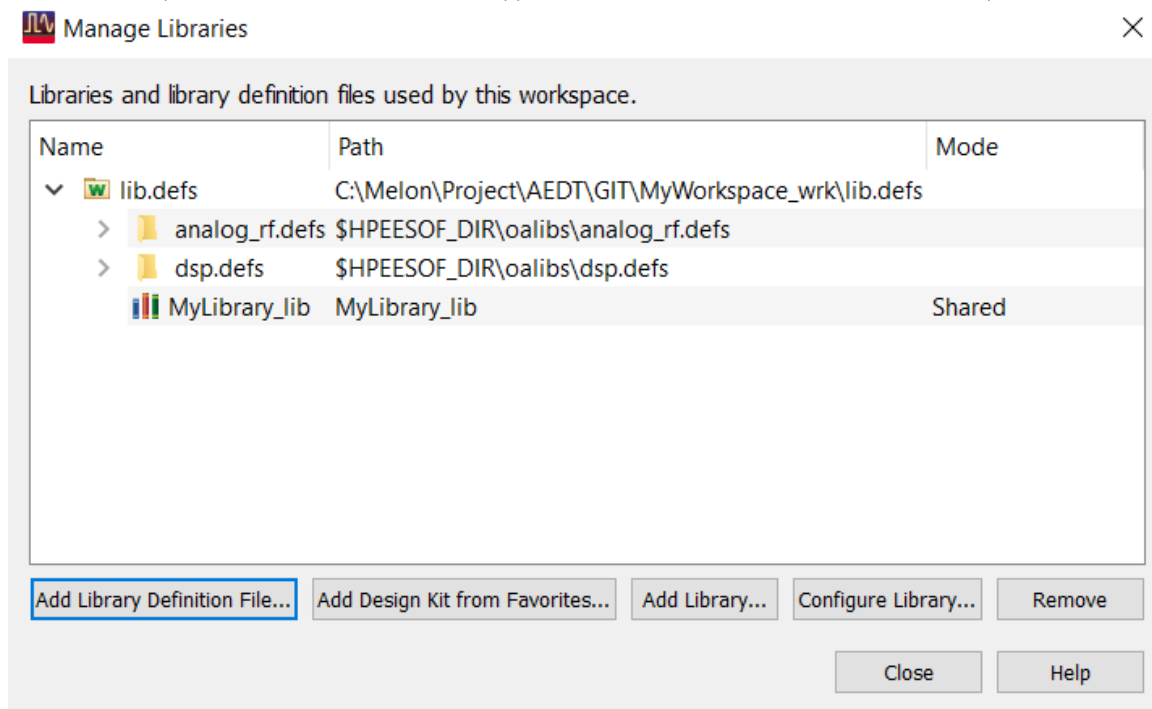


Figure 6: Add Library Definition File...

Library import is done and click "Close".

