

40V N-CHANNEL MOSFET



Features

- Power MOSFET for high-current applications
- 40 V drain-source voltage rating
- 166 A continuous drain current
- Very low RDS(ON): 2.6 mΩ max
- DFN5060 surface-mount package



Benefits

Higher efficiency and longer battery runtime due to very low on-resistance and minimal power loss

Robust current handling in a compact footprint, enabling reliable operation in space-constrained, high-power designs

Applications



Light electric vehicles



Power stages in gaming systems



Factory automation equipment

High-Efficiency 40V N-Channel MOSFET with Ultra-Low 2.6 mΩ RDS(on)



Compact DFN5060 Package for High-Current, Space-Constrained Power Designs

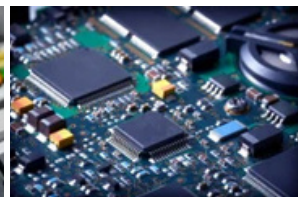
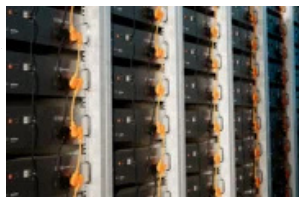
Low-Loss Power Switching Across Industrial and Energy Applications



Product Attributes, Parametrics & Datasheets

Product	Type	Package	Drain-Source Voltage VDS (V)	Drain CurrentID (A)	Drain-Source On-Resistance RDS(ON) Max @ VGS=10V (Ω)	Datasheet
MCAC2D6N04Y	Power MOSFET	DFN5060	40	166	0.0026	Info

Applications



Power Tools & Energy Storage

- Battery protection in cordless tools like drills and saws
- Battery management in home and commercial energy storage systems
- High-current switching for lithium-ion packs in outdoor and garden equipment
- Pack-level MOSFETs for e-bikes, scooters, and other light electric vehicles

Telecom, Networking & Data Infrastructure

- DC-DC converters in telecom base stations and radio units
- Point-of-load converters for switches, routers, and optical network gear
- Bus converters and VRMs in data center and enterprise servers
- Power ORing for backup and redundancy in -48 V systems
- Hot-swap protection for line cards and rack-mounted systems

Industrial & Motor Control

- Motor drive circuits for factory automation equipment
- BLDC and brushed motor controllers in robots and mobile robots (AGVs/AMRs)
- Power stages in industrial tools and handheld devices
- PWM motor control for HVAC systems, fans, and pump

Power Management, ORing & Load Switching

- Power ORing in redundant power supplies
- Hot-swap and load-switching for backplanes and plug-in modules
- High-side and low-side load switching in distributed power systems
- Protection and power-path control in DC power panels

Consumer, Computing & Embedded Systems

- DC-DC converters in set-top boxes, gateways, and home networking devices
- Power stages in gaming systems, compact PCs, and embedded boards
- Battery protection and power-path control in portable and prosumer electronics

CONTACT MCC TO REQUEST A SAMPLE

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