



Analog and Discrete
Power Solutions



[diodes.com](https://www.diodes.com)

MOSFETs

Ultra-High Performance MOSFETs

Diodes Incorporated's (Diodes) products are designed for high performance across a wide range of existing and emerging applications

Diodes Incorporated is a leading global designer and manufacturer Analog and Discrete Power Solutions.

We enable innovation by leveraging our broad product portfolio, company-owned operations, and leading-edge packaging technology to meet your needs.

Our broad range of application-specific solutions, coupled with a worldwide network of engineering, testing, manufacturing, and customer service sites, positions us as a premier provider for automotive, industrial, and consumer markets.

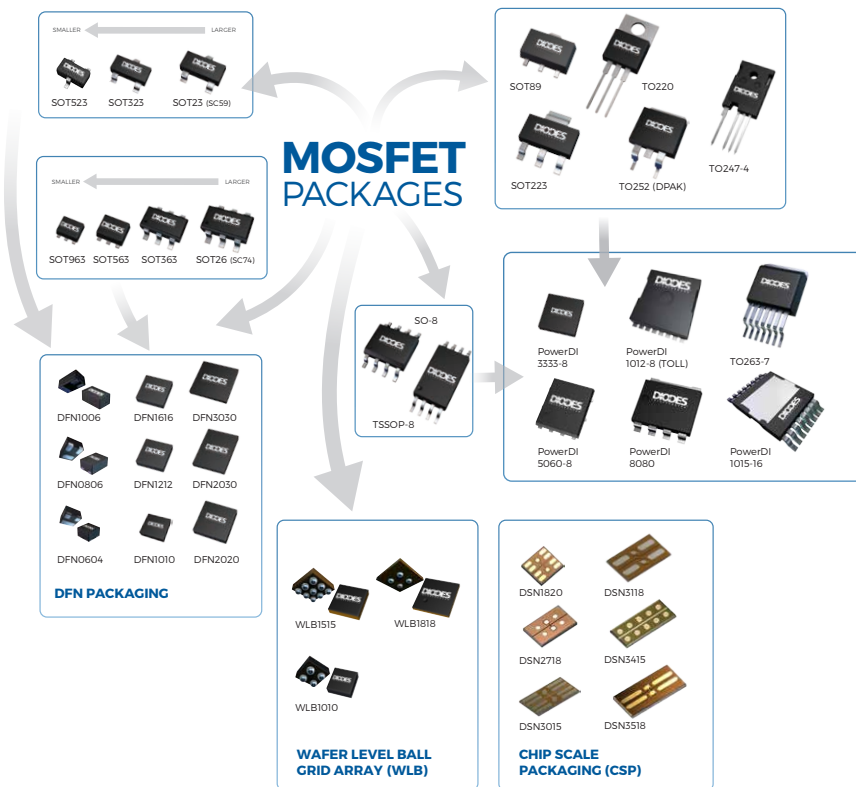
Diodes Incorporated's broad semiconductor portfolio provides our customers with leading-edge solutions for next-generation systems.

Our discrete products portfolio includes silicon carbide MOSFETs, silicon MOSFETs, bipolar transistors, diodes, rectifiers, Super Barrier Rectifiers (SBR®), and protection products

Our Analog portfolio comprises power management ICs, LED drivers, standard linear devices and sensors, signal switching, signal integrity, connectivity, and timing products.

Our Logic products include single-gate, dual-gate, and standard logic gates, as well as level translators, analog switches, registers, and multiplexers.

MOSFET Package Evolution



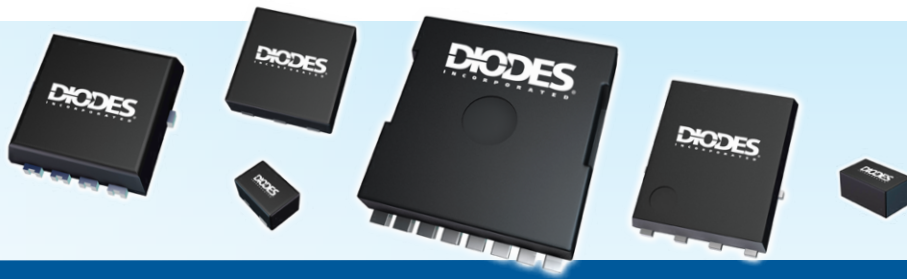
As advances in semiconductor technology processes lead to improved device performance and efficiencies, it is essential that packaging technologies keep pace with these developments.

On the one hand, increased loads—such as in automotive motors and pumps and industrial drives—demand larger die for higher current handling and the thermal management challenges that creates.

On the other hand, reduced silicon geometries lead to smaller and smaller devices to meet the demands of wearables and other highly integrated systems.

Diodes' PowerDI1012-8 (TOLL) package can handle very high currents. Top-side cooled packages such as PowerDI1015 provide an improved thermal pathway to ambient via appropriate heatsinking. High-temperature (175°C) automotive SiC devices meet the demands of rapidly-evolving EV systems.

Diodes' DFN2020 (2mm x 2mm PCB footprint) delivers the same current-handling capabilities as the popular SOT223 package for 9% of the PCB real estate. Chip Scale Packages (CSP) allow designers integration of protection MOSFETs for battery charge and discharge control.



Encompassing N- and P-channels, the portfolio ranges from -600V to +1700V in single, dual, complementary, and H-Bridge (Quad) configurations. These are offered in a wide range of package options, from the tiny DFN0604 (0.6mm by 0.4mm) to the thermally-efficient PowerDI1012-8 (TOLL) and PowerDI1015 (top-side cooled) packages. Innovations in chip-scale packaging enable the lowest $R_{DS(ON)}$ for a given footprint.

Embracing both industry-standard and differentiated products, the broad portfolio has expanded to over 2,200 products, from small-signal to power MOSFETs. Diodes Incorporated utilizes technologies that are uniquely suited for specific applications, such as using shield-gate technology to reduce conduction and switching losses, which is ideal for BLDC motor driving.

Diodes' lateral MOSFETs (LD-MOS) feature industry-leading Figure of Merit (FOM), which enables greater efficiency in DC-DC buck converters.

The breadth of the Diodes' MOSFET portfolio enables designers to select a device that is optimized for their application, ranging from consumer to industrial to automotive segments.

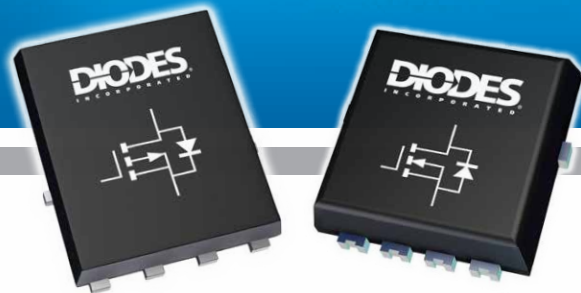
The portfolio is suited to requirements in:

- DC-DC conversion
- LED lighting
- Load switching
- Battery chargers
- Power-over-ethernet
- Motor control
- Battery protection
- Power supplies
- Audio circuits

The majority of products in the Diodes MOSFET product portfolio are designed to meet the stringent requirements of the AEC-Q101 reliability standard of the Automotive Electronic Council.

A key part of our capability is automotive compliance. Such parts are qualified to AECQ101, manufactured in facilities certified to the rigorous IATF 16949 standard, and capable of customer audit to VDA6.3. Furthermore, all in-house packaging utilizes an environmentally 'green' mold compound.

Diodes Incorporated's MOSFET product development strategy is focused on high-growth market segments such as Automotive, LED lighting, smartphones, and the Internet of Things.



MOSFETs

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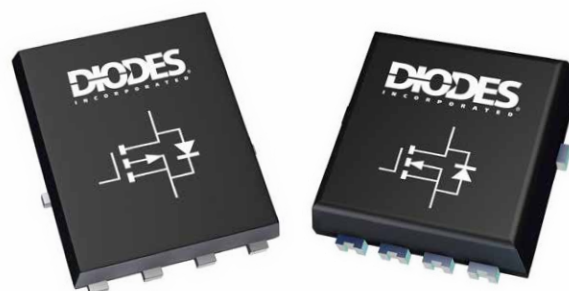
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MOSFETs

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Silicon Carbide (SiC) MOSFETs

Silicon carbide offers designers unique properties essential in tomorrow's power electronic systems such as in green energy, energy storage systems, and electric vehicles.

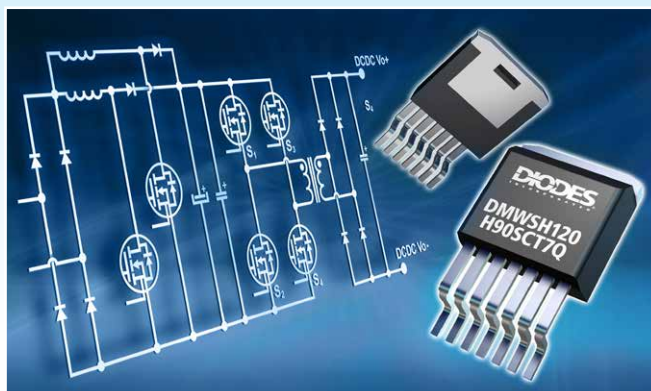
Wide band gap materials such as SiC offer fast switching and low on-resistance at higher temperatures and voltages than silicon can offer.