# USER GUIDE

UGXXX | WE ADS Library

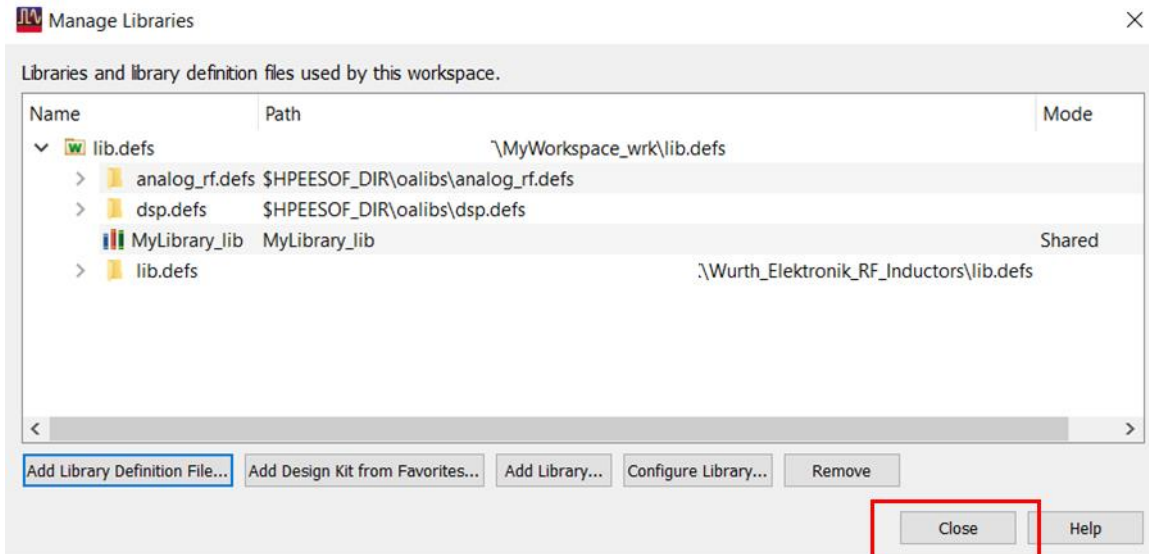


Figure 7: Library import done

Now you can use library for schematic design or simulation.

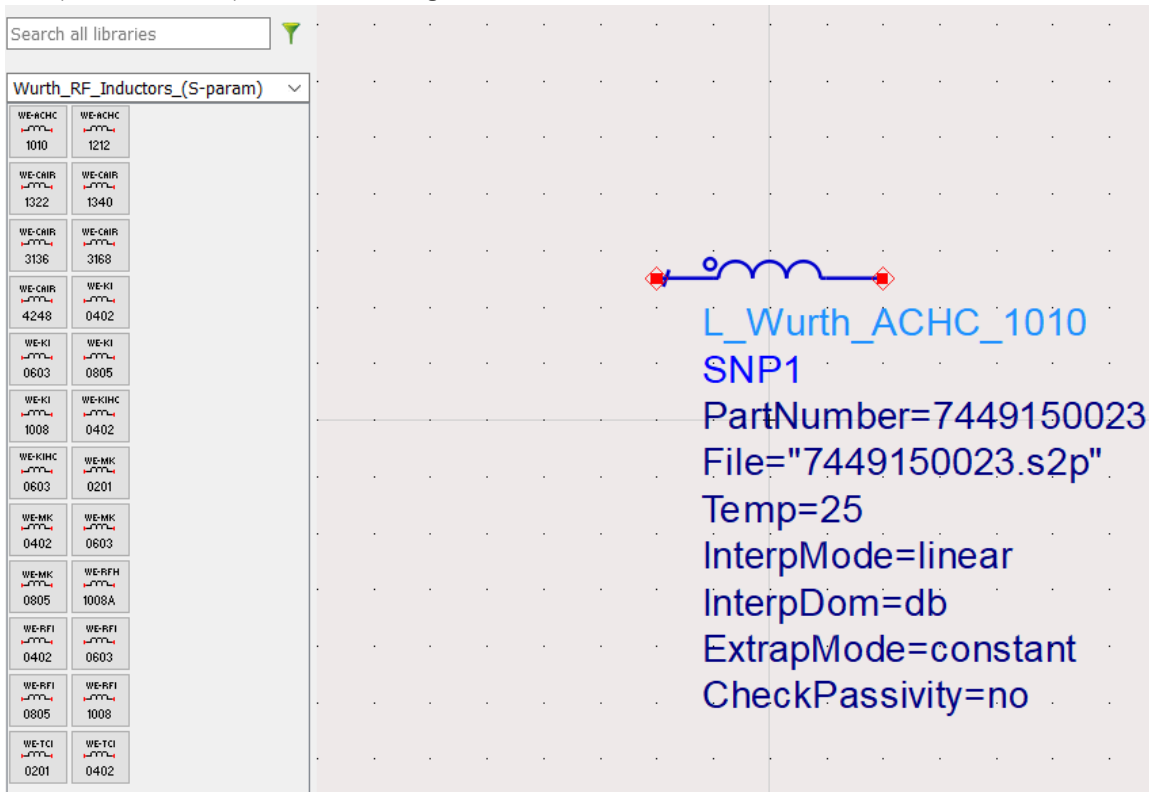


Figure 8: Use for simulation

## 3. Install from GitHub repository

Note: ADS models in GitHub repository are always the latest.

