



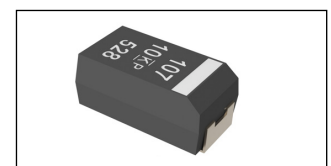
E-CHARGE



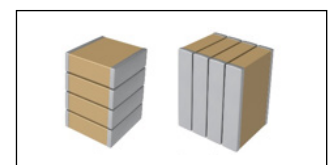
In combination with the automotive electrification trend significant investments and work has been done in charging stations. The e-charge stations beside the high power required for charging also include connectivity and sensing control where DC/DC controllers with lower voltage rails are required. Tantalum polymer product portfolio is an adequate solution.

Key Products

- KEMET T598 Series - Organic Capacitor (KO-CAP®) - Polymer
- KEMET KC-LINK with KONNEKT Technology (Commercial & Automotive Grade)
- YAGEO AC Series - Automotive Grade MLCC
- YAGEO PU Series - Power Shunt Metal Current Resistor
- Pulse PA1005 - SMT Current Sense Transformer Series
- Pulse PM2190 - EP7 series High Isolation SMT Transformer
- Pulse PH9185 - EP7 series High Isolation SMT Transformer
- Pulse PM2190 - EP7 series High Isolation SMT Transformer
- Pulse PA434x, PM434x, PA500x, PM220x Series



T598 Series



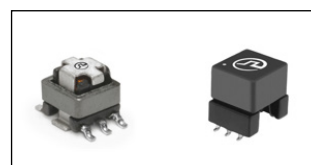
KC-Link



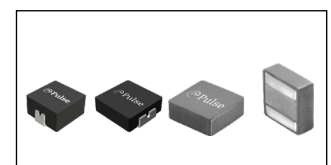
AC Series



PU Series



SMT Current Sense Transformers Series



PA434x, PM434x, PA500x, PM220x Series



E-CHARGE

YAGEO
Group

KEMET Organic Capacitor (KO_CAP®) - Automotive Grade Polymer

In combination with the automotive electrification trend significant investments and work has been done in charging stations. The e-charge stations beside the high power required for charging also include connectivity and sensing control where DC/DC controllers with lower voltage rails are required. Tantalum polymer product portfolio is an adequate solution.

Key Features

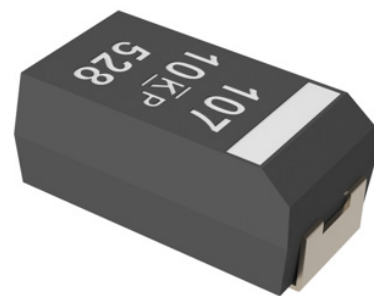
- AEC-Q200 Qualification
- Case size offering from EIA3216 to EIA7343
- Full rated voltage Range (2,5V - 75V)
- High Stability in Harsh Environmental Conditions

Key Applications

- Electronic Control Systems DC/DC (e.g Temperature)
- Connectivity Systems

Key Benefits

- Ultra Extended Life Time under typical applications
- High Volumetric Efficiency
- No piezo effect or Capacitance Loss with bias





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KEMET KC-LINK with KONNEKT Technology (Commercial & Automotive Grade)

In combination with the automotive electrification trend significant investments and work has been done in charging stations. The e-charge stations beside the high power required for charging also include connectivity and sensing control where DC/DC controllers with lower voltage rails are required. Tantalum polymer product portfolio is an adequate solution.

Key Features

- Standard and Low-Loss Orientation
- Capacitance offerings ranging from 14 – 880 nF
- DC voltage ratings from 500 – 2,000 V
- Operating temperature range of –55°C to +150°C

Key Benefits

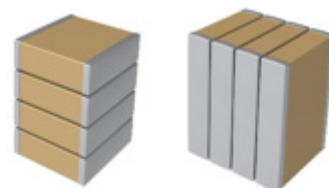
- Extremely high-power density and ripple current capability
- Extremely low equivalent series resistance (ESR)
- No capacitance shift with voltage
- Surface mountable using standard MLCC reflow profiles

Key Products

- CKC33C884KCGLCAUTO7805
- CKC33C883KJGLCAUTO7805
- CKC33C444KCGLCAUTO

Key Applications

- Wide bandgap (WBG), silicon carbide (SiC) and gallium nitride (GaN) systems
- EV/HEV (drive systems, charging)
- LLC resonant converters
- DC-LINK, Resonant, Snubber Capacitor





E-CHARGE

YAGEO AC Series - Automotive Grade MLCC

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Key Features

- AEC-Q200 qualified and PPAP ready
- IATF 16949 certified
- Board flex ≥ 2 mm
- 100% AOI
- High reliability

Key Benefits

- TC: X7R, NPO and X8R (-55°C~150°C)
- Capacitance range: 0.47 pF - 10 μ F
- $\pm 5\%$ / $\pm 10\%$ tolerance
- Case size: 0201 ~ 1812
- Voltage range: 6.3 V - 1 kV

Key Applications

- All general-purpose applications
- Entertainment
- Comfort and security
- Information