Future electronic systems such as electric vehicles and renewable energy demand ever higher efficiencies at higher power densities. Diodes' SiC MOSFETs feature robust body diodes that deliver fast switching and low reverse recovery charge, minimizing switching losses at high frequencies. By using the planar manufacturing process, Diodes has created new MOSFETs that offer more robust and reliable performance in automotive applications—and with increased drain current, junction temperature, and power rating.

Diodes' innovative packaging solutions include the TO247-4 (Type WH) package, which offers an additional Kelvin sense pin. This can be connected to the source to optimize switching performance, enabling even higher power densities.

Diodes' SiC portfolio includes Schottky Barrier Diodes (SBD) as well as power MOSFETs. SiC's unique properties make it ideal in such applications as:

- EV high-power DC-DC converters
- EV charging systems
- Automotive motor drivers
- On-board chargers
- Industrial motor drives
- Solar inverters
- Data center and telecom power supplies
- DC-DC converters
- Next-generation applications in green energy, energy storage systems, and electric vehicles



The DIODES Advantage

- **Low $R_{DS(ON)}$ and Low Q_G**
Enables system designers to maximize efficiency while ensuring power dissipation is kept to a minimum
- **Low Thermal Resistance Packaging**
Enables higher switching currents
- **Kelvin Sense Pin**
Optimizes switching performance, enabling higher power densities
- **Robust Body Diode**
Fast t_{RR} and Low Q_{RR} minimizes switching losses
- **Qualified to 175°C**
Suitable for use in high-ambient environments

Part Number	Package	Polarity	V_{DS} (V)	V_{GS} ($\pm$ V)	I_{DS} @ $T_C = +25^\circ\text{C}$ (A)	P_D @ $T_C = +25^\circ\text{C}$ (W)	$R_{DS(ON)}$ Typ. (m Ω)	$R_{DS(ON)}$ Max. (m Ω)	@ V_{GS} (V)	$V_{GS(TH)}$		C_{iss} Typ (pF)	Q_G Typ @ $V_{GS} = 10\text{V}$ (nC)	Automotive Compliant "Q" Available	175°C Rated
										Min (V)	Max (V)				
DMWSH90H24HM3 [†]	TO247-3	N	900	18, 5	TBD	TBD	15	24	18	1.8	4.3	TBD	TBD (@ 18V)	Y	Y
DMWSH90H24HM4 [†]	TO247-4	N	900	18, 5	TBD	TBD	15	24	18	1.8	4.3	TBD	TBD (@ 18V)	Y	Y
DMWSH90H24HTSC7 [†]	TSCPack	N	900	18, 5	TBD	TBD	15	24	18	1.8	4.3	TBD	TBD (@ 18V)	Y	Y
DMWSH120H22SCT7	TO263-7 (Type B)	N	1200	18, 5	103	356	16.5	22	18	1.8	3.6	3959	220 (@ 18V)	-	Y
DMWSH120H23SM3	TO247-3	N	1200	18, 4	100	349	17	23	18	1.8	3.6	3962	217 (@ 18V)	-	Y
DMWSH120H23SM4	TO247-4	N	1200	18, 4	100	349	17	23	18	1.8	3.6	3962	217 (@ 18V)	Y	Y
DMWSH120H28SM3	TO247-3	N	1200	15, 4	97.4	405	20	28.5	15	1.8	3.6	3905	175 (@ 15V)	Y	Y
DMWSH120H28SM4	TO247-4	N	1200	15, 4	100	429	20	28.5	15	1.8	3.6	3944	173.7 (@ 15V)	Y	Y
DMWSH120H28SCT7	TO263-7 (Type B)	N	1200	15, 4	85.5	312	20	28.5	15	1.8	3.6	3864	184 (@ 15V)	Y	Y
DMWSH120H36SCT7 [†]	TO263-7 (Type B)	N	1200	18, 5	TBD	TBD	26	36	18	2.04	4.4	TBD	TBD (@ 18V)	Y	Y
DMWSH120H36HTSC7 [†]	TSCPack	N	1200	18, 5	TBD	TBD	26	36	18	2.04	4.4	TBD	TBD (@ 18V)	Y	Y
DMWSH120H37SM3	TO247-3	N	1200	18, 5	75	315	28.5	37	18	2.04	4.4	2320	135 (@ 18V)	-	Y
DMWSH120H37SM4	TO247-4	N	1200	18, 5	75	315	28.5	37	18	2.04	4.4	2320	135 (@ 18V)	-	Y
DMWSH120H43SM3	TO247-3	N	1200	15, 4	72.7	341	33	43	15	1.8	3.6	2187	105 (@ 15V)	Y	Y
DMWSH120H43SM4	TO247-4	N	1200	15, 4	72.7	341	33	43	15	1.8	3.6	2187	105 (@ 15V)	Y	Y
DMWSH120H80SM3	TO247-3	N	1200	18, 4	44.5	238	62	80.5	18	1.7	3.5	1069	59.1 (@ 18V)	-	Y
DMWSH120H80SM4	TO247-4	N	1200	18, 4	44.5	238	62	80.5	18	1.7	3.5	1069	59.1 (@ 18V)	-	Y
DMWSH120H80SCT7	TO263-7	N	1200	18, 5	37.5	170	62	80.5	18	1.7	3.5	1102	63 (@ 18V)	-	Y
DMWSH120H82HM4 [†]	TO247-4	N	1200	18, 5	TBD	TBD	63	82	18	1.8	4.2	TBD	TBD (@ 18V)	Y	Y
DMWSH120H82HTSC7 [†]	TSC Pack	N	1200	18, 5	TBD	TBD	63	82	18	1.8	4.2	TBD	TBD (@ 18V)	Y	Y
DMWSH120H90SM3	TO247-3	N	1200	15, 4	41	246	75	97.5	15	1.7	3.5	1090	50.9 (@ 15V)	Y	Y
DMWSH120H90SM4	TO247-4	N	1200	15, 4	40	235	75	97.5	15	1.7	3.5	1112	51.1 (@ 15V)	Y	Y
DMWSH120H90SCT7	TO263-7	N	1200	15, 4	38.2	197	75	90	15	1.7	3.5	1078	54.6 (@ 15V)	Y	Y
DMWS120H100SM4	TO247-4	N	1200	15, 4	37.2	208	80	100	15	1.7	3.5	1516	59.5 (@ 15V)	-	Y
DMWSH170H85OHM4	TO247-4	N	1700	20, 5	6.58	73.5	630	850	20	2.0	4.0	178	14.8 (@ 20V)	-	Y

[†] In development

Diodes Part Number Coding Scheme

D M T H 4 M90 L P S W Q

Diodes Incorporated

MOSFET

Technology (T= Split gate NMOS)

H= T_{MAX} 175°CV_{DS} (4=40V)

Q = Automotive

W = Sidewall plateable

Package PS=PowerDI5060

V_{GS} L= Logic LevelR_{DS(ON)}@V_{GS}=10V (0.9mΩ)

Key

MOSFET Technology

C = Complementary pair

N = NMOS

P = PMOS

T = Split-gate NMOS

T_{MAX}

Blank = 150°C

H = 175°C

V_{GS(TH)(MAX)}

U = Ultra Low <1.1V

L = Low 1.2V to 2.5

S = Standard >2.5V

Package

FDE/FDF= DFN2020

FG/FV = PowerDI3333

DV = Dual PowerDI3333

PS = PowerDI5060

PD = Dual PowerDI5060

PG = PowerDI8080

TL = PowerDI1012-8 (TOLL)

TT = PowerDI1015 (top-side cooled)

“Q” Automotive Compliant

- Qualified to AEC-Q101
- Manufactured in facilities certified to IATF 16949
- Capable of customer audit to VDA6.3.
- Supported by Production Part Approval Process (PPAP) documentation

