



The value package:
EMC components,
inductors and more

WÜRTH ELEKTRONIK EMC & Inductive Solutions

No matter if communication technology, machinery or many other applications if its using state-of-the-art electronics: Reliable EMC-protection and efficient inductors are mandatory for successful product developments.

It is essential that you have a reliable supplier with a comprehensive range who makes sure that simple requirements don't turn out to become problems: Würth Elektronik. So you can concentrate on what's really important for you – your product.

Würth Elektronik is an Allied Company of the internationally active Würth Group which employed 38,000 people and reached a turnover of about 5.2 billion US Dollars in 2002. Especially the division EMC & Inductive Solutions within Würth Elektronik can look back on annual sales growth of 40-50% in the last four years – a definite proof of trust in our products and consulting competence by both, smaller customers as well as well-known companies.

Würth Elektronik develops, manufactures and distributes inductors and EMC components like chip beads, patented snap-ferrites, common-mode-chokes, shielding material and high frequency ceramic filters. All products are designed to fulfill the most demanding standards such as FCC and CE.

Our first priority at Würth Elektronik lays on competent consultation of our customers. Specially trained sales reps, field application engineers and distribution partners support you two ways: either already in the design-in process where they put in valuable knowledge in the early stages of the product development; or select from the variety of possibilities we can offer you post-production to ensure your EMC compliance. A service that our customers and partners highly appreciate:



HÖFT & WESSEL

FUJITSU
COMPUTERS
SIEMENS

ebmpapst

KATHREIN



OTIS

BinTec

JUNGHEINRICH

B/S/H/

BSH BOSCH UND SIEMENS HAUSGERÄTE GMBH



more than you expect...

... that's what we promise our customers. We regard ourselves not just as a manufacturer of components, we offer you a whole package of services for your convenience.

Availability ex stock

In all countries with Würth Elektronik subsidiaries you can get sample deliveries and regular orders within 3-5 days. We deliver all catalog products ex-stock. **Feel free to test us.**

Samples

All samples for your initial testing are delivered free of charge.

Innovative products

Our technical know-how has been awarded several global patents for our clever design and a high quality production with self-developed tools.

Technical support

We have a highly qualified technical sales force as well as a customer service department that are at your disposal for all your technical questions concerning EMC and inductors.

Services, publications and documentations

Customer service to us means more than just selling components. We support you e.g. with our design-in handbook „trilogy of inductors“ for perfect EMC & Inductive Solutions. In this handbook we share our technical knowledge with you in the description of more than 80 specific customer applications such as switching power supplies and Bluetooth transmitters. For products and their technical data you'll find information either in our printed catalog or you visit us at:

www.we-online.com



You find Würth Elektronik companies in Germany, USA, UK, Austria, France, Ireland, Taiwan, China and the Netherlands.

Distributors for Würth Elektronik components are located in the Far East, Finland, Spain, Switzerland and throughout all of Europe.



Products

SMD Power Inductors

WE-PD, WE-PD2, WE-PD3, WE-PD4,
WE-DD, WE-TPC

Description

These small dimension chokes are perfectly suited for switching regulators with operating frequency up to 5 MHz and currents up to 35 A. They are available also with shielding to minimize EMC problems.

Characteristics

- high energy capacity
- operating temperature -40°C to +85°C
- storage temperature -40°C to +105°C
- inductor range 1-1000 μ H

Applications

For high efficiency and high frequency switch controller, compact DC-DC and suppression chokes up to 10 MHz. Recommended for applications with: National Semiconductor, Linear Technology, Texas Instrument and Fairchild Semiconductor.



High Current Inductor WE-HC, WE-HCF

Description

For high frequency switching regulators like Multiphase or PolyPhase™ this very flat inductor allows currents up to 40 A. Because of its flat wire with a big surface and the Superflux material this inductor is perfect for high currents and restricted board space applications.

Characteristics

- flat wire enabling less skin effect for greater voltage transmission
- very low stray field
- low profile
- max. rated current: 40 A
- operating temperature -40°C to +130°C
- inductor range 0.1-2.7 μ H

Applications

High frequency switch controller for:

- graphic cards
- motherboards
- laptop computers
- industrial PCs
- PDAs

Ferrite Cores STAR-TEC, STAR-FLAT, STAR-RING

Description

These patented products offer: a safety lock that eliminates air gap, a safety key for opening, cable squeeze protection, pre-adjustment for cable.

