

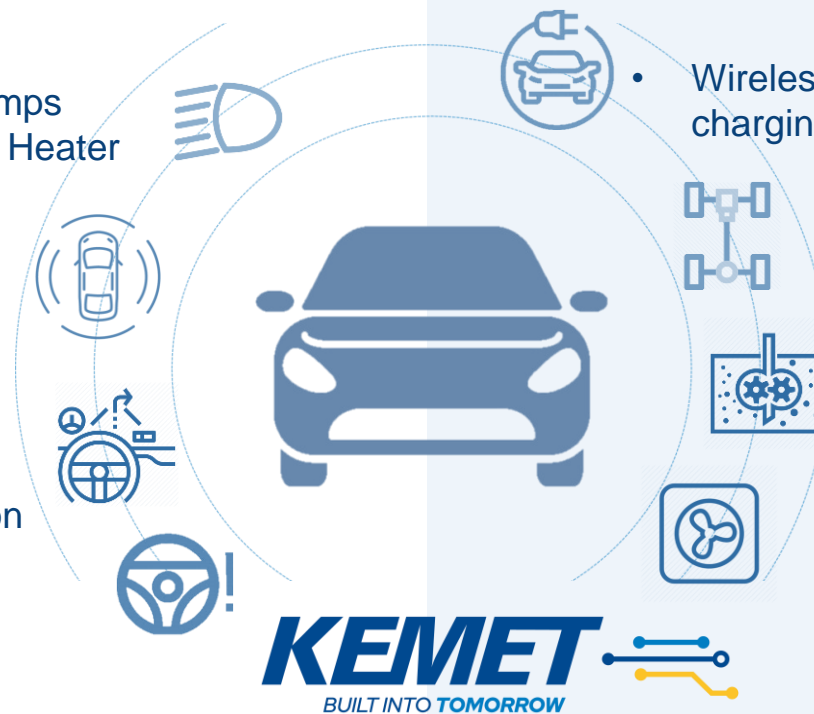
Low-Voltage (12...48V)

- LED Head Lamps
- Front Window Heater

- ADAS Cameras
- Mirrors

- Meter Cluster & Head-Up Display
- Air-Bag, ECU
- Audio, Communication & Navigation

- Electrical Water/Oil Pump
- Electrical-Power-Steering
- Blower motor control
- Air-Condition
- Power-Train



High-Voltage (400...800V)

- Wireless high power charging systems

- Drive train applications

- Oil pumps
- Blower fans
- Water pumps

- Airconditioning
- DC/DC power converter
- Electrical Heater Systems
- Onboard Charger

Magnetics for Automotive

MPCV / MPLCV Series AEC-Q200

Technology with shielded design (-40 ~to+155°C, <32A, Low DCR, high freq.)

100nH – 100µH

MPXV Series – AEC-Q200

Technology with shielded design ≤155°C & 200+ parts from 5x5 to 22x22mm)

170mA – 93A

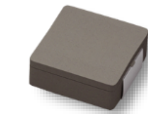
MPEV Series - AEC-Q200 (SOP Q4/2020)

with increased performance ≤180°C

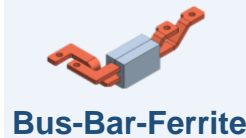
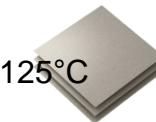
Up to 180°C

Flexsuppressor®-Sheets – FF1/EFF4 Series - AEC-Q200

High frequency absorption (≥1GHz up to 5G applications), Up to 125°C placing directly on the aggressor (e.g. cable, processor & FPGA)



SMD Power Inductor



Bus-Bar-Ferrite



Ferrite-Titles FPL Series



THT-Chokes

High saturation Mn-Zn ferrite in differential & common mode, development & simulation support

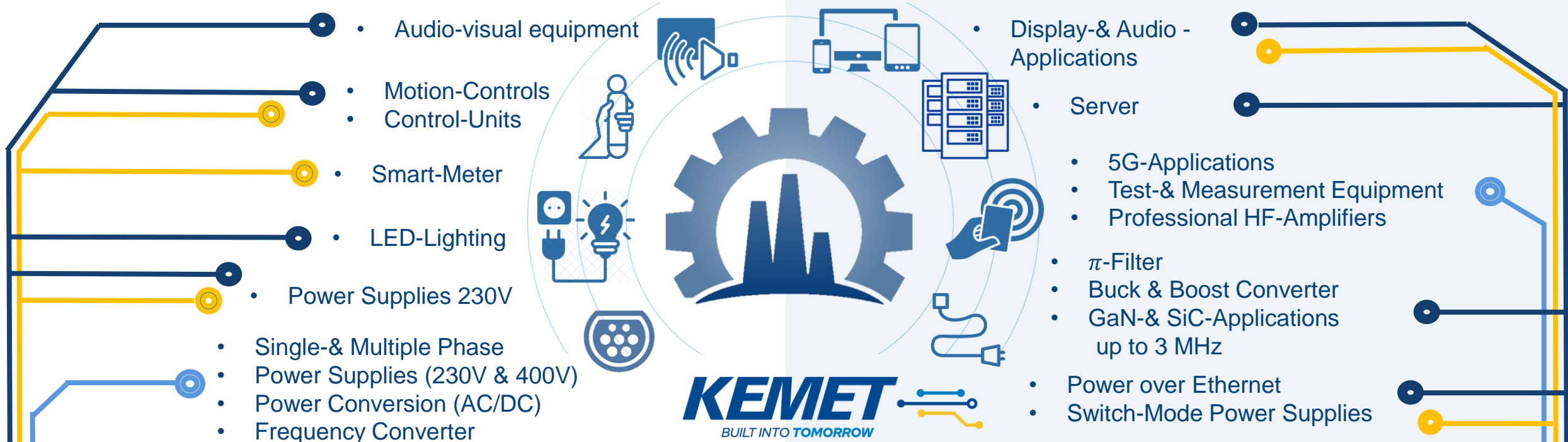
Stable performing Mn-Zn ferrite materials, standard & custom shapes with different thickness

