

# Passive Components One-Click Selection Guide

The pictures are linked to the product page.



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EMC Components			Power Magnetics			Signal & Communications																				
<h3>Ferrites for PCB Assembly</h3> <p><b>WE-CBF</b> Impedance @ 100 MHz: 5 – 2700 Ω DCR: 0.008 – 1.5 Ω Rated current: 50 – 6000 mA Frequency range: 6 – 2000 MHz Sizes: 0402 – 1812</p> <p><b>WE-CBF HF</b> Impedance @ 100 MHz: 180 – 1000 Ω DCR: 0.25 – 1.8 Ω Rated current: 50 – 600 mA Frequency range: 300 – 3000 MHz Sizes: 0402 – 0603</p> <p><b>WE-MPSB</b> Impedance @ 100 MHz: 56 – 550 Ω DCR: 0.004 – 0.035 Ω Rated current: 4000 – 10000 mA Frequency range: 1 – 3000 MHz Sizes: 1612 – 3312</p> <p><b>WE-PBF</b> Impedance @ 100 MHz: 42 – 98 Ω DCR: 0.6 – 0.9 mΩ Rated current: 6 A Frequency range: 6 – 2000 MHz</p> <p><b>WE-PF</b> DCR: 9 – 30 mΩ Rated current: 4.5 – 10 A Frequency range: 1 – 100 MHz</p> <p><b>WE-CMS</b> Impedance @ 25 MHz: 34 Ω Impedance @ 100 MHz: 52 Ω Frequency range: 10 – 1000 MHz</p> <p><b>WE-SUKW</b> Impedance @ 25 MHz: 272 – 425 Ω Impedance @ 100 MHz: 416 – 580 Ω Frequency range: 0.1 – 800 MHz</p> <p><b>WE-UKW</b> Impedance @ 25 MHz: 145 – 920 Ω Impedance @ 100 MHz: 230 – 1240 Ω Frequency range: 0.1 – 500 MHz</p> <p><b>WE-MLS</b> Impedance @ 25 MHz: 150 – 292 Ω Impedance @ 100 MHz: 150 – 334 Ω Frequency range: 10 – 800 MHz</p>			<h3>Ferrites for Cable Assembly</h3> <p><b>WE-TOF</b> Impedance 1 Turn @ 25 MHz: 25 – 110 Ω Impedance 1 Turn @ 100 MHz: 37 – 200 Ω Cable diameter: 3.0 – 33.4 mm Frequency range: 1 – 2000 MHz</p> <p><b>WE-AFB</b> Impedance 1 Turn @ 25 MHz: 44 – 300 Ω Impedance 1 Turn @ 100 MHz: 70 – 451 Ω Cable diameter: 3.3 – 17.5 mm Frequency range: 1 – 2000 MHz</p> <p><b>WE-SAFB</b> Impedance 1 Turn @ 25 MHz: 20 – 144 Ω Impedance 1 Turn @ 100 MHz: 40 – 278 Ω Cable diameter: 0.56 – 4 mm Frequency range: 1 – 1000 MHz</p> <p><b>WE-SD</b> Inductance: 2 – 10 μH DCR: 1.7 – 33 mΩ Rated current: 2.5 – 15 A Frequency range: 0.01 – 90 MHz</p> <p><b>WE-FI</b> Inductance: 8.2 – 860 μH DCR: 0.01 – 0.45 Ω Rated current: 0.4 – 5 A Frequency range: 0.01 – 0.3 MHz</p> <p><b>WE-CNSW</b> Impedance @ 100 MHz: 67 – 2200 Ω DCR: 0.25 – 1.2 Ω Rated current: 200 – 400 mA Frequency range: 10 – 1000 MHz</p> <p><b>WE-SL1</b> Inductance: 10 – 330 μH DCR: 0.16 – 0.3 Ω Rated current: 300 mA Frequency range: 9 – 600 MHz</p> <p><b>WE-SL2</b> Inductance: 10 – 6500 μH DCR: 0.08 – 0.95 Ω Rated current: 0.4 – 1.6 A Frequency range: 0.01 – 600 MHz</p> <p><b>WE-SL3</b> Inductance: 20 – 100 μH DCR: 0.14 – 0.45 Ω Rated current: 450 – 700 mA Frequency range: 9 – 600 