



EV CHARGING

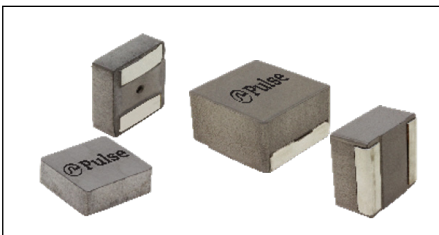
EV Charging - Power Magnetics



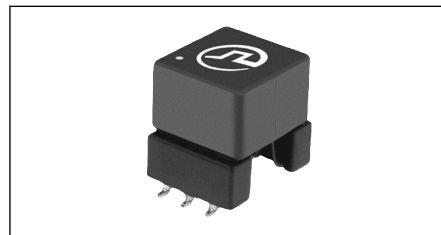
Charging Stations for EVs are complex high-power systems that take available AC power and convert it to high voltage DC. The high-power rail, including EMI Filter, PFC and DC/DC stages utilizes multiple customized high efficiency magnetics including DM chokes, CM chokes, PFC inductors, power transformers 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 Products

- Molded and Composite Inductors - PA434x, PM434x, PA500x, PM220x Series
- High Voltage Isolation Transformers – PH9185 & PM2190
- High Frequency Current Sense Magnetics – PA1005 & PM2190



PA434x, PM434x, PA500x, PM220x Series



PH9185 & PM2190



PA1005 & PM2190



MOLDED AND COMPOSITE INDUCTORS PA434x, PM434x, PA500x, PM220x Series



Features

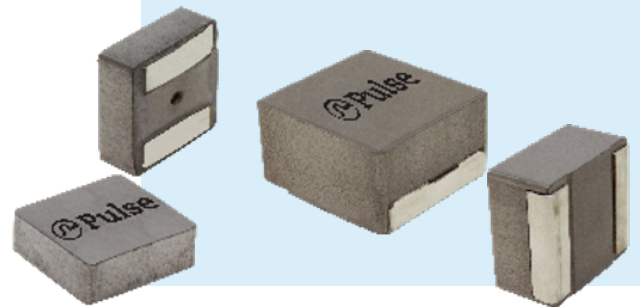
- 40+ Platform Sizes (3.7x3.4x1.2mm to 24x22x13mm)
- Inductance Range: 100nH to 100uH
- Up to 120Apk
- Commercial and Automotive Grade
- -40°C to 130°C and -55°C to 155°C Temperature Ranges

Applications

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

Key Benefits

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





HIGH VOLTAGE ISOLATION TRANSFORMERS PH9185 & PM2190



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
- -40C to 130C Temperature Range

Applications

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

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





HIGH FREQUENCY CURRENT SENSE MAGNETICS PA1005 & PM2190



Features

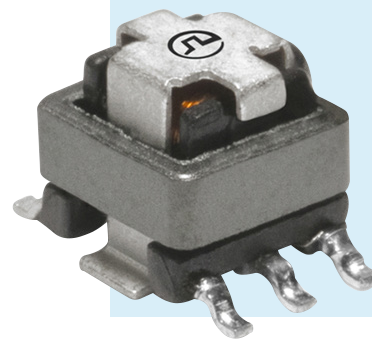
- Functional Insulation, 1000Vrms dielectric strength
- 20A capability
- Low Primary DCR: <math><0.75\text{m}\Omega</math>
- Commercial and Automotive Grade
- -40C to 130C Temperature Range

Applications

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

Key Benefits

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





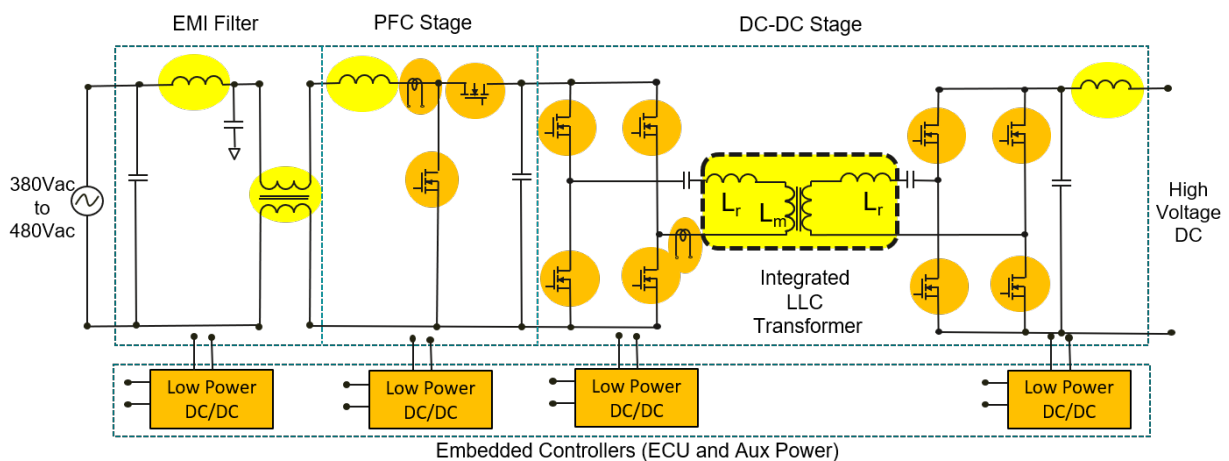
EV CHARGING

EV Charging - Power Magnetics



Custom Power Magnetics

- High Power CM Chokes
- High Power PFC Inductors
- High Power Transformers
- High Current Inductors



Catalog Power Magnetics

- Current Sense Magnetics
- Isolation Transformers
- Power Transformers
- CM Chokes
- Power Inductors