8V – 29V N-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)		C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Compliant “Q” Available
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Min.	Max.				
DMNI054UCB4	X1-WLB0808-4	8	5	N	4	1.34	-	42	50	65	-	0.7	590	9.6	-	-
DMNI1M1UCA14	X4-DSN3027-14	12	8	Y	33.3	2	-	1.85	3.4	-	0.35	1.4	3308	77.7	-	-
DMNI2M3UCA6	X4-DSN3118-6	12	8	Y	24.4	2.47	-	2.75	6.1	-	0.35	1.4	3062	45.7 @4V	-	-
DMNI003UFDE	U-DFN2020-6 (Type E)	12	8	Y	2.2	2.2	-	3	4	-	0.3	1	2551	27	-	-
DMNI5M5UCA4	X4-DSN1815-4	12	8	Y	8.8	1.8	-	-	6 @3.3V	-	0.35	1.4	1669	21.7 @4V	-	-
DMNI001UCA10	X2-TSN1820-10	12	8	Y	20	2.4	-	3.55	6.9	-	0.35	1.4	2865	29 @4V	-	-
DMNI6M7UCA6	X4-DSN2718-6	12	8	Y	19.2	2.1	-	3.8	4	-	0.5	1.3	2333	45.4	-	-
DMNI004UFV	PowerDI3333-8 (Type UX)	12	8	Y	70*	1.9	-	3.8	5.1	-	0.3	1	2385	26	47 @8V	-
DMNI004UFDF	U-DFN2020-6 (Type F)	12	8	Y	15	2.1	-	4.8	7	-	0.3	1	2385	26	47	-
DMNI6M8UCA6	X3-DSN2718-6	12	8	Y	15.5	2.1	-	5.6	8	-	0.5	1.3	2333	45.4	-	-
DMNI5M3UCA6	X3-DSN2718-6	12	12	Y	16.5	2.4	-	5.8	8	-	0.5	1.3	2360	35.2	-	-
DMNI4M8UFDF	U-DFN2020-6 (Type F)	12	8	N	14.7	1.9	-	6	9	-	0.45	1.2	1246	14.6	29.5	-
DMNI005UFDF	U-DFN2020-6 (Type F)	12	8	N	14.1	1.8	-	6	10	-	0.3	1	2014	29.7	-	-
DMNI008UFDF	U-DFN2020-6 (Type F)	12	8	N	12.2	1.7	-	8	12.5	-	0.3	1	995	13.6	23.4 @8V	-
DMNI019USN	SC59	12	8	Y	9.3	1.2	-	10	12	14	0.35	0.8	2480	27.3	50.6 @8V	-
DMNI019UVT	TSOT26	12	8	Y	10.7	1.73	-	10	12	14	0.35	0.8	2588	28	50.4 @8V	-
DMNI019UFDE	U-DFN2020-6 (Type E)	12	8	Y	11	2.17	-	10	12	14	0.35	0.8	2480	27.3	50.6 @8V	-
DMNI017UCP3	X3-DSN1010-3	12	8	N	7.5	1.47	-	-	21	30	0.4	1	1002	10.5 @3.3V	-	-
DMNI014UFDF	U-DFN2020-6 (Type F)	12	8	N	8	1.7	-	16	25	-	-	1	515	6.4	-	-
DMNI021UCA4	X2-TSN0808-4	12	8	N	7.4	1.8	-	21	28	43	0.3	1.2	409	-	-	-
DMNI053UCP4	X3-DSN0808-4	12	8	N	4	1.34	-	42	50	65	0.35	0.7	612	7.2	-	-
DMNI045UFR4	X2-DFN1010-3	12	8	Y	3.2	0.5	-	45	64	85	0.4	1	390	4.8	-	-
DMNI150UFB	X1-DFN1006-3	12	6	Y	1.4	0.5	-	150	185	210	0.35	1	110	1.5	-	-
DMNI260UFA	X2-DFN0806-3	12	8	Y	0.5	0.36	-	366	520	950	-	1	65	0.96	-	-
DMN2002UFG	PowerDI3333-8	20	12	N	180*	2.2	1.4	1.7	2.4	-	0.5	1.3	3926	53	99	-
DMN22M5UFG	PowerDI3333-8	20	12	N	27*	2.2	-	2	2.6	-	0.5	1.3	3926	53	99	-
DMN2005UPS	PowerDI5060-8	20	12	N	20	2.5	-	4.6	8.7	-	0.4	1.2	5337	60	142	-
DMN2005UFG	PowerDI3333-8	20	12	N	18	2.27	-	4.6	8.7	-	0.4	1.2	6495	68.8	164	Y
DMN2009LSS	SO-8	20	12	N	12	2	8	9	12	-	0.5	1.2	2555	28.9	58.3	-
DMN2009USS	SO-8	20	12	N	12.8	2	8	9	12	-	0.5	1.2	1706	16	34	-
DMN2015UFDF	U-DFN2020-6 (Type F)	20	12	N	11.6	1.8	-	9	15	30	0.4	1.2	1439	19.3	42.3	-
DMN2011UFDE	U-DFN2020-6 (Type E)	20	12	Y	11.7	1.97	-	9.5	11	20	0.4	1	2248	24	56	-
DMN2011UFDF	U-DFN2020-6 (Type F)	20	12	Y	11.7	2.1	-	9.5	11	20	0.4	1	2248	24	56	-
DMN2011UTS	TSSOP-8	20	12	Y	9	1.3	-	11	13	25	0.4	1	2248	24	56	-
DMN2013UFDE	U-DFN2020-6 (Type E)	20	8	Y	10.5	2.03	-	11	13	30	0.5	1.1	2453	14.3	25.8 @8V	-

* @T_C=25°C **V_{GS}=20V

Diodes at the Forefront of Miniaturization

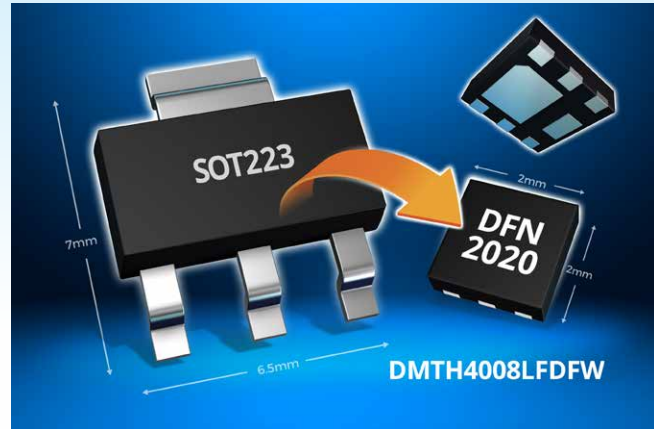
Diodes has been at the forefront of small package development and manufacturing for many years and offers an industry-leading portfolio of devices with the smallest of footprints.

Improvements in both lead design and underside thermal pads mean that devices that were once available in SOT (small-outline transistor) packages now have smaller equivalents. For example, the internal dissipation losses are reduced in the much smaller DFN (dual flat no lead) packages compared to similar devices, improving design flexibility and boosting efficiency.

The trend for smaller packages continues apace. Of course, the journey towards miniaturization has been driven over the decades by the need to pack more functionality and capability into less space, which is especially important with the increasing numbers of “wearable” and mobile devices. More recently, the emergence of ubiquitous interconnectivity, such as the Internet of Things (IoT) and adoption of Artificial Intelligence (AI) in more everyday devices further fuels the insatiable demand for high-performance devices with tiny footprints.

Supplying semiconductor components in packaged form not only protects the die inside but also provides a more convenient way of handling the components and using them in automated manufacturing processes. Diodes offers a vast range of small outline packages (SOPs), including the very small outline package (VSOP) and chip-scale packages (CSPs) meeting this constant demand. One of the most in-demand discrete packages from Diodes Incorporated that feeds this developing market is the high current density PowerDI series.

Improvements in packaging technology mean that devices that were once available in a 6.5mm x 7mm SOT223 (small-outline transistor)



can now fit in the tiny DFN2020 (dual flat no lead) occupying just 2mm x 2mm of PCB area. One popular such device is the 40V DMTH4008LDFWQ, an automotive-compliant MOSFET in DFN2020.

Taking up less than 10% of the area on a PCB that a traditional SOT223 package requires, this kind of miniature MOSFET brings greater power density to many automotive applications, including DC-DC converters, LED backlighting, and advanced driver assistant systems (ADAS).

Diodes' expertise in packaging ensures that the smallest of devices can withstand the harshest of environments, with many devices qualified to the stringent automotive standard AEC-Q101.