MHz</p> <p><b>WE-SL5</b> Inductance: 120 – 4700 μH DCR: 0.025 – 0.72 Ω Rated current: 350 – 2500 mA Frequency range: 9 – 600 MHz</p> <p><b>WE-SL5 HC</b> Inductance: 5 – 9 μH DCR: 0.0055 – 0.011 Ω Rated current: 3.5 – 5 A Frequency range: 0.5 – 300 MHz</p> <p><b>WE-SL</b> Inductance: 35 – 4700 μH DCR: 0.035 – 0.85 Ω Rated current: 0.2 – 2.7 A Frequency range: 0.01 – 600 MHz</p> <p><b>WE-CMB</b> Inductance: 0.5 – 39 mH DCR: 1.7 – 3000 mΩ Rated current: 0.3 – 35 A Frequency range: 0.1 – 50 MHz</p>			<h3>Common Mode Chokes</h3> <p><b>WE-CMB HC</b> Inductance: 0.175 – 0.7 mH DCR: 2.7 – 13 Ω Rated current: 5 – 10 mA Frequency range: 0.1 – 100 MHz</p> <p><b>WE-CMB NIZn</b> Inductance: 14 – 110 μH DCR: 27 – 80 mΩ Rated current: 1.5 – 10 A Frequency range: 4 – 500 MHz</p> <p><b>WE-CMBH</b> Inductance: 1 – 7 mH DCR: 12.5 – 80 mΩ Rated current: 3.5 – 10 A Frequency range: 0.001 kHz – 30 MHz</p> <p><b>WE-LF</b> Inductance: 0.4 – 50 mH DCR: 0.02 – 2.6 Ω Rated current: 0.3 – 6 A Frequency range: 0.1 – 500 MHz</p> <p><b>WE-LF SMD</b> Inductance: 0.7 – 47 mH DCR: 0.03 – 2.6 Ω Rated current: 0.3 – 4 A Frequency range: 0.1 – 500 MHz</p> <p><b>WE-FC</b> Inductance: 0.82 – 33 mH DCR: 0.065 – 2.5 Ω Rated current: 0.3 – 2 A Frequency range: 0.01 – 20 MHz</p> <p><b>WE-TV5</b> Operating Voltage: 3.3 – 5 V<sub>DC</sub> Capacitance @ 1 MHz: 0.25 – 55 pF Channels: 2 – 6 (+VDD) Unidirectional, Rail-to-Rail</p> <p><b>WE-VE/WE-VEA</b> Operating Voltage: 5 – 24 V<sub>DC</sub> Capacitance @ 1 MHz: 0.2 – 120 pF Size: 0201 – 0805/0508 – 0612</p> <p><b>WE-VS</b> Operating voltage: 5.5 – 85 V<sub>DC</sub> Inductance: 20 – 1200 nH W<sub>DC</sub>: 0.02 – 12 J C<sub>DC</sub>: 70 – 13600 pF Size: 0402 – 2220</p> <p><b>WE-VD</b> Operating Voltage: 18 – 1465 V<sub>DC</sub> Diameters: 5 – 20 mm I<sub>max</sub>: 0.1 – 10 kA W<sub>app</sub>: 0.7 – 496 J Reference for UL/CSA/VDE</p>			<h3>Power Inductors</h3> <p><b>WE-PMI</b> Inductance: 0.47 – 10 μH DCR: 2.7 – 700 mΩ Rated current: 0.3 – 2 A Frequency range: 1 – 10 MHz</p> <p><b>WE-GF</b> Inductance: 0.1 – 1000 μH DCR: 0.32 – 50 Ω Rated current: 30 – 450 mA Frequency range: 0.1 – 100 MHz</p> <p><b>WE-LQ</b> Inductance: 1 – 2200 μH DCR: 0.08 – 63 Ω Rated current: 0.04 – 1.8 A Frequency range: 10 – 1000 MHz</p> <p><b>WE-TPC</b> Inductance: 0.11 – 1500 μH DCR: 0.0045 – 9 Ω Rated current: 80 – 8500 mA Frequency range: 0.1 – 10 MHz</p> <p><b>WE-PD</b> Inductance: 0.47 – 1500 μH DCR: 0.003 – 9.44 Ω Rated current: 0.2 – 23.5 A Frequency range: 0.1 – 10 MHz</p> <p><b>WE-PDF</b> Inductance: 0.22 – 30 μH DCR: 0.08 – 49.2 Ω Rated current: 3.7 – 10.3 A Frequency range: 0.1 – 10 