

40V AUTOMOTIVE MOSFETS



Features

- Fully AEC-Q101 qualified
- Split-gate trench (SGT) technology
- Low RDS(on)
- High power density package
- High junction temperature up to 175°C
- Available in compact DPAK and D2PAK packages



Benefits

These components leverage split-gate trench (SGT) technology and full AEC-Q101 qualification in compact packages.

Both MCU2D8N04YHQ and MCB2D8N04YHQ also boast low on-resistance of only 2.8mΩ, ensuring efficient power management in a diverse range of automotive systems.

Applications



Electric Power Steering (EPS)



Load Switches



Seat Control System

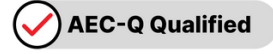
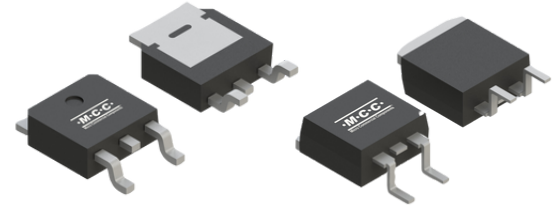
Give Existing Designs a Seamless Upgrade with MCC's 40V Automotive MOSFETs



AEC-Q Qualified

DPAK and D2PAK Packages Enable Easy Integration

40V N-channel MOSFETs with Full AEC-Q101 qualification



Product Attributes, Parametrics & Datasheets

Product	Type	Package	Drain-Source Voltage V _{DS}	Drain-Source On-Resistance R _{DS(on)}	Mounting Type	Datasheet
MCU2D8N04YHQ	N-Channel Power MOSFET	DPAK (TO-252)	40V	2.8mΩ	Surface-mount (SMD)	Info
MCB2D8N04YHQ	N-Channel Power MOSFET	D2PAK	40V	2.8mΩ	Surface-mount (SMD)	Info

Applications:



Battery Management Systems (BMS) & DC-DC Converters

- Efficient power management for battery monitoring and control systems
- Enhanced reliability in BMS applications
- Efficient conversion of power
- Stable power output and optimization in converter operations



Electric Power Steering (EPS) & Electric Water Pumps

- Optimal power distribution for electric power steering systems
- Improved efficiency and responsiveness in EPS functionalities
- Reliable power delivery for electric water pump operations
- Increased efficiency and durability in water pump applications



Lighting & Load Switches

- Seamless integration for low-side switching applications
- Enhanced safety features in automotive circuitry
- Precision control for automotive lighting applications
- Increased energy efficiency in lighting designs



Seat Control Systems & Motor Drives

- Robust power handling capabilities for various motor drive applications
- Consistent operation and reliability in motor drive systems
- Precise control and management of seat adjustment mechanisms
- Seamless integration for enhanced user experience and comfort

CONTACT MCC TO REQUEST A SAMPLE

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