

High-Current 40V Automotive-Grade Power MOSFET



40V AEC-Q101 POWER MOSFET



Features

- 40 V N-Channel Power MOSFET
- AEC-Q101 qualified
- High current capability: 133 A
- Ultra-low RDS(ON): 3 mΩ @ 10 V
- D2-PAK surface-mount package
- Low conduction and switching losses
- Strong thermal performance
- Suitable for automotive and industrial use



Benefits

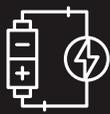
Improved efficiency and reduced power loss, enabling cooler operation and higher system reliability

Supports high-current loads with confidence, making it ideal for automotive power management, motion control, and heavy-duty switching applications

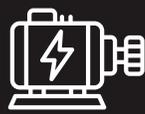
Applications



Heavy-duty solenoid



High-current load switching



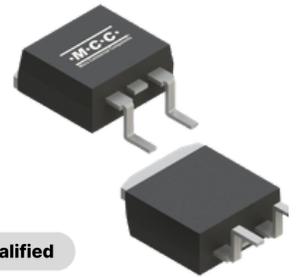
Motor control systems



AEC-Q Qualified

40V, 3.0 mΩ, 133 A AEC-Q101 MOSFET for Automotive Power Applications

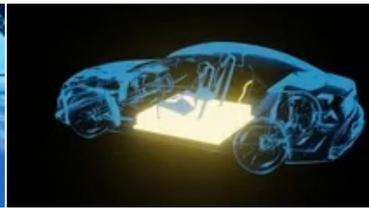
Low-RDS(ON) 40V MOSFET in a Rugged D2-PAK Package



Product Attributes, Parametrics & Datasheets

Product	Type	Package	Numbers of functions	Channel	Drain-Source Voltage VDS (V)	Gate-Source Voltage VGS (V)	Drain Current ID (A)	Drain-Source On-Resistance RDS(ON) Max @ VGS=10V (Ω)	Data-sheet
<u>MCB3D0N04YLHE3</u>	Power MOSFET	D2-PAK	Single	N	40	±20	133	0.003	<u>Info</u>

Applications



Automotive – Body & Chassis Systems

Automotive – Power Management

Automotive & Industrial – Power Switching

Automotive & Industrial – Motion Control

- Body electronics and body control modules (BCM) in electric vehicles
- Heavy-duty solenoid and valve control for transmission and braking systems

- DC-DC converters
- Battery management systems (BMS)

- High-current load switching

- Motor drives and motor control systems

CONTACT MCC TO REQUEST A SAMPLE

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