MHz</p> <p><b>WE-PD2</b> Inductance: 0.12 – 820 μH DCR: 0.0035 – 2.55 Ω Rated current: 0.32 – 10 A Frequency range: 0.1 – 10 MHz</p> <p><b>WE-PD3</b> Inductance: 1 – 1000 μH DCR: 0.027 – 3.2 Ω Rated current: 0.19 – 3.9 A Frequency range: 0.1 – 10 MHz</p> <p><b>WE-PD4</b> Inductance: 0.47 – 10000 μH DCR: 0.016 – 39 Ω Rated current: 0.07 – 18 A Frequency range: 0.1 – 10 MHz</p> <p><b>WE-DD</b> Inductance: 1.3 – 220 μH DCR: 0.016 – 1.73 Ω Rated current: 0.3 – 8.6 A Frequency range: 0.1 – 10 MHz</p> <p><b>WE-LHMI</b> Inductance: 0.1 – 22 μH DCR: 0.8 – 470 mΩ Rated current: 1 – 24 A Frequency range: 0.01 – 3 MHz</p> <p><b>WE-HCI</b> Inductance: 0.13 – 47 μH DCR: 0.35 – 34 mΩ Rated current: 3.5 – 415 A Frequency range: 0.1 – 3 MHz</p> <p><b>WE-HCC</b> Inductance: 0.22 – 10 μH DCR: 0.51 – 20.7 mΩ Rated current: 9 – 27 A Frequency range: 0.1 – 3 MHz</p> <p><b>WE-HCF</b> Inductance: 0.7 – 10 μH DCR: 0.83 – 7.96 mΩ Rated current: 16 – 32 A Frequency range: 0.1 – 3 MHz</p>			<h3>Power Inductors</h3> <p><b>WE-HCM</b> Inductance: 0.072 – 0.4 μH DCR: 0.155 – 0.37 mΩ Rated current: 26 – 31 A Frequency range: 0.1 – 3 MHz</p> <p><b>WE-TI</b> Inductance: 1 – 22000 μH DCR: 0.006 – 55 Ω Rated current: 0.09 – 8.5 A Frequency range: 0.01 – 90 MHz</p> <p><b>WE-TIS</b> Inductance: 1.3 – 100000 μH DCR: 0.007 – 210 Ω Rated current: 0.05 – 8.5 A Frequency range: 0.001 – 10 MHz</p> <p><b>WE-SI</b> Inductance: 12 – 1619 μH DCR: 0.008 – 0.7 Ω Rated current: 0.5 – 5 A Frequency range: 0.01 – 0.1 MHz</p>			<h3>LAN Transformers</h3> <p><b>WE-LAN</b> compliant with IEEE 802.3 standards for Ethernet, Powerover Ethernet, 1 Gigabit Ethernet &amp; Power over Ethernet plus</p> <p><b>WE-LAN HV</b> Compliant with IEEE802.3 standards 4 kV Hipot test</p> <p><b>WE-RJ45 LAN / WE-RJ45 LAN HPLE</b> for ADSL Modems, LAN, embedded PCs, Hubs, Routers and Switches</p>			<h3>Telecom Transformers</h3> <p><b>WE-AMT</b> for Analog Modems</p> <p><b>WE-ISDN</b> compliant with ITUG.703 ISDN-Primary rate recommendations</p> <p><b>WE-DSL</b> suitable for IEC905 for ADSL, ADSL 2+, HDSL, SHDSL, UDSL applications</p>			<h3>Power Transformers</h3> <p><b>WE-FLEX</b> suitable for all switch mode power supply topologies like: Buck-Converter, Boost-Converter, SEPIC-Converter, Flyback-Converter, Forward-Converter and Push-Pull-Converter</p> <p><b>WE-FLEX*</b> suitable for all switch mode power supply topologies like: Buck-Converter, Boost-Converter, SEPIC-Converter, Flyback-Converter, Forward-Converter and Push-Pull-Converter</p> <p><b>WE-PoE</b> suitable for Power over Ethernet ICs</p> <p><b>WE-PoE*</b> Compliant with the 30W PoE* objectives of