8V – 29V N-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)		C _{ISS} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant Q ¹ Available
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Min.	Max.				
DMN2015UFDE	U-DFN2020-6 (Type E)	20	12	Y	10.5	2.03	-	11.6	15	30	0.5	1.1	1779	19.7	45.6	-
DMN2027UPS	PowerDI5060-8	20	12	N	10	1.9	-	12.5	19	-	-	1.3	1091	11.6	-	-
DMN2027USS	SO-8	20	12	N	10.5	2	-	12.5	19	-	0.7	1.3	1000	11.6	-	-
DMN29M9UFD	U-DFN2020-6 (Type F)	20	12	Y	11	2	-	13.5	15.5	-	-	1.2	-	7.3	14.6	-
DMN2020UFCL	X1-DFN1616-6 (Type E)	20	10	Y	9	0.61	-	14	20	26	0.4	0.9	1788	21.5	49	-
DMN2028USS	SO-8	20	12	Y	7.3	1.56	-	20	28	-	0.6	1.3	1000	11.6	28.5	-
DMN2020LSN	SC59	20	12	Y	6.9	0.61	-	20	28	-	0.5	1.5	1149	11.6	-	-
DMN2022UFDF	U-DFN2020-6 (Type F)	20	8	Y	7.9	2.03	-	22	26	36	0.5	1	907	9.8	18 (@8V)	-
DMN2024UFDF	U-DFN2020-6 (Type F)	20	10	Y	7.1	1.67	-	22	26	36	0.5	1	647	6.5	14.8	-
DMN2024LCA4	X4-DSN1313-4	20	10	Y	8.3	2.4	21 @6.5V	23	34	-	0.68	1.3	991	-	28.5	-
DMN2026UVT	TSOT26	20	10	N	6.2	1.75	-	24	32	-	-	1.5	-	10	18.4 @8V	-
DMN2028UVT	TSOT26	20	8	N	6.2	1.6	-	24	32	-	-	1.5	856	8.3	-	-
DMN2040UVT	TSOT26	20	8	N	6.7	1.6	-	24	32	-	0.4	1.5	667	7.5	-	-
DMN2029UVT	TSOT26	20	10	N	6.8	1.7	-	24	32	-	0.4	1.5	646	7.1	-	-
DMN2028UFDF	U-DFN2020-6 (Type F)	20	8	Y	7.9	2.03	-	25	29	39	-	1	907	9.8	18 @8V	-
DMN2024U	SOT23	20	10	Y	6.8	1.4	-	25	29	36	0.5	0.9	647	7.1	-	-
DMG3414U	SOT23	20	8	N	4.2	0.78	-	25	29	37	0.5	0.9	830	9.6	-	Y
DMN2025UFDF	U-DFN2020-6 (Type F)	20	10	Y	6.5	1.6	-	25	31	60	0.5	1	486	5.9	12.3	-
DMN2040U	SOT23	20	12	N	6	1.36	-	25	33	-	0.5	1.2	667	7.5	-	-
DMN2050L	SOT23	20	12	N	5.9	1.4	-	29	50	-	0.45	1.4	532	-	6.7	-
DMN2053U	SOT23	20	12	N	6.5	1.3	29	35	48	91	0.5	1.2	414	4.6	-	-
DMN2056U	SOT23	20	8	N	4	0.94	-	38	45	85	0.4	1	339	4.3	-	-
DMN2075U	SOT23	20	8	N	4.2	0.8	-	38	45	-	0.4	1	594	7	-	-
DMN2044UCB4	U-WLB1010-4 (Type B)	20	8	N	4.5	1.18	-	40	50	56	0.4	0.9	1056	13.1	23.2 @8V	-
DMN2058U	SOT23	20	12	N	4.6	1.13	35	40	60	91	0.4	1.2	281	3.6	7.7	-
DMN2058UW	SOT323	20	12	N	3.5	0.7	42	45	60	91	0.4	1.2	281	3.6	7.7	-

* @T_C=25°C ** @V_{GS}=2.7V

8V – 29V N-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)		C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Compliant *Q-Available
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Min.	Max.				
DMN2055UW	SOT323	20	8	N	3.1	0.65	-	46	53	-	0.4	1	400	4.3	-	-
DMN2075UDW	SOT363	20	8	N	2.8	0.58	-	48	59	70	0.4	1	594	7	-	-
DMN2100UDM	SOT26	20	8	Y	4	1.5	-	55	70	90	0.6	1	555	8.8	-	-
DMN2053UW	SOT323	20	12	N	2.9	0.7	-	56	65	93	0.35	1	369	3.6	-	-
DMN2080UCB4	X2-VLBO808-4 (Type B)	20	8	Y	4	1.25	-	56	68	90	0.4	1	540	7.4	-	-
DMN2046U	SOT23	20	12	Y	3.4	1.26	-	72	110	-	0.4	1.4	292	3.8	-	-
DMN6070LCA6	X2-TSNI510-6	20	60	Y	3.68	1.8	-	85	95	-	0.4	1	1613	18.7	-	-
DMG2302UK	SOT23	20	12	Y	2.8	1.1	-	90	120	-	0.3	1	130	1.4	2.8	Y
DMN2046UW	SOT323	20	12	Y	2.1	0.63	-	90	130	-	0.4	1.4	278	3.6	-	-
DMN2120UFCL	U-DFNI616-6	20	12	Y	1.8	1.16	-	100	140	200	0.3	1	130	1.4	2.8	-
DMN2310UFB4	X2-DFNI006-3	20	8	Y	2.1	1.14	-	150	190	250	0.45	0.95	38	0.7	-	-
DMN2250UFB	X1-DFNI006-3	20	8	Y	1.35	0.5	-	170	230	250	0.35	1	100	1.4	3.1	-
DMN2300U	SOT23	20	8	Y	1.4	0.55	-	175	240	360	0.45	0.95	70	1.6	-	-
DMN2310U	SOT23	20	8	Y	1.6	0.68	-	175	240	360	0.45	0.95	38	0.7	-	-
DMN2300UFB4	X2-DFNI006-3	20	8	Y	1.3	0.5	-	175	240	360	0.45	0.95	70	1.6	-	-
DMN2300UFB	X1-DFNI006-3	20	8	Y	1.32	0.47	-	175	240	360	0.45	0.95	70	0.89	-	-
DMN2300UFD	X1-DFNI212-3	20	8	Y	1.7	0.96	-	200	260	400	0.45	0.95	70	0.89	-	-
DMN2310UFD	U-DFNI212-3 (Type C)	20	8	Y	1.9	1.1	-	240	300	400	-	0.95	-	0.7	-	-
DMN2320UFB4	X2-DFNI006-3	20	8	Y	1	1.07	-	320	500	1000	-	0.95	71	0.89	-	-
DMG1012T	SOT523	20	6	Y	0.63	0.28	-	400	500	700	0.5	1	61	0.74	-	Y
DMN2450UFB4	X2-DFNI006-3	20	12	Y	1	0.9	-	400	500	700	0.5	0.9	56	0.6	1.3	-
DMN2451UFB4	X2-DFNI006-3	20	12	Y	1.3	1.1	-	400	500	700	-	1	-	3.4	6.4	Y
DMN2501UFB4	X2-DFNI006-3	20	8	Y	1.5	1.2	-	400	500	700	0.5	1	88	1.1	2	-
DMN2550UFA	X2-DFN0806-3	20	8	Y	0.6	0.36	-	450	550	750	0.4	1	54	0.88	-	-
DMN2710UW	SOT323	20	6	Y	0.9	0.6	-	450	600	750	0.5	1	42	0.6	-	Y
DMG1012UW	SOT323	20	6	Y	1	0.29	-	450	600	750	0.5	1	61	0.74	-	-
DMN2710UT	SOT523	20	6	Y	0.87	0.52	-	450	600	750	0.5	1	42	0.6	-	Y
DMN2710UFB	X1-DFNI006-3	20	6	Y	1.3	1.3	-	450	600	750	0.5	1	42	0.6	-	Y
DMN2004K	SOT23	20	8	Y	0.63	0.35	-	550	700	900	0.5	1	87	0.9	-	-
DMN2004WK	SOT323	20	8	Y	0.54	0.2	-	550	700	900	0.5	1	87	-	-	Y
DMN2004TK	SOT523	20	8	Y	0.54	0.15	-	550	700	900	0.5	1	87	-	-	-
DMN2400UFB	X1-DFNI006-3	20	12	Y	0.75	0.47	-	550	750	900	0.5	0.9	38	0.5	-	-
DMN2450UFD	X1-DFNI212-3	20	12	Y	0.9	0.89	-	600	800	1000	0.45	1	52	0.7	-	-
DMN2451UFD	U-DFNI212-3 (Type C)	20	12	Y	1.1	1.1	-	600	800	1000	0.45	1	52	0.7	-	Y
DMN2990UFB	X1-DFNI006-3	20	8	Y	0.78	0.92	-	900	1200	1800	0.4	1	31	0.41	-	-
DMN2992UFB4	X2-DFNI006-3	20	8	Y	0.83	1.02	-	990	1200	1800	0.4	1	15.6	0.41	-	Y
DMN21D2UFB	X1-DFNI006-3	20	12	Y	0.76	0.9	-	990	1200	2400	0.4	1	29	0.41	0.93	-
DMN2992UFA	X2-DFN0806-3	20	8	Y	0.5	0.38	-	990	1200	1800	0.4	1	15.6	0.07	-	-
DMN2990UFA	X2-DFN0806-3	20	8	Y	0.51	0.4	-	990	1200	1800	0.4	1	28	0.5	-	-
DMN2991UFA	X2-DFN0806-3	20	8	Y	0.52	0.42	-	990	1200	1800	0.4	1	14.6	0.28	-	-
DMN2990UFZ	X2-DFN0606-3	20	8	Y	0.25	0.32	-	990	1200	1800	0.4	1	28	0.5	-	-
DMN2992UFZ	X2-DFN0606-3	20	8	Y	0.25	0.32	-	990	1200	1800	0.4	1	15.6	0.41	-	-
DMN2991UFZ	X2-DFN0606-3	20	8	Y	0.55	0.53	-	990	1200	1800	0.4	1	21.5	0.35	-	-
DMN2992UFO	X2-DFN0604-3	20	8	Y	0.53	0.42	-	990	1200	1800	0.4	1	15.6	0.41	-	-
DMN2991UFO	X2-DFN0604-3	20	8	Y	0.54	0.44	-	990	1200	1800	0.4	1	21.5	0.35	-	-
DMN2990UFO	X2-DFN0604-3	20	8	Y	0.75	0.84	-	990	1200	1800	0.4	1	31	0.41	-	-
DMN2005LP4K	X2-DFNI006-3	20	10	Y	0.3	0.4	-	1500	1700	3500	0.53	0.9	37	-	-	-
DMN2005LPK	X1-DFNI006-3	20	10	Y	0.44	0.45	-	1500	1700	3500	0.53	1.2	37	-	-	-
DMN2005K	SOT23	20	10	Y	0.3	0.35	-	-	1700	3500	0.53	0.9	37	-	-	-
DMN26DOUT	SOT523	20	10	Y	0.23	0.3	-	3000	4000	6000	0.5	1	14.5	-	-	-
DMN2011UCA6	X4-DSNI1818-6	22	12	Y	9	2.1	-	6.5	12	-	0.4	1.3	1580	20	-	-
DMT2004UPS	PowerDI5060-8	24	12	N	80*	3	5	6.5	10	-	0.55	1.45	1683	29.6	53.7	-
DMT2004UFG	PowerDI3333-8	24	12	N	70*	2.3	5	6.5	10	-	0.55	1.45	1683	29.6	53.7	-
DMT2004UFV	PowerDI3333-8 (Type UX)	24	12	N	70*	2.3	5	6.5	10	-	0.55	1.45	1683	29.6	53.7	-
DMT2004UFDF	U-DFN2020-6 (Type F)	24	12	N	14.1	1.8	6	7.2	12.5	-	0.55	1.45	1683	29.6	53.7	-
DMN2022UCA4	X4-DSNI1717-4	24	12	Y	7.8	2	-	22	37	-	0.4	1.4	1438	12.5	-	-
DMN2600UFB	X1-DFNI006-3	25	8	Y	1.3	0.54	-	350	450	600	0.45	1	75	0.85	-	-
DMG301NU	SOT23	25	8	Y	0.26	0.4	-	4000	5000	-	0.7	1.1	27.9	0.36	-	-
DMN25D0UFA	X2-DFN0806-3	25	8	Y	0.32	0.63	-	4000	5000	-	0.6	1.2	27.9	0.36	-	-
DMN34D0U	SOT23	25	8	Y	0.3	0.56	-	4000	5000**	-	1.1	0.7	24	0.4	-	-
DMN3150LW	SOT323	28	12	N	1.6	0.35	-	88	138	-	0.62	1.4	300	-	-	-

