



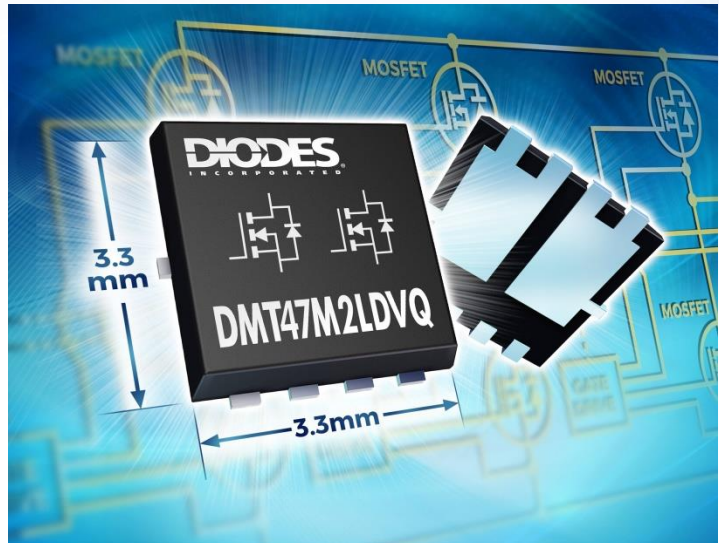
Industry's First Automotive-Compliant Dual MOSFET in 3.3mm x 3.3 Package

The DMT47M2LDVQ is the industry's first automotive-compliant 40V dual MOSFET in the PowerDI®3333-8 package. Measuring just 3.3mm x 3.3mm, the DMT47M2LDVQ can replace two discrete MOSFETs to reduce the board space footprint in many automotive functions.

The DMT47M2LDVQ integrates two n-channel enhancement mode MOSFETs with the industry's lowest $R_{DS(ON)}$ for this configuration – just 10.9m Ω at V_{GS} of 10V and I_D of 30.2A. This low on-resistance keeps conduction losses to a minimum in applications such as wireless charging or motor control. The typical gate charge of 14.0nC, at a V_{GS} of 10V and I_D of 20A, ensures that switching losses are kept to a minimum.

The thermally efficient PowerDI3333-8 package has a junction-to-case thermal resistance (R_{thJC}) of 8.43°C/W, enabling higher power density designs.

PowerDI® is a registered trademark of Diodes Incorporated in the United States and other countries.



The Diodes Advantage

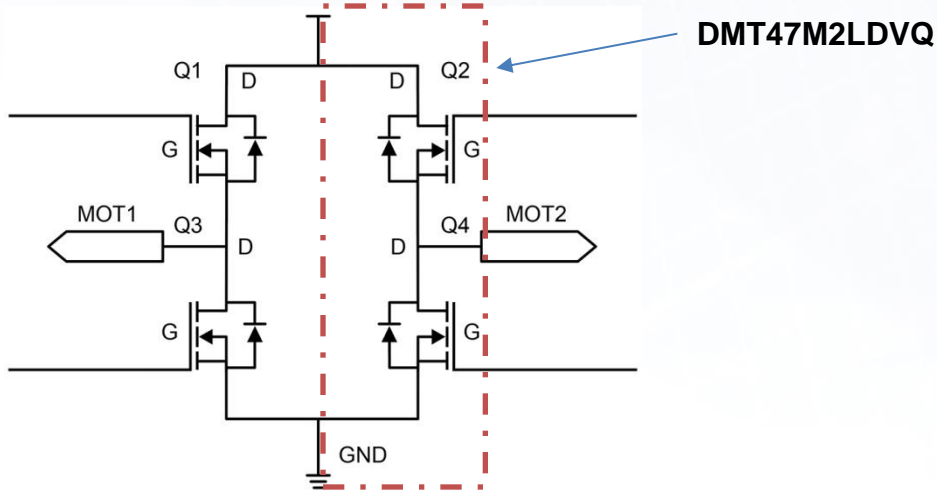
- **Low Figure of Merit ($R_{DS(ON)} \times Q_G$)**
Minimizes power losses, increases efficiency
- **Low R_{thJC} of <10°C/W**
Low thermal resistance enables high power density
- **PCB footprint of just 10.9mm²**
Occupies just 46% of the PCB area of that occupied by SOT223
- **Automotive Compliant**
 - Qualified to AECQ-101
 - Supported by a full PPAP for full traceability

Applications

- Motor Controls
- Wireless Charging
- DC-DC Converters



Typical Application Schematic

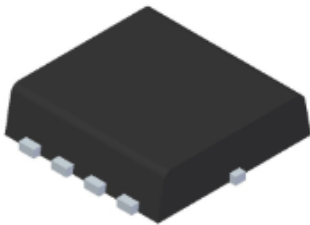


Product Portfolio

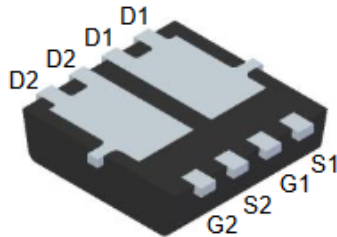
Product	Package	Polarity	V _{DS} (V)	V _{GSS} (V)	I _D (A)	V _{GS(TH)} (V)	R _{DS(ON)} MAX (mΩ)		Q _G typ @V _{gs} =10V (nc)	Typ. C _{iss} (pF) @25V _D ss	E _{AS} (mJ)	T _j (°C) max
							@10V	@4.5V				
DMT47M2LDVQ	PowerDI3333-8	N+N	40	20	30	1-3	10.8	15	14	890	32	150

Package Information

PowerDI3333-8 (Type UXC)



Top View



Bottom View