IEEE802.3at Suitable for PoE* powered devices</p> <p><b>WE-FB</b> for LT3573 and LT3751 of Linear Technology</p> <p><b>WE-UNIT</b> for Switch Mode Power Supply especially designed for ICs of Power Integrations, STMicroelectronics &amp; NXP</p> <p><b>WE-PFC</b> for active power factor correction and lighting applications, recommended for the ICs NCP1606B &amp; MC33262 of ON Semiconductor</p> <p><b>WE-CST</b> for Switch Mode Power Supply and AC current detection</p>			<h3>RF Inductors</h3> <p><b>WE-KI, WE-RFI, WE-RFH</b> Inductance: 1 – 47000 nH Sizes: 0402, 0603, 0805, 1008 Frequency range: 90 – 5000 MHz</p> <p><b>WE-TCI</b> Inductance: 1 – 68 nH Sizes: 0402, 0603 Frequency range: 90 – 5000 MHz</p> <p><b>WE-MK</b> Inductance: 1 – 220 nH Sizes: 0201, 0402, 0603 Frequency range: 70 – &gt;10000 MHz</p>		
<h3>Ferrites for Cable Assembly</h3> <p><b>STAR-BUENO</b> Impedance 1 Turn @ 25 MHz: 100 – 1180 Ω Impedance 1 Turn @ 100 MHz: 150 – 250 Ω Cable diameter: 2.5 – 8.5 mm Frequency range: 5 – 2000 MHz</p> <p><b>STAR-FIX</b> Impedance 1 Turn @ 25 MHz: 145 – 151 Ω Impedance 1 Turn @ 100 MHz: 246 – 270 Ω Cable diameter: 4.5 – 12.5 mm Frequency range: 5 – 2000 MHz</p> <p><b>STAR-FIX LFS</b> Impedance 1 Turn @ 25 MHz: 30 Ω Impedance 1 Turn @ 100 MHz: 45 Ω Cable diameter: 4.5 – 8 mm Frequency range: 0.3 – 30 MHz</p> <p><b>STAR-TEC</b> Impedance 1 Turn @ 25 MHz: 98 – 176 Ω Impedance 1 Turn @ 100 MHz: 182 – 321 Ω Cable diameter: 3.5 – 12.5 mm Frequency range: 5 – 2000 MHz</p> <p><b>STAR-GAP</b> Impedance 1 Turn @ 25 MHz: 28 – 35 Ω Impedance 1 Turn @ 500 MHz: 345 – 400 Ω Cable diameter: 4.5 – 12.5 mm Frequency range: 100 – 2000 MHz</p> <p><b>STAR-RING</b> Impedance 1 Turn @ 25 MHz: 64 – 142 Ω Impedance 1 Turn @ 100 MHz: 119 – 327 Ω Cable diameter: 8 – 27 mm Frequency range: 5 – 2000 MHz</p> <p><b>STAR-FLAT</b> Impedance 1 Turn @ 25 MHz: 42 – 97 Ω Impedance 1 Turn @ 100 MHz: 114 – 194 Ω No. of Pins: 26 – 50 Frequency range: 5 – 2000 MHz</p>			<h3>Filter Chokes</h3>			<h3>Circuit Protection</h3>			<h3>EMI Shielding Material</h3> <p><b>EMI Shielding Material</b> Conductive shielding gasket, earthing belts, conductive foam, EMI shielding tape, earthing nylon clips</p>			<h3>D-SUB Filter Connectors</h3> <p><b>D-SUB Filter Connectors</b> Bent 90°, solder cup, solder pin straight, filter adapter</p>			<h3>LTCC Components</h3> <p><b>WE-LPF</b> Frequency range: 902 – 5875 MHz Sizes: 0603, 0805</p> <p><b>WE-BPF</b> Frequency range: 2400 – 5920 MHz Sizes: 0805, 1008</p> <p><b>WE-BAL</b> Frequency range: 1400 – 5875 MHz Sizes: 0603, 0805</p> <p><b>WE-MCA</b> Frequency range: 868 – 5875 MHz</p>											

