

40V N-CHANNEL MOSFETS



Features

- **Low RDS(on):** As low as 4.5mΩ at VGS = 10V
- **Split Gate Trench Technology:** Enables reduced switching losses
- **High Current Capability:** Supports continuous drain current of 45A, 70A and 80A
- **Compact Package:** PDFN3333 footprint
- **Low Thermal Resistance:** Below 4°C/W junction-to-case
- **Logic-Level Gate Drive**
- **40V VDS Rating**



Benefits

MCGxDxN04Yx series, a family of high-efficiency 40V N-Channel MOSFETs designed to meet the growing demand for compact, high-performance power solutions.

Compact PDFN3333 package, combining ultra-low RDS(on) values of 4.5mΩ, 5.8mΩ, and 8.2mΩ with continuous drain current capability up to 80A. Built on Split Gate Trench (SGT) MOSFET technology.

Applications



Power
management
units

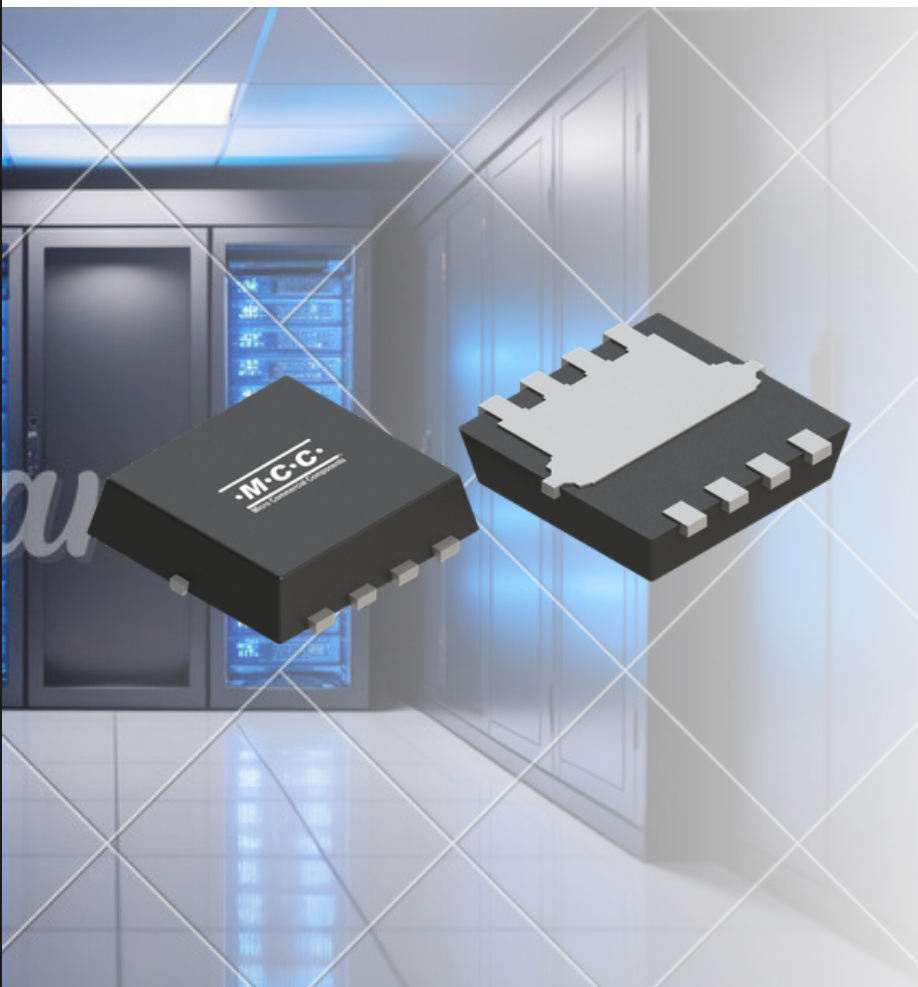


Portable
electronics



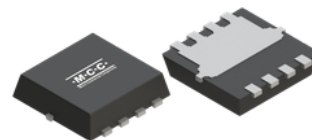
Embedded
system control

High-Efficiency Power in Compact Form: MCC's 40V N-Channel MOSFETs



Low RDS(on) and High Current Capability for Next-Generation Power Designs

Enhanced Thermal Performance for Reliable Operation



Product Attributes, Parametrics & Datasheets

Product	Type	Package	Channel	Drain-Source Voltage VDS (V)	Gate-Source Voltage VGS (V)	Drain-Source On-Resistance RDS(ON) Max @ VGS=10V (Ω)	Datasheet
MCG4D5N04YL	Power MOSFET	PDFN3333	N	40	±20	0.0045	Info
MCG5D8N04Y	Power MOSFET	PDFN3333	N	40	±20	0.0058	Info
MCG8D2N04YL	Power MOSFET	PDFN3333-B	N	40	±20	0.0082	Info

Applications:



Data Center and Networking Infrastructure

- Power distribution and load switching in servers
- Hot-swap and high-side switching in storage systems
- Power control and protection in networking equipment



Energy & Power Management

- Battery management systems (BMS)
- Power management units
- Load switching applications



Industrial Systems

- Industrial automation systems
- Motor drivers and control
- Actuator and control circuits



Power Conversion

- DC-DC converters
- Power path control and input switching
- Auxiliary and intermediate bus converters



Consumer Electronics

- Portable electronics
- Consumer power systems
- Compact device power supply



Motor Control

- Motor drivers
- Load control switching
- Embedded system control

CONTACT MCC TO REQUEST A SAMPLE

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