DIGITAL WE DAYS 2024

INTRODUCTION TO REDEXPERT - EASY COMPONENT SELECTION AND PERFORMANCE SIMULATION

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WÜRTH ELEKTRONIK MORE THAN YOU EXPECT

WHAT IS REDEXPERT ?

Würth Elektronik's online component selection, simulation and design platform

- Launched in 2015

- Online platform: https://redexpert.we-online.com

- 41 product family modules and growing

- 18 design tools and growing

Technical platform for engineers

Contains realistic lab measurement data of components

Making engineer's life easier

Datasheet v2.0

Design tool for specific applications with component specific info
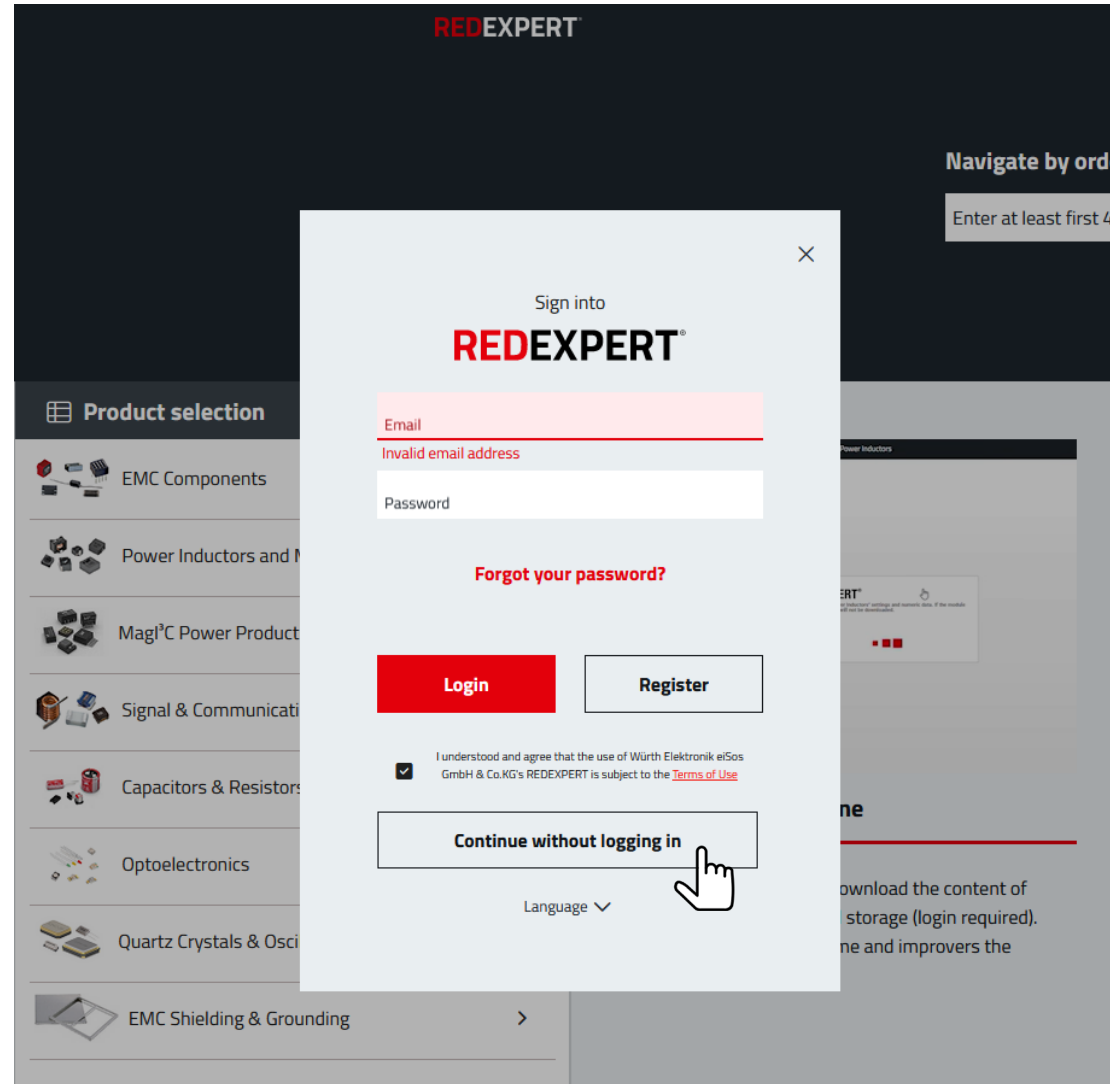
Focused on "Design-in"