more than you expect



# Electromechanical One-Click Selection Guide

The pictures are linked to the product page.



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## WERI Connectors

## Switches

## Assembly Technique

### Board-to-Board

### Wire-to-Board

### Input/Output (I/O)

### Dip Switches

### Rotary Switches

### Spacer Studs & Round Spacers

#### Pin Header WR-PHD

Pitch: 1.27 ~ 2.54 mm  
Construction: THT, SMT  
Type: straight, angled, board stacker  
Rows: single, dual



#### Male Header WR-MPC3

Rows: 1 ~ 2  
Type: vertical, angled  
Pitch: 3.0 mm  
No. of poles: 2 ~ 24  
Construction: THT, SMT  
PCB type, cable housing, terminal



#### Female Connector WR-DSUB

Type: IDC, solder bucket, crimp housing, terminal/contact, straight, angled  
Standard, high density, cable, PCB



#### 2.54 mm THT horizontal WS-BS

Actuator: flat, raised  
No. of poles: 1 ~ 12  
Connection type: THT  
non-washable



#### 7x7 mm SMD Arrow Type WS-RAS

Position: 10 & 16  
Code: real, complement  
Connection type: SMT  
washable



#### Socket Header WR-PHD

Pitch: 1.27 ~ 2.54 mm  
Construction: THT, SMT  
Type: straight, angled, bottom entry



#### Female Receptacle & Terminal WR-MPC3

Rows: 1 ~ 2  
Pitch: 3.0 mm  
No. of poles: 2 ~ 24  
Cable housing, terminal



#### Male Connector WR-DSUB

Type: IDC, solder bucket, crimp housing, terminal/contact, straight, angled  
Standard, high density, cable, PCB



#### 2.54 mm right angled WS-RA

Actuator: flat, raised  
No. of poles: 2 ~ 12  
Connection type: THT  
non-washable



#### 10x10 mm SMD

Position: 10 & 16  
Code: real, complement  
Connection type: SMT  
washable



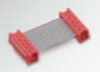
#### Jumper WR-PHD

Pitch: 1.27 ~ 2.54 mm



#### MiniModule Connector WR-MM

Gender: male IDC, transition  
Cable type



#### Communication Connector WR-COM

Shielding: shielded, half-shielded  
Construction: THT, SMT  
Type: horizontal, up right, vertical  
IEEE1394 / FireWire, MiniDin, HDMI, Mini HDMI, DVI



#### 2.54 mm Piano Type WS-PT

Actuator: flat, raised  
No. of poles: 2 ~ 12  
Connection type: THT, SMT  
non-washable



#### 7x7 mm THT WS-RAT

Position: 10 & 16  
Code: real, complement  
Connection type: THT  
washable



#### MiniModule Connector WR-MM

Gender: female, male  
Construction: THT, SMT  
Type: straight, angled, w & w/o latch, w & w/o polarization  
PCB type



#### Pre-crimped contact WR-WTB, WR-MPC3, WR-MPC4

Pitch: 1.25, 1.50, 2.00, 2.50, 2.54, 3.00, 3.96, 4.20 mm  
Male & Female



#### Card Connectors

Type: Mini SIM, SD Card, Micro SD, Compact Flash



#### 2.54 mm horizontal, small compact WS-IC

Actuator: flat, raised  
No. of poles: 1 ~ 12  
Connection type: THT, SMT  
washable, non-washable



#### 10x10 mm THT

Position: 10 & 16  
Code: real, complement  
Connection type: THT  
washable



### Spacers

#### Spacer

Length: ≤ 74.2 mm  
LED spacer, locking on both ends, locking on one end, snap rivet



### Wire-to-Board

### Input/Output (I/O)

### Terminal Block

#### Box Header WR-BHD

Pitch: 2.00 ~ 2.54 mm  
Gender: male  
Construction: THT, SMT  
Type: straight, angled  
PCB type



#### Horizontal Shielded Modular Jack WR-MJ

Construction: THT, SMT  
LED: with, without  
xPxC: 6P6C, 8P8C  
Tab: up, down, down & up,  
Single & Multiport