* @T_C=25°C **V_{GS}=20V

8V – 29V P-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)		C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Product Q-Available	175 °C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Min.	Max.					
DMP1007UCB9	U-WLB1515-9	8	6	Y	13.2	1.53	-	5.7	9.1	-	0.4	1.1	900	8.2	-	-	-
DMP1008UCB9	U-WLB1515-9	8	6	Y	13.2	1.53	-	5.7	9.1	-	0.4	1.1	900	8.2	-	-	-
DMP1008UCA9	X2-DSN1515-9	8	6	Y	16	2.2	-	5.7	9.1	-	0.4	1.1	952	9.5	-	-	-
DMP1010UCA4	X2-DSN1212-4	8	6	Y	10	1.75	-	9.9	15	40	0.4	1.05	699	7	-	-	-
DMP1011UCB9	U-WLB1515-9 (Type B)	8	6	Y	7.4	1.57	-	10	14	-	0.4	1.1	817	8.1	-	-	-
DMPH16M1UPSW	PowerDI5060-8 (SWP) (Type UX)	12	8	N	96	1.95	-	6	8	-	0.4	1	5392	75	164	-	Y
DMPH1006UPS	PowerDI5060-8	12	8	N	80*	3.2	-	6	8	-	0.4	1	6334	72	124 @8V	Y	Y
DMP1005UFDF	U-DFN2020-6 (Type F)	12	8	Y	12.8	2.1	-	8.5	12	18.5	0.3	1	2475	28	-	-	-
DMP1009UFDF	U-DFN2020-6 (Type F)	12	8	N	11	2	-	11	19	30	0.3	1	1860	26	-	Y	-
DMP1011LFV	PowerDI3333-8 (Type UX)	12	6	Y	13	1.05	-	11.7	18.6	-	0.6	1.2	913	7.1	-	-	-
DMP1022UFDF	U-DFN2020-6 (Type F)	12	8	Y	9.5	2.1	-	14.8	19	26	0.35	0.8	2712	28.6	-	-	-
DMP1012USS	SO-8	12	8	N	8.5	1.6	-	15	30	40	0.4	1	1344	19.5	-	-	-
DMP1012UFDF	U-DFN2020-6 (Type F)	12	8	N	12.6	2.11	-	15	30	40	0.3	0.9	1344	19.5	-	-	-
DMP1022UFDE	U-DFN2020-6 (Type E)	12	8	Y	9.1	2.03	-	16	21.5	26	-	0.8	2953	25.3	-	Y	-
DMP1022UWS	V-DFN3020-8	12	8	Y	7.2	1.4	-	18	22	28	0.35	1	2847	27	-	-	-
DMP1245UFCL	X1-DFN1616-6 (Type E)	12	8	Y	6.6	1.7	-	29	45	60	0.3	0.95	1357	16.1	-	-	-
DMP1045U	SOT23	12	8	Y	5.2	1.3	-	31	45	75	0.3	1	1357	15.8	-	Y	-
DMP1070U	SOT23	12	8	Y	5.4	1.4	-	31	45	75	0.3	1	143	11.5	-	Y	-
DMP1045UFY4	X2-DFN2015-3	12	8	Y	5.5	1.7	-	32	45	75	0.3	1	1291	14.7	-	-	-
DMP1070UFY4	X2-DFN2015-3	12	8	Y	5	1.9	-	48	60	90	0.2	1	929	11.7	-	Y	-
DMP1055USW	SOT363	12	8	Y	3.8	1.03	-	48	59	80	0.4	1	1028	13	-	-	-
DMP1045UCB4	X2-WLB0808-4	12	8	Y	4.8	1.75	-	50	65	100	0.3	1	535	6.1	-	-	-
DMP1070UCA3	X4-DSN0607-3	12	6	Y	3.6	1.36	-	70	100	150	0.4	0.95	147	1.45	-	-	-
DMP1100UCB4	X2-WLB0808-4	12	8	Y	3.2	1.1	-	83	96	150	0.35	0.8	680	9	-	-	-
DMP1200UFR4	X2-DFN1010-3	12	8	Y	2	1.26	-	100	160	200	0.35	1	514	5.8	-	-	-
DMP1555UFA	X2-DFN0806-3	12	8	Y	0.2	0.36	-	800	1100	3000	0.4	1	55	0.84	-	-	-
DMP2068UFY4	X2-DFN2015-3	16	8	Y	4.8	1.3	-	39	65	103	0.3	1	973	11	-	Y	-
DMP2002UPS	PowerDI5060-8 (Type K)	20	12	N	60*	2.3	1.9	2.4	3.8	-	0.5	1.4	12826	228	476	-	-
DMP22M1UPSW	PowerDI5060-8 (SWP) (Type Q)	20	12	N	60*	3.2	1.9	2.4	4	-	0.5	1.4	15853	196	425	Y	-
DMP2003UPS	PowerDI5060-8	20	12	N	150*	2.7	2.2	2.55	4	-	0.5	1.4	8352	79	177	-	-
DMP22M2UPS	PowerDI5060-8	20	12	N	42*	2.3	2.5	3.5	5	-	0.5	1.4	12826	228	476	-	-
DMP2005UFG	PowerDI3333-8	20	10	N	19	2.2	-	4	6.5	14	0.3	0.9	4670	55	125	-	-
DMP2004UFG	PowerDI3333-8	20	12	N	115*	2.4	3	4	-	-	-	1.1	3840	40	83	-	-
DMP2006UFG	PowerDI3333-8	20	10	N	17.5	2.3	-	5.5	7.5	12	0.4	1	5404	64	140	Y	-
DMP26M1UFG	PowerDI3333-8	20	10	N	71*	3	-	5.5	7.5	12	0.4	1	5392	75	164	-	-
DMP26M1UPSW	PowerDI5060-8 (SWP) (Type UX)	20	10	N	83*	2.6	-	6	8	-	0.4	1	5392	75	164	Y	-
DMP26M1UPS	PowerDI5060-8	20	10	N	90*	2.76	-	6	8	-	0.4	1	5392	75	164	-	-
DMP26M7UFG	PowerDI3333-8	20	10	N	18	2.3	-	6.7	9	-	0.4	1	5940	75	156	-	-
DMP27M1UPSW	PowerDI5060-8 (SWP) (Type UX)	20	12	N	84*	1.95	5.5	7	9	-	0.4	1.3	4777	55	123	Y	-
DMP2007UFG	PowerDI3333-8	20	12	N	18	2.3	5.5	7	9	-	0.4	1.3	4621	39	85	-	-
DMP2008UFG	PowerDI3333-8	20	8	N	14	2.4	-	8	9.8	13	0.4	1	6909	72	-	-	-
DMP2008USS	SO-8	20	8	N	13	2.3	-	9	11	16	1	1	6820	76	159	-	-
DMP2012UFDE	U-DFN2020-6 (Type E)	20	8	Y	14	2.4	-	9	12	-	0.4	1.5	1686	16	28	-	-
DMP2010UFG	PowerDI3333-8	20	10	N	12.7	2.3	-	9.5	12.5	-	0.4	1.2	3350	50	103	-	-
DMP2010UFV	PowerDI3333-8 (Type UX)	20	10	N	50*	2	-	9.5	12.5	-	0.4	1.2	3350	50	103	-	-
DMP2016UFDE	U-DFN2020-6 (Type E)	20	8	Y	9.5	1.8	-	15	19	36	0.35	1.1	1710	17	30 @8V	-	-
DMP2016UFDF	U-DFN2020-6 (Type F)	20	8	Y	9.5	1.8	-	15	19	-	-	1.1	-	17	30 @8V	-	-
DMP2021UFDF	U-DFN2020-6 (Type F)	20	8	Y	9	2.02	-	16	22	40	0.35	1	2760	34	59 @8V	-	-
DMP2021UTS	TSSOP-8	20	10	Y	7.4	1.3	-	16	22	40	0.35	1	2760	34	59 @8V	Y	-
DMP2021UFDE	U-DFN2020-6 (Type E)	20	10	N	9	1.9	-	16	22	40	0.35	1	2760	34	59 @8V	-	-
DMP2022LSS	SO-8	20	12	N	10	2.5	13	16	22	-	0.6	1.1	2444	28.1	56.9	Y	-
DMP2018LFK	U-DFN2523-6	20	12	Y	9.2	2.1	-	16	20	-	0.45	1.2	4748	53	113	-	-
DMP2035UFCL	U-DFN1616-6 (Type K)	20	8	Y	6.6	1.6	-	24	31	45	0.4	1	1610	15.4	29 @8V	-	-
DMP2024UFDF	U-DFN2020-6 (Type F)	20	8	N	7.2	2.1	-	27	32	50	0.4	1	2007	21.7	-	-	-
DMP2023UFDF	U-DFN2020-6 (Type F)	20	8	N	7.6	2.03	-	27	32	50	0.4	1	1837	27	-	-	-
DMP2037U	SOT23	20	10	Y	6.1	1.6	-	28	43	-	-	1.2	803	8.4	-	-	-
DMP2037UFCL	U-DFN1616-6 (Type K)	20	10	Y	8	2.3	-	28	43	-	0.5	1.5	806	8.5	-	-	-
DMP2035UFDF	U-DFN2020-6 (Type F)	20	8	Y	6.9	2.03	-	29	39	60	0.4	1	1808	20.5	-	-	-
DMP2036UVT	TSOT26	20	8	Y	6	1.5	-	30	39	58	0.4	1	1808	20.5	-	-	-
DMP2040UFDF	U-DFN2020-6 (Type F)	20	12	N	6.1	1.8	-	32	53	-	0.6	1.5	834	8.6	19 @8V	-	-
DMP2040USS	SO-8	20	12	N	7	1.9	-	33	52	-	0.6	1.5	834	8.6	19 @8V	-	-