Characteristics

- internal locking
- only authorized removal possible
- ergonomic design
- no additional mounting parts necessary

Applications

STAR-TEC: computers, terminals, modems, SCSI, electronic devices
 STAR-FLAT: medical care, signal lines in computer and telecommunication appliances
 STAR-RING: data line, computer terminals, switchgear cabinets, industrial controls

SMD-Ferrites, Chip Beads

Description

These chip beads can be directly mounted on the PCB and offer excellent anti-EMI properties and low DC resistance. Closely placed to the interference source impedances up to 3,000 Ohms can be reached.

Characteristics

- sizes from 0402 to 1812
- reliable Ni-Sn electrodes
- suitable for wave and reflow soldering as well as pasting
- current up to 6 A

Applications

Perfect for data lined filter and for decoupling of distribution voltage to build up \bar{n} - or T-Filters.



Common Mode and Line Chokes WE-VB2, WE-SL2, WE-LF, WE-CNS, WE-CMB

Description

WE-VB2: SMD line chokes
WE-SL2: common mode SMD line filter
WE-LF: current-compensated chokes
WE-CNS: common mode SMD multilayer line filter
WE-CMB: current-compensated chokes

Characteristics

- WE-VB2: miniature housing with 4 poles, ring core for small stray field, nom.voltage 50 VDC (60 VDC max.)
- WE-SL2: current-compensated, 4 pole SMD miniature housing, nom.voltage 80 VDC
- WE-LF: 4-pin-housing, compact size, minimal stray field
- WE-CNS: high common-mode suppression, extremely small (0805), impedances up to 1200 Ω
- WE-CMB: broadband screening, compact design, highest possible current with small sizes

Applications

- WE-VB2: damping of common mode interferences, filter for video and audio signals, telecommunications
- WE-SL2: BUS-systems, filter for signal and data lines, sensors
- WE-LF: main filters, power electronics, SMPS
- WE-CNS: USB 2.0, IEEE 1394, firewire, power supply filter
- WE-CMB: power electronics, power line in- & output filter



SMD Multilayer Ceramic Inductor WE-MK, RF-Components WE-LPF, WE-BPF, WE-BAL, WE-MCA

Description SMD Multilayer Ceramic Inductor

Sizes from 0201 with inductance values from 1-680 μH.

Description RF-Components

Key products for Bluetooth™ RF-frontend, reproducible and guaranteed filter characteristics in a single component, technical design-in support, all components available ex stock, special Bluetooth™-Designer-Kits.

Characteristics

- operating temperature -40°C to +85°C
- storage temperature -55°C to +100°C
- insizes from 0402 up to 1210
- guaranteed filter characteristics over a wide temperature range

Applications

- RF-applications in the area of 0.8 to 6 GHz
- wireless communication systems like DECT, Bluetooth™, WLAN, GSM, PACS, PHS



Shielding Material WE-LT, WE-GS, WE-ST

Description

WE-LT: Copper fabric guarantees excellent surface conductivity. Conductive fabric profile
WE-GS: Elastomer Core covered with Monel-fabric
WE-ST: Conductive nylon weave

Characteristics

- WE-LT: non conductive adhesive tape
- WE-GS: excellent screening effect
- high elasticity
- protects against dust and air circulation
- WE-ST: extremely high screening

Applications

- computer case
- LCD-Panels
- measuring instruments
- WE-ST: wires, cables, cabletrees, lines



Power Elements

Description

An excellent low cost method for distributing high current on and off the boards these products have been developed for easy handling. They can be mounted in press-in technique without welding. This way you avoid cold welding spots. Can stand 10 A per Pin.

Characteristics

- material CuZn 39 Pb3
- surface: copper with tin plating
- thickness of PCB 1.6 to 3.2 mm
- extraction standard DIN 41611

Applications

For all applications where power up to 360 A is put on or taken from a PCB



WERI-Connectors

Description

Interface solutions from Würth Elektronik. No matter if pin or female headers, IDC sockets, low profile box headers, PLCC-sockets or D-SUB connectors. You can connect PCB on PCB or PCB on flat cable with the right component from Würth Elektronik.

Characteristics

- mating cycles: 200
- current-carrying capacity from 1-5 A
- grid dimension: 2.54 mm or 1.27 mm
- selective or full gold plated components

Applications

Connections of PCB on PCB or flat cable



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