#### Wire Protector System WR-TBL

Pitch: 3.5 & 5.0 mm  
Modularity: modular / not modular  
Wire: 1.5 ~ 3.0 mm<sup>2</sup>  
PCB type



### Tact Switches

### Power Elements

### Power Elements

#### Press-Fit Technology

Two rows pin-plate, pin-plate circumference, full plain pin-plate, power elements 90° two rows pin-plate, power elements plain pin-plate, two part power terminals, power elements in press fit-technology



### Cable Holder & Cable Ties

#### Cable Holder

Mounting: screwable, snap-in, self-adhesive  
Cable tie, cable twister, flat cable, round cable, self-adhesive base



#### IDC Connector WR-BHD

Pitch: 2.00 ~ 2.54 mm  
Gender: female, male, transition  
IDC for cable



#### Horizontal Half-shielded Modular Jack WR-MJ

Construction: THT  
LED: without  
xPxC: 6P6C, 8P8C  
Tab: down  
Sizes: 0402 ~ 1812



#### Rising Clamp System WR-TBL

Pitch: 2.54 ~ 10.16 mm  
LED: modular / not modular  
Wire: 0.8 ~ 8.5 mm<sup>2</sup>  
PCB type



#### Male Header WR-MPC4

Type: vertical, angled  
Rows: 1-2  
Pitch: 4.2 mm  
No. of poles: 2 ~ 24  
PCB type, cable housing, terminal



#### Horizontal Plastic Modular Jack WR-MJ

Construction: THT, SMT  
LED: without  
xPxC: 4P4C, 6P2C, 6P4C, 6P6C, 8P8C  
Tab: up, down,  
Single & Multiport



#### Pluggable Cable System WR-TBL

Pitch: 3.5 ~ 7.62 mm  
Modularity: modular / not modular  
Wire: 0.13 ~ 3.0 mm<sup>2</sup>  
Optional: Coding key



#### Female Receptacle & Terminal WR-MPC4

Rows: 1-2  
Pitch: 4.2 mm  
No. of poles: 2 ~ 24  
Cable housing, terminal



#### Vertical Shielded Modular Jack WR-MJ

Construction: THT  
LED: with, without  
xPxC: 8P8C



#### Pluggable PCB System WR-TBL

Pitch: 3.5 ~ 7.62 mm  
Modularity: modular, not modular  
Gender: female / male  
Optional: Coding key, reversed types available



#### Male Header WR-WTB

Pitch: 1.25 ~ 3.96 mm  
Construction: THT, SMT  
Type: vertical, angled, horizontal  
PCB type



#### Vertical Plastic Modular Jack WR-MJ

Construction: THT, SMT  
LED: without  
xPxC: 4P4C, 6P4C, 6P6C, 8P8C



#### Spring Clamp System WR-TBL

Pitch: 2.54 ~ 5.0 mm  
LED: not modular  
Wire: 0.5 ~ 3.0 mm<sup>2</sup>  
PCB type



#### Female Terminal Housing & Crimp Contact WR-WTB

Pitch: 1.25 ~ 3.96 mm  
Cable housing, terminal



#### Modular Jack 45° WR-MJ

Shielding: plastic, shielded  
Construction: THT  
LED: without  
xPxC: 8P8C



### FPC Connector & FFC Cable

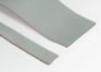
#### ZIF Connector WR-FPC

Pitch: 0.5 & 1.0 mm  
Construction: SMT  
Type: horizontal, vertical,  
Top contact, bottom contact (horizontal)



#### Ribbon Flat Cable WR-CAB

Pitch: 1.0 & 1.27 mm



#### USB Connector WR-COM

Construction: THT, SMT  
Type: horizontal, up right, vertical  
USB, Mini-USB, Micro-USB, Type A, Type B, Type AB



#### Flat Flexible Cable WR-FFC

Pitch: 0.5 & 1.0 mm  
Type: contact on same side, contact on opposite side



#### 3.5x4.7 SMD/J-Bend

Height: 1.65 mm  
Operation force: 160 ~ 220  
Life cycle: 100000 ~ 200000



more than you expect