Common (SCF) - Dual (SCN) Series
Cores Mn-Zn / nanocrystalline, flexible & fast designs (sampling & analyzing interferences)

High magnetic flux density ~450mT @ 1200A/m

3000µ permeability
PCV~320 W/cm3 @0.2T/100kHz

High µ Materials
10A – 60A
Up to 155°C
10 standard parts



Magnetics for Industrial

Common-Mode-Chokes – SSRH-Series
High Density Type, Mn-Zn, for ranges above 10kHz, Thermal Class E (120°C)

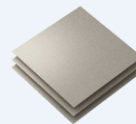
Common-Mode-Chokes – SCR/SCF-Series
Toroidal Type, SCR with Mn-Zn, SCF with Nanocrystal, Suitable for ranges above 10kHz, Thermal Class E (120°C)

Dual-Mode-Chokes – SSHB-Series
One component for common & differential EMC, Low leakage magnetic flux, reducing number of products for cost & space saving

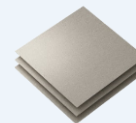
High μ to 18k μ
300mA – 40A
2.4kV testing

All Core orientations
Low Profile / Small Size

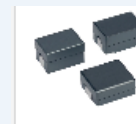
UL94 V2 or V-0 materials



Noise-Suppressor-Sheets – EF-Series
Very high frequency EMI countermeasure up to 25GHz, Quick solution



Magnetic-Sheets – M4- & RM4A-Series
NFC inductive enhancement for RFID, Improves magnetic flux convergence



SMD-Power Inductors-TPI series(105nH...230nH)
High switching frequency, Low core loss. High current Low DCR



SMD-Power Inductors – MPX-Series (0.1 μ H...100 μ H)
Own development of materials, Wide range of 200+ parts, 5x5 to 22x22mm size, robust with low DCR & high saturation

Inventor of that technology,
Flexible sheets,
105°C & 125°C
Halogen free,
UL approved &
Adhesive back

• Charging Wall-Boxes

• Charging Cables / Cord-Sets

• Aftermarket Home Charging

• oil / gas & industrial combustion

• Smart home / smart industrial

• Display-& Audio -Applications

• Home Appliances

• Semiconductor manufacturing equipment

• Smart integration

• Contact less switching

• Production Control of all industries, motors, bearings & pumps



Sensors & Actuators

AC & DC leakage sensor – FG-R05-3A

Integrated for up to 22kW, Easy to apply for IEC62752, Digital alarm outputs & test input integrated, Small footprint, Accurate linear output vs ambient temp. & supply current



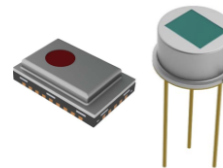
Clamp-On-Current-Sensors – C/CT-Series

Compact and slim design & flat temperature characteristics, UL 94 V-0 flame retardant case & RoHS compliant, Types for 30A (50A) & 120A (150A) rated AC currents available



Infrared gas detection with pyroelectric flame sensors -

THT analog (QFC series) & SMD I2C digital/analog (QFS series), High responsivity, Wide field of view around 100°, Rapid recovery



Pyroelectric Infrared Sensors – PL-Series

High sensitivity PIR detection, Lens less design for low range detection (also through HDPE, 120° detection angle. SMD low profile and small size design (5 x 4.8 x 1.7mm)



Vibration Sensors – VS-Series

Wide frequency range, Built-in amplifier, Integrated cable, Extremely sensitive, Low voltage 3.3 to 5V power supply, VS-JV10A with unique detachable cable & Waterproof and oil-resistant design.



Multilayer Piezoelectric Actuators-AE Series

Large generated force of 3,500 N/cm²
Operating temperature range from -25° C to +85° C
High-speed response: Driving up to about 1/3 of selfresonant frequency (in several ten kHz)