Interactive calculations

REGISTER

- No need to register:
    - **Data is freely available**
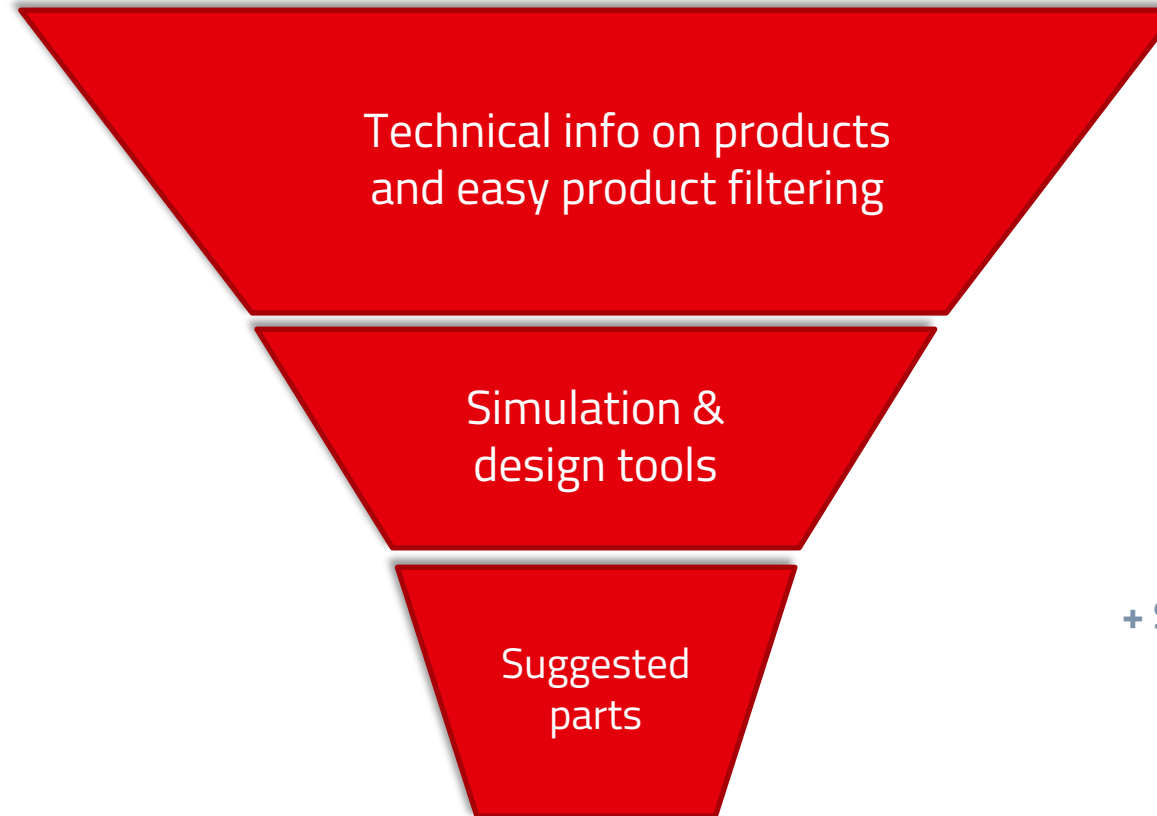   - **Free samples can be requested**

What do you get when registering for free?

- Pin favourites

- See recently visited

- Freely add and move chart sliders

- Download charts in SVG format

- Manual loss calculation tool

- See extra data columns in table

WHY REDEXPERT ?

2767 Power Inductors, **3504** Aluminium Elektrolytic & Polymer Capacitors, **2514** PCB ferrites, ...

Technical info on products and easy product filtering

Simulation & design tools

Suggested parts

+ Share components and selection

MORE THAN YOU EXPECT

The best part for you!