* @T_C = 25°C ** P+SKY *** P+SBR SWP=Side Wall Plating

8V – 29V P-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)		C _{iss} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant* Available	175 °C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Min.	Max.					
DMP2035U	SOT23	20	10	Y	4.9	1.2	-	35	45	62	0.4	1	1610	15.4	-	-	-
DMP2035UVT	TSOT26	20	12	Y	6	2	-	35	45	62	0.4	1.5	1610	15.4	-	Y	-
DMP2066UFDE	U-DFN2020-6 (Type E)	20	12	N	6.2	2.03	-	36	56	75	0.4	1.1	1537	14.4	-	-	-
DMPH2040UVT	TSOT26	20	12	N	5.6	1.5	-	38	52	-	0.6	1.5	834	8.6	19 @8V	Y	Y
DMP2040UVT	TSOT26	20	12	N	5.5	1.5	-	38	52	-	0.6	1.5	834	8.6	19 @8V	-	-
DMP2066LSN	SC59	20	12	N	4.6	1.25	-	40	70	-	0.6	1.2	820	10.1	-	-	-
DMP2070U	SOT23	20	8	Y	4.6*	1.4	-	44	57	-	-	0.95	118	8.2	17.8 @8V	Y	-
DMP2066LVT	SOT26	20	8	N	4.5	1.8	-	45	65	-	0.4	1.5	1496	14.4	-	-	-
DMP2067LVT	TSOT26	20	8	N	4.2	1.6	-	45	65	-	0.4	1.5	1575	15	28 @8V	-	-
DMP2045U	SOT23	20	8	Y	4.3	1.2	-	45	58	90	0.3	1	634	6.8	-	Y	-
DMP2045UFY4	X2-DFN2015-3	20	8	N	4.7	1.49	-	45	58	90	0.3	1	634	6.8	-	-	-
DMP2043UCA3	X2-DSN1010-3	20	20	Y	4.2	1.3	-	45	62	-	0.4	1.2	327	1.46	-	-	-
DMP2047UCB4	U-WLB1010-4	20	6	Y	4.1	1.6	-	47	60	-	0.4	1.2	218	2.3	-	-	-
DMP2042UCP4	X1-DSN1010-4 (Type C)	20	6	Y	3.4	0.86	-	48	65	-	0.4	1.2	218	2.5	-	-	-
DMP2069UFY4	X2-DFN2015-3	20	8	Y	2.5	0.53	-	54	69	90	0.3	1	214	9.1	-	-	-
DMP2070UFY4	X2-DFN2015-3	20	8	Y	4.7	1.8	-	54	69	90	0.3	1	915	10.2	-	Y	-
DMP2305UVT	TSOT26	20	8	N	4.23	1.64	-	60	90	113	0.5	0.9	727	7.6	-	-	-
DMP2305U	SOT23	20	8	N	4.2	1.4	-	60	90	113	0.5	0.9	727	7.6	-	-	-
DMP2065U	SOT23	20	12	N	4	1.5	-	60	90	113	-	0.9	-	10.2	-	Y	-
DMP2120U	SOT23	20	8	N	3.8	1.3	-	62	90	150	0.4	1	487	6.3	-	-	-
DMP2056UCA4	X4-DSN0808-4	20	8	Y	4.4	1.87	-	64	80	130	0.4	1.1	437	4.9	8.4 @8V	-	-
DMP2033UVT	TSOT26	20	8	N	4.2	1.7	-	65	100	200	0.5	0.9	845	10.4	-	-	-
DMP2123L	SOT23	20	12	N	3	1.4	-	72	123	-	0.6	1.25	443	7.3	-	Y	-
DMP2075UVT	TSOT26	20	8	N	3.8	1.6	-	75	137	-	0.3	1	642	8.8	-	-	-
DMP2130L	SOT23	20	12	N	3	1.4	-	75	125	-	0.6	1.25	443	7.3	-	-	-
DMP2109UVT	TSOT26	20	10	N	3.7	1.2	-	80	110	-	0.45	1	443	6	-	-	-
DMP2110U	SOT23	20	10	N	3.5	1.2	-	80	110	-	0.45	1	443	6	-	-	-
DMP2130LDM	SOT26	20	12	N	3.4	1.25	-	80	130	-	0.6	1.25	443	7.3	-	-	-
DMP2090UFDB	U-DFN2020-6 (Type B)	20	8	Y	3.2	1.39	-	90	120	-	0.3	1	634	6.8	-	-	-
DMP2170U	SOT23	20	12	N	3.1	1.28	-	90	250	-	0.4	1.25	303	3.6	7.8	-	-
DMP2165UW	SOT323	20	12	Y	2.5	0.7	-	90	120	180	0.4	1	184	3.5	-	-	-
DMS2120LFWB**2	W-DFN3020-8 (Type B)	20	12	Y	2.9	1.5	-	95	120	150	-	-	-	-	-	-	-
DMS2095LFDB**1	U-DFN2020-6 (Type B)	20	12	N	3.4	1.64	-	95	120	150	0.4	1.3	561	7	-	-	-
DMS2220LFDB**2	U-DFN2020-6 (Type B)	20	12	Y	3.5	1.4	-	95	120	-	-	-	-	-	-	-	-
DMP2101UCP9	X2-DSN1515-9 (Type B)	20	6	Y	3.1	1.47	-	100	130	175	0.4	0.9	392	3.2	-	-	-
DMP2160UW	SOT323	20	10	N	1.5	0.35	-	100	120	-	-	0.9	627	-	-	-	-
DMP2110UW	SOT323	20	12	N	2	1.1	-	100	120	160	0.4	0.9	443	6	-	-	-
DMP2078LCA3	X4-DSN1006-3	20	12	Y	3.4	1.4	-	100	165	600	0.7	1.2	152	1.1	-	-	-
DMP2079LCA3	X4-DSN1006-3	20	12	Y	3.4	1.4	-	100	165	600	0.7	1.2	152	1.1	-	-	-
DMP2077UCA3	X4-DSN1006-3	20	12	N	4	1.98	-	100	165	600	0.5	1	143	1.34	-	-	-
DMS2085LSD**1	SO-8	20	20	N	3.3	0.7	-	125	-	-	0.5	2.2	410	3.7	7.8	-	-
DMP2240UW	SOT323	20	12	N	1.5	0.25	-	150	200	240	0.45	1	320	-	-	Y	-
DMP2104V	SOT563	20	12	N	1.9	0.85	-	150	200	240	0.45	1	320	-	-	-	-
DMP2104LP	X1-DFN1411-3	20	12	N	1.5	0.5	-	150	200	240	0.45	1	320	-	-	-	-
DMP2012SN	SC59	20	12	Y	0.9	0.5	-	300	500	-	0.5	1.2	178.5	-	-	-	-
DMP21D0UFD	X1-DFN1212-3	20	8	Y	1.14	0.93	-	495	730	960	0.45	1.2	76.5	1	-	-	-
DMP21D0UT	SOT523	20	8	Y	0.65	0.33	-	495	690	960	0.45	1.2	76.5	1	-	-	-
DMP21D0UFB	X1-DFN1006-3	20	8	Y	1.17	0.99	-	495	690	960	0.5	1	76.5	1	-	-	-
DMP21D0UFB4	X2-DFN1006-3	20	8	Y	1.17	0.99	-	495	690	960	0.5	1	76.5	1	-	-	-
DMP2900UT	SOT523	20	6	Y	0.5	0.32	-	700	900	1300	0.5	1	49	0.7	-	Y	-
DMP21DIUT	SOT523	20	8	Y	0.63	0.44	-	710	930	1250	0.5	1	33	1.4	-	Y	-
DMP2900UW	SOT323	20	6	N	0.6	0.5	-	750	1050	1500	0.5	1	49	0.7	-	-	-
DMP2900UFB	X1-DFN1006-3	20	6	Y	0.99	1.1	-	750	1050	1500	0.5	1	49	0.7	-	Y	-
DMP2004K	SOT23	20	8	Y	0.6	0.55	-	900	1400	2000	0.5	1	95	-	-	-	-
DMP2004WK	SOT323	20	8	Y	0.4	0.25	-	900	1400	2000	0.5	1	95	-	-	-	-
DMP21D6UFD	X1-DFN1212-3	20	8	Y	0.6	0.8	-	1000	1500	2000	0.5	1	46.1	0.5	-	-	-
DMP21D6UFB4	X2-DFN1006-3	20	8	Y	0.58	0.98	-	1000	1500	2000	0.5	1	46.1	0.5	0.8 @8V	-	-
DMP21D5UFB4	X2-DFN1006-3	20	8	Y	0.7	0.95	-	1000	1500	2000	0.5	1	46.1	0.5	-	-	-
DMP21D2UFA	X2-DFN0806-3	20	8	Y	0.33	0.36	-	1000	1200	1600	0.3	1	49	0.8	-	-	-
DMP2004TK	SOT523	20	8	Y	0.43	0.23	-	1100	1600	2400	0.5	1	95	0.55	0.97 @8V	-	-
DMP22D6UT	SOT523	20	8	Y	0.43	0.15	-	1100	1600	2600	0.5	1	95	-	-	-	-