### 3.1 Install GitHub Desktop

GitHub Desktop is the most user-friendly tool for working with GitHub projects, and we recommend you use it for keeping your library files up to date.

Go to <https://desktop.github.com/> to download the appropriate package for your operating system and install it on your computer.

During the Desktop installation, register or sign in with your GitHub Account and click next. On the opening GitHub Browser webpage authenticate yourself and give permission to the GitHub desktop application. Then the process jumps back to the Desktop tool/application.

### 3.2 Clone the library

From GitHub Desktop, click the button Clone a repository from the Internet. Enter the URL of Würth Elektronik ADS Library repository <https://github.com/WurthElektronik/ADS-Library.git> and define the local directory to clone the repository.

Then click the Clone button, all the files from the online repository will begin to synchronize into local.

Let's get started!

Add a repository to GitHub Desktop to start collaborating

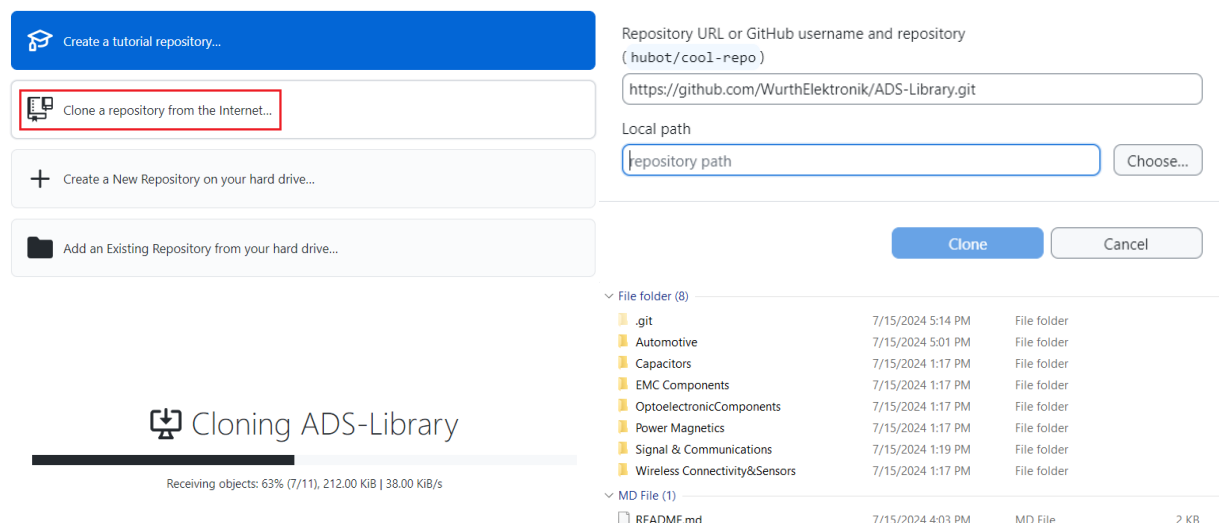


Figure 9: Clone the library

### 3.3 Synchronize local library from GitHub

If there are any update in GitHub repository, GitHub Desktop will detect it and you can "Pull" the update to your local.