GETTING STARTED

Landing page

- Design Tools / Product Selection

- Favorites

- Menu

- Learn more

https://redexpert.we-online.com/

COMPONENT SELECTOR

Basic functionality

- Filter
- Organise columns
- Table column sorting
- Select
- Add to basket and free samples
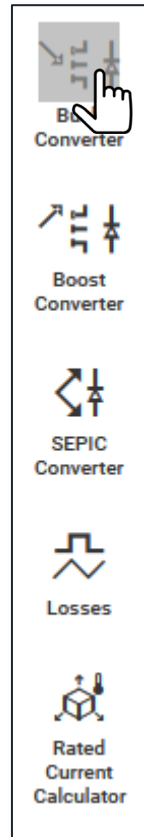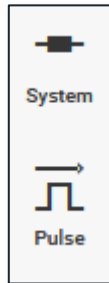- Share selection
- Tray bar

Link

Charts

- chart panels & export
- Slider
- compare & filter
- Tidy up

Link

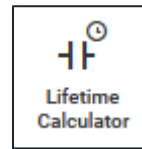REDEXPERT® WE

EMBEDDED DESIGN TOOLS

POWER INDUCTORS

ELECTROLYTIC CAPACITORS

FLYACK TRANSFORMERS

WIRELESS CONNECTIVITY

PCB FERRITES

System

Pulse

Buck Converter

Boost Converter

SEPIC Converter

Losses

Rated Current Calculator

Lifetime Calculator

WIRELESS POWER TRANSMISSION

Resonance Tank

Disc. Mode

Boundary Mode

Quasi Resonant Mode

Range Estimator

Energy Consump

Link

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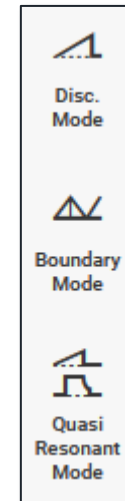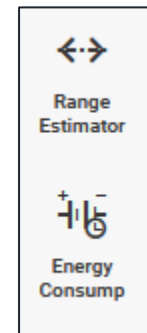
DC-DC CONVERTERS

Proprietary AC loss model

- Uses real core:
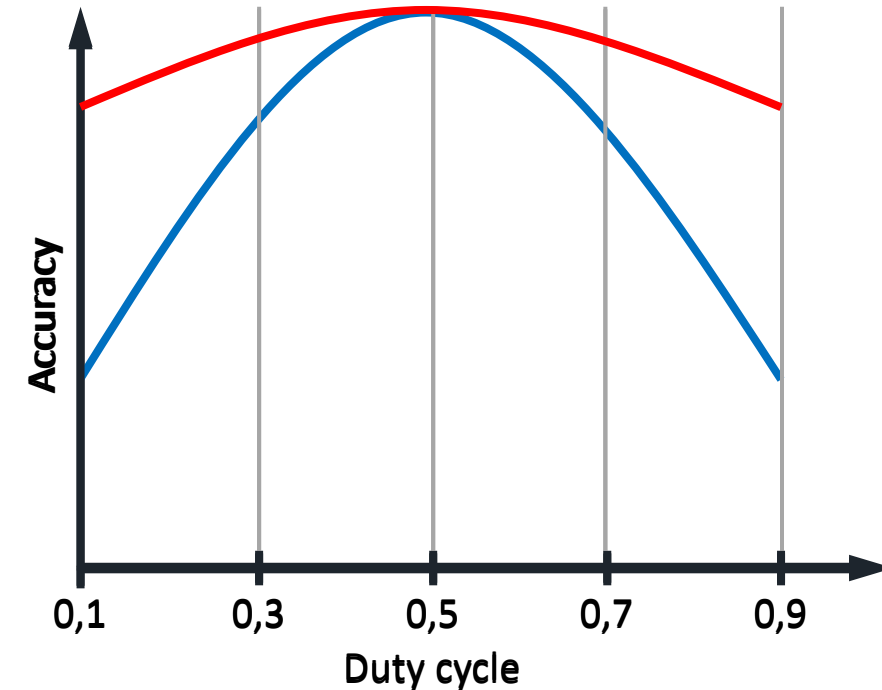 - material (NiZn, MnZn, etc)
  - shape
  - air-gap
  - winding
- Uses point of operation:
  - square voltage
  - triangular current
  - DC-offset
- Combined AC core and copper losses

  (not just core)

Würth model

Steinmetz model

Highest accuracy over wide d.c. range

STAND-ALONE DESIGN TOOLS

- New style design tool
- Cross product family
- Parts recommendation

EMI Filter Designer

- Uses component equivalent models

Link

Magic Power Module Designer

- Uses DC bias and module's operating conditions

Link

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Questions
& Answers

We are here for you now!
Ask us directly via our chat or via E-Mail.

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