8V – 29V P-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)		C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Qualification Available	175 °C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Min.	Max.					
DMP22D3UFZ	X2-DFN0606-3	20	8	Y	0.39	0.37	-	1400	2200	3300	0.4	1	17	0.3	-	-	-
DMP22D5UDR4	X2-DFN1010-6 (Type UXC)	20	8	Y	0.36	0.7	-	1900	2400	3400	0.4	1	17	0.3	-	-	-
DMP22D5UFB4	X2-DFN1006-3	20	8	Y	0.4	1.18	-	1900	2400	3400	0.4	1	17	0.3	-	Y	-
DMP22D6UFB4	X2-DFN1006-3	20	8	Y	1	1	-	1900	2400	3400	0.4	1	22.2	0.5	-	Y	-
DMP22D4UFA	X2-DFN0806-3	20	8	Y	0.33	0.4	-	1900	2400	3400	0.4	1	28.7	0.4	-	-	-
DMP22D5UFA	X2-DFN0806-3	20	8	Y	0.36	0.37	-	1900	2400	3400	0.4	1	17	0.3	-	-	-
DMP22D5UFZ	X2-DFN0606-3	20	8	Y	0.33	0.95	-	1900	2400	3400	0.4	1	17	0.3	-	-	-
DMP22D5UFO	X2-DFN0604-3	20	8	Y	0.51	0.34	-	1900	2400	3400	0.4	1	17	0.3	-	-	-
DMP22D4UFO	X2-DFN0604-3	20	8	Y	0.53	0.82	-	1900	2400	3400	0.4	1	28.7	0.4	-	-	-
DMP2039UFDE4	X2-DFN2020-6	25	8	Y	7.3	2.4	-	26	33	40	0.4	1	2530	28.2	0	-	-
DMP2039UFDE	U-DFN2020-6 (Type E)	25	8	Y	6.7	2	-	27	34	40	0.4	1	2530	28.2	48.7 @8V	-	-
DMP2541UCP9	X2-DSN1515-9 (Type B)	25	6	Y	5.2	1.67	-	40	50	60	0.4	1.1	566	4.7	-	-	-
DMP213DUFA	X2-DFN0806-3	25	8	Y	0.166	0.36	-	10000	13000	-	0.65	1.5	27.2	0.35	-	-	-