E-CHARGE

YAGEO PU Series - Power Shunt Metal Current Resistor



Key Features

- AEC-Q200 qualified
- Withstand high temperature and high humidity
- Excellent heat dissipation
- Low thermal EMF
- Operation temperature from -65°C to +275°C

Key Applications

- Power system
- Automotive
- Telecommunications
- Industrial equipment
- Resources
- Low Thermal EMF for Shunt Resistors - PU Series
- Shunt Resistors with Excellent Heat Dissipation

Key Benefits

- Open-Air design provides good heat dissipation which is able to work under high ambient temperature
- Perfect for current sensing applications with a high power rating requirement





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SMT Current Sense Transformer Series

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Charging Stations for EVs are complex high-power systems that take available AC power and convert it to high voltage DC. The high-power rail, including EMI Filter, PFC and DC / DC stages utilizes multiple customized high efficiency magnetics including DM chokes, CM chokes, PFC inductors, power transformers and output inductors. In addition, standard catalog parts are used including isolation transformers as part of the driver circuit for the switches, current sense magnetics to monitor operation and lower power inductors, transformers and chokes used in the auxiliary power supplies and embedded controllers.

Key Features

- Functional Insulation, 1000Vrms dielectric strength
- 20A capability
- Low Primary DCR: <0.75mΩ
- Commercial and Automotive Grade
- -40°C to 130°C Temperature Range

Key Applications

- EV Charging
- OBC
- Inverter
- DC/DC Converter
- BMS

Key Products

- Pulse PA1005 - SMT Current Sense Transformer Series, Up To 20A, 5.5mm Max Height, EE5
- Pulse PM2190 - EP7 series High Isolation SMT Transformer (5,000Vrms)

Key Benefits

- Off-the-shelf solution for current sensing
- Multiple turns ratios to fit circuit requirements
- Small Form Factor: 8.4x7.2x5.5mmmm





E-CHARGE

EP7 series High Isolation SMT Transformer

YAGEO
Group

Charging Stations for EVs are complex high-power systems that take available AC power and convert it to high voltage DC. The high-power rail, including EMI Filter, PFC and DC / DC stages utilizes multiple customized high efficiency magnetics including DM chokes, CM chokes, PFC inductors, power transformers and output inductors. In addition, standard catalog parts are used including isolation transformers as part of the driver circuit for the switches, current sense magnetics to monitor operation and lower power inductors, transformers and chokes used in the auxiliary power supplies and embedded controllers.

Key Features

- Reinforced Insulation for Isolated Power Supply Drivers
- 8mm creepage distance for safety spacing requirements
- 5kVrms dielectric strength & 1kVrms continuous isolation
- Commercial and Automotive Grade
- -40°C to 130°C Temperature Range

Key Applications

- EV Charging
- OBC
- Inverter
- DC/DC Converter
- BMS

Key Products

- Pulse PH9185 - EP7 series High Isolation SMT Transformer (5,000Vrms) for RS-485/RS232 Communication Interfaces
- Pulse PM2190 - EP7 series High Isolation SMT Transformer (5,000Vrms)

Key Benefits

- Off-the-shelf solution for driver circuits for GaN/SiC/IGBT switching
- Multiple turns ratios to fit circuit requirements
- Small Form Factor: 10x10x12.5mm





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Pulse PA434x, PM434x, PA500x, PM220x Series

Charging Stations for EVs are complex high-power systems that take available AC power and convert it to high voltage DC. The high-power rail, including EMI Filter, PFC and DC / DC stages utilizes multiple customized high efficiency magnetics including DM chokes, CM chokes, PFC inductors, power transformers and output inductors. In addition, standard catalog parts are used including isolation transformers as part of the driver circuit for the switches, current sense magnetics to monitor operation and lower power inductors, transformers and chokes used in the auxiliary power supplies and embedded controllers.

Key Features

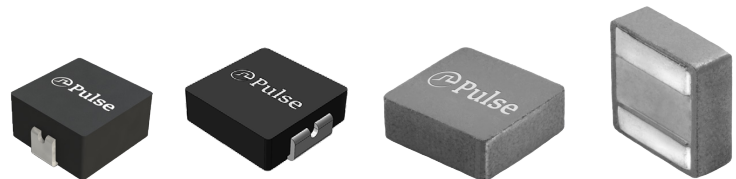
- 40+ Platform Sizes (3.7x3.4x1.2mm to 24x22x13mm)
- Inductance Range: 100nH to 100uH
- Up to 120Apk
- Commercial and Automotive Grade
- -40 to 130°C and -55 to 155°C Temperature Ranges

Key Applications

- EV Charging
- OBC
- Inverter
- DC/DC Converter
- BMS

Key Benefits

- Shielded Construction for low EMI
- High Energy Density to minimize the footprint
- Low DCR to maximize efficiency



Key Products

- Pulse PA4340 - SMT Molded Power Inductor Series, up to 23A, 3.0mm Max Height
- Pulse PM4340- PA4340 SMT Molded Power Inductor Series, up to 23A, 3.0mm Max Heightc
- Pulse PA5000/PA5111/PA5112 EP13 Reinforced Insulation SMT Power Transformer, up to 24W
- Pulse High Current Composite Inductor - PA5001.XXXNLT and PM2201.XXXNLT