# USER GUIDE

UGXXX | WE ADS Library

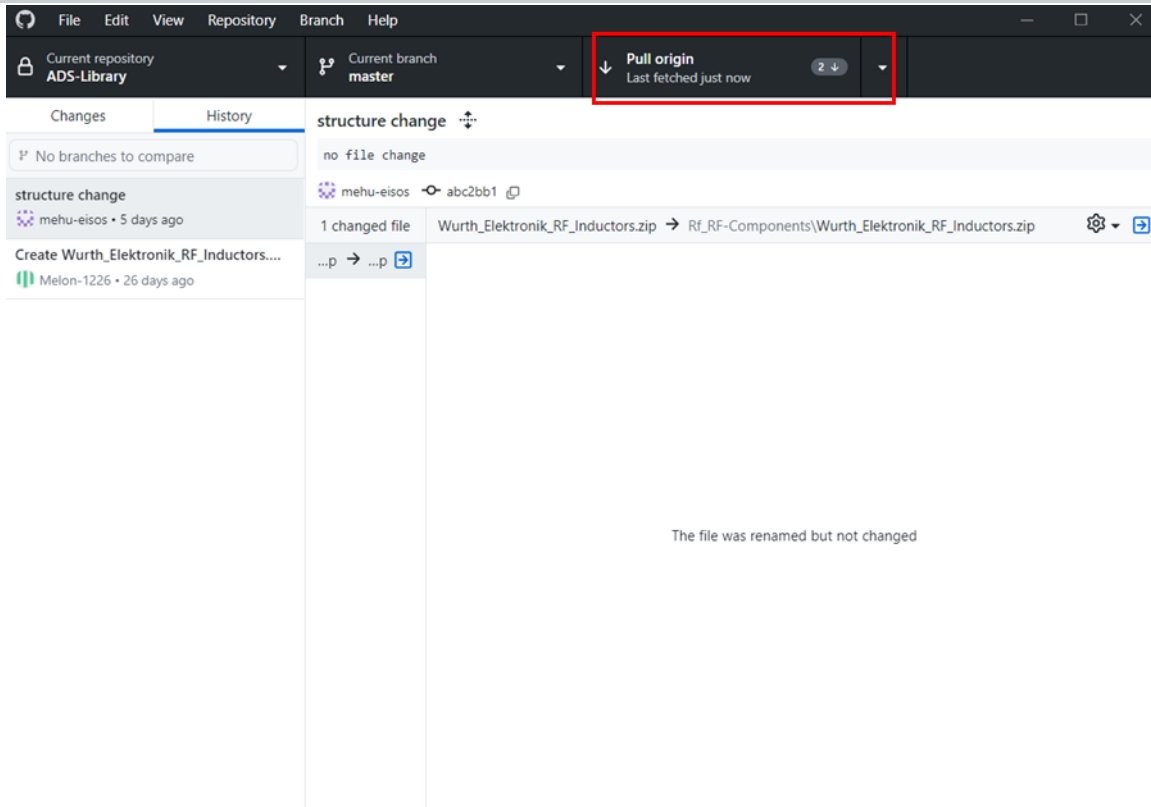


Figure 10: Synchronize from GitHub

Use the models in your local folder as introduced in Chapter 2.

ADS-Library > Signal & Communications > RF Component					Search
Name	Date modified	Type	Size		
Wurth_Elektronik_Antenna_WE_MCA.zip	7/15/2024 2:11 PM	Compressed	251 KB		
Wurth_Elektronik_RF_Inductor_WE_ACHC.zip	7/15/2024 2:12 PM	Compressed	374 KB		
Wurth_Elektronik_RF_Inductor_WE_CAIR.zip	7/15/2024 2:12 PM	Compressed	2,095 KB		
Wurth_Elektronik_RF_Inductor_WE_KI.zip	7/15/2024 2:12 PM	Compressed	10,634 KB		
Wurth_Elektronik_RF_Inductor_WE_KIHC.zip	7/15/2024 2:12 PM	Compressed	3,180 KB		
Wurth_Elektronik_RF_Inductor_WE_MK.zip	7/15/2024 2:12 PM	Compressed	6,901 KB		
Wurth_Elektronik_RF_Inductor_WE_RFH.zip	7/15/2024 2:12 PM	Compressed	585 KB		
Wurth_Elektronik_RF_Inductor_WE_RFI.zip	7/15/2024 2:12 PM	Compressed	1,907 KB		
Wurth_Elektronik_RF_Inductor_WE_TCI.zip	7/15/2024 2:12 PM	Compressed	1,466 KB		

Figure 11: Use for simulation

### IMPORTANT NOTICE

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### USEFUL LINKS



Application Notes

[www.we-online.com/apnotes](http://www.we-online.com/apnotes)

**REDEXPERT Design Platform**



Toolbox

[www.we-online.com/toolbox](http://www.we-online.com/toolbox)



Product Catalog

[www.we-online.com/products](http://www.we-online.com/products)

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