* @T_C = 25°C ** P+SKY *** P+SBR SWP=Side Wall Plating

12V – 29V Dual N-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)		C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Qualification Available	175 °C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Min.	Max.					
DMN1002UCA6	X4-DSN3118-6	12	8	Y	24.4	2.47	-	2.75	6.1	-	0.35	1.4	3062	45.7 @4V	31	-	-
DMN12M7UCA10	X4-DSN3015-10	12	8	Y	20.2	1.73	-	2.75	6.1	-	0.5	1.4	3039	35.7 @4V	29	-	-
DMN12M8UCA10	X4-DSN3015-10	12	8	Y	25	2.75	-	2.8	6.2	-	0.5	1.4	2504	4 @4V	30	-	-
DMN1003UCA6	X3-DSN3518-6	12	8	Y	23.6	2.67	-	3.2	6.3	-	0.5	1.3	3315	56.5	32	-	-
DMN13M9UCA6	X3-DSN3518-6 (Type B)	12	8	Y	23.6	2.67	-	3.2	6.5	-	0.5	1.3	3315	56.5	33	-	-
DMN1001UCA10	X2-TSN1820-10	12	8	Y	20	2.4	-	3.55	6.9	-	0.35	1.4	2865	29 @4V	27	-	-
DMN15M5UCA6	X4-DSN2117-6	12	10.5	Y	16.5	2	-	5.1	10	-	0.5	1.3	59	-	35	-	-
DMN1006UCA6	X3-DSN2718-6	12	12	Y	16.6	2.4	-	5.9	9	-	0.5	1.3	2360	35.2	36	-	-
DMN16M0UCA6	X4-DSN2112-6	12	8	Y	17	2.6	-	5.9	11	-	0.4	1.3	-	24	26	-	-
DMN16M9UCA6	X3-DSN2718-6 (Type B)	12	12	Y	16.6	2.4	-	6.5	11.4	-	0.5	1.3	2360	35.2	37	-	-
DMN1025UFDB	U-DFN2020-6 (Type B)	12	10	Y	6.9	1.7	-	25	30	38	0.4	1	917	12.6	34	-	-
DMN1029UFDB	U-DFN2020-6 (Type B)	12	8	N	5.6	1.4	-	29	34	44	0.4	1	914	10.5	28	-	-
DMN1150UFL3	X2-DFN1310-6 (Type B)	12	6	Y	2	0.9	-	150	185	210	0.35	1	115	1.4	23	-	-
DMN1250UFEL*	U-QFN1515-12	12	8	N	2	1.25	-	450	550	-	-	1	146	1.3	25	-	-
DMN12M3UCA6	X4-DSN3118-6	14	8	Y	24.4	2.47	-	2.75	6.1	-	0.35	1.4	3062	45.7 @4V	38	-	-
DMN15M3UCA6	X3-DSN2718-6	14	12	Y	16.5	2.4	-	5.8	8	-	0.5	1.3	2360	35.2	39	-	-
DMN2008LFU	U-DFN2030-6 (Type B)	20	12	Y	14.5	1.7	-	5.4	9.6	-	0.5	1.5	1418	18.7	83	-	-
DMN2011UFX	V-DFN2050-4	20	12	Y	12.2	2.1	-	9.5	13	-	0.3	1	2248	24	86	-	-
DMN2022UNS	PowerDI3333-8 (Type UXB)	20	10	Y	10.7	1.9	-	10.8	14.5	17	0	1	1870	20.3	68	-	-
DMN2013UFX	W-DFN5020-6	20	8	Y	10	2.14	-	11.5	14	-	0.5	1.1	2607	32.4	56	-	-
DMN2009UCA4	X4-DSN1717-4	20	8	Y	10.3	1.9	-	11.9	23	-	0.35	1.4	1780	-	51	-	-
DMN2014LHAB	U-DFN2030-6 (Type B)	20	12	Y	9	1.7	-	13	18	28	0.3	1.1	1550	16	82	-	-
DMN2016UTS	TSSOP-8	20	8	Y	8.58	0.88	-	14.5	16.5	-	0.4	1	1495	16.5	58	-	-
DMN2016LHAB	U-DFN2030-6 (Type B)	20	12	Y	7.5	1.65	-	15.5	20	30	0.5	1.1	1550	16	81	-	-
DMN2016LFG	U-DFN3030-8	20	8	Y	5.2	0.77	-	18	22	30	0.4	1.1	1472	16	55	-	-
DMN2028UFU	U-DFN2030-6 (Type B)	20	10	Y	7.5	1.8	-	20.2	23.5	30	0	1	887	10	65	-	-
DMN2024UFU	U-DFN2030-6 (Type B)	20	10	Y	7.5	1.7	-	20.2	23.5	-	-	0.95	647	6.5	66	-	-
DMN2019UTS	TSSOP-8	20	12	Y	5.4	18.5	18.5	21	24	31	0.35	0.95	143	8.8	88	-	-
DMN2024UFX	V-DFN2050-4	20	10	Y	8	2.1	-	22	26	-	0	1	647	6.5	69	-	-
DMN2028UFBDH	PowerDI3030-8	20	12	Y	6.8	20	20	22	26	36	0.5	1	151	8.5	85	-	-
DMN2024UDH	U-DFN3030-8	20	10	Y	5.2	1.76	-	23	27	34	0.35	1	647	7.1	67	-	-
DMN2024UTS	TSSOP-8	20	10	Y	6.2	1.39	-	24	28	-	0.35	0.95	647	7.1	70	-	-
DMN2024UVT	TSOT26	20	10	Y	7	1.6	-	24	28	34	0	0.9	647	7.1	64	-	-
DMN2029USD	SO-8	20	8	N	5.8	1.4	-	25	35	-	0.6	1.5	1171	10.4	59	-	-
DMN2025UFDB	U-DFN2020-6 (Type B)	20	10	Y	6	1.4	-	25	31	-	0.5	1	486	5.9	63	-	-
DMN2040LTS	TSSOP-8	20	12	N	6.7	0.89	-	26	36	-	0.5	1.2	570	5.2	89	-	-

*8x N-Channel ** @T_C = 25°C

12V – 29V Dual N-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)		C _{iss} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Component Available	T ₇₅ °C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Min.	Max.					
DMN2041LSD	SO-8	20	12	N	7.6	1.16	-	28	41	-	0.5	1.2	550	7.2	90	-	-
DMN2041UVT	TSOT26	20	8	N	5.8	1.1	-	28	32	40	0.4	0.9	689	9.1	52	-	-
DMN2030UCA4	X4-DSN1111-4	20	12	N	6.3	1.9	-	32	50	-	0.35	1.4	523	-	71	-	-
DMN2053UVT	TSOT26	20	12	N	4.6	1.1	-	35	43	56	0.4	1	369	3.6	77	-	-
DMN2053UFDB	U-DFN2020-6 (Type B)	20	12	N	4.6	1.1	-	35	43	56	0	1	-	3.6	74	Y	-
DMN2041UFDB	U-DFN2020-6 (Type B)	20	12	Y	4.7	1.4	-	40	65	-	0.35	1.4	713	8	75	-	-
DMN2050LFB	U-DFN2020-6 (Type B)	20	12	N	4.5	1.42	-	45	55	-	0.4	1	389	5.7	73	-	-
DMN2046UVT	TSOT26	20	12	Y	2.6	0.59	-	90	130	-	0.4	1.4	278	3.6	76	-	-
DMN2300UFL4	X2-DFN1310-6	20	8	Y	2.11	1.39	-	195	260	380	0.45	0.95	70	1.6	48	-	-
DMN2710UDW	SOT363	20	6	Y	0.8	0.49	-	450	600	750	0	1	-	0.6	42	Y	-
DMN2710UV	SOT563	20	6	Y	0.92	0.5	-	450	600	750	0.5	1	42	0.6	40	Y	-
DMN2400UV	SOT563	20	12	Y	1.33	0.53	-	500	700	900	0.5	0.9	38	0.5	72	-	-
DMN2004DMK	SOT26	20	8	Y	0.54	0.225	-	550	700	900	0.5	1	87	-	53	-	-
DMN2004DWK	SOT363	20	8	Y	0.54	0.2	-	550	700	900	0.5	1	87	0.53	50	Y	-
DMN2004VK	SOT563	20	8	Y	0.54	0.25	-	550	700	900	0.5	1	87	-	49	-	-
DMN2991UDR4	X2-DFN1010-6 (Type UXC)	20	8	Y	0.5	0.7	-	990	1200	1800	0.4	1	14.6	0.28	47	-	-
DMN2990UDJ	SOT963	20	8	Y	0.45	0.35	-	990	1200	1800	0.4	1	28	0.5	45	Y	-
DMN2991UDJ	SOT963	20	8	Y	0.5	0.38	-	990	1200	1800	0.4	1	21.5	0.35	46	-	-
DMN2991UDA	X2-DFN0806-6	20	8	Y	0.45	0.31	-	990	1200	1800	0.4	1	21.5	0.35	43	-	-
DMN21DIUDA	X2-DFN0806-6	20	8	Y	0.455	0.31	-	990	1200	1800	0.4	1	31	0.41	44	-	-
DMN2005DLP4K	X2-DFN1310-6	20	10	Y	0.3	0.4	-	1500	1700	3500	0.53	0.9	37	-	62	-	-
DMN22M5UCA10	X4-DSN3221-10	24	12	Y	26.5	3.14	-	4	7.4	-	0.4	1.3	3490	40.7	97	-	-
DMT2005UDV	PowerDI3333-8 (Type UXC)	24	12	N	50*	7	7	8	12	-	0.5	1.5	2060	24.8	98	-	-
DMN2012UCA6	X3-DSN2718-6	24	12	Y	13	2.3	-	9	13	-	0.5	1.3	2417	-	96	-	-
DMN2016UFX	V-DFN2050-4	24	12	Y	9.9	2.23	-	15	20	-	0.4	1.5	950	14	100	-	-
DMN2023UCB4	X1-WLB1818-4	24	12	Y	6	1.45	-	26	40	-	0.5	1.3	2564	29	95	-	-
DMN2036UCB4	X2-WLB1616-4	24	12	Y	5	1.45	-	36	52	-	0.5	1.3	-	12.6	94	-	-
DMT26MOLDG	PowerDI3333-8 (Type F)	25	12	N	11.6, 20.1	6, 2	6, 2	7.5, 3.1	-	-	0.8, 1.1	2.2	1010, 4016	7.2, 26.7	102	-	-

*8x N-Channel ** @T_C = 25°C

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12V – 29V Dual P-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)		C _{ISS} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant "Q" Available
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Min.	Max.				
DMP1055UFDB	U-DFN2020-6 (Type B)	12	8	Y	3.9	1.4	-	59	81	115	0.4	1	1028	13	20.8 @8V	-
DMP1046UFDB	U-DFN2020-6 (Type B)	12	8	N	3.8	1.4	-	61	81	115	0.4	1	915	10.7	17.9 @8V	-
DMP2040USD	SO-8	20	12	N	6.5	1.6	-	33	52	-	0.6	1.5	834	8.6	19 @8V	-
DMP2035UTS	TSSOP-8	20	8	Y	6.04	0.89	-	35	45	62	0.4	1	1610	15.4	-	-
DMP2040UND	PowerDI3333-8	20	12	N	5.3	1.4	-	36	60	-	-	1.5	-	9.6	20	-
DMP2100UFU	U-DFN2030-6 (Type B)	20	10	Y	5.7	1.9	38	43	75	-	0.3	1.4	906	10.3	21.4	-
DMP2065UFDB	U-DFN2020-6 (Type B)	20	12	N	4.5	1.54	-	50	100	150	0.4	1	752	9.1	-	-
DMP2075UFDB	U-DFN2020-6 (Type B)	20	8	Y	3.8	1.4	-	75	137	-	0.35	1.4	642	8.8	15 @8V	-
DMP2110UFDB	U-DFN2020-6 (Type B)	20	12	N	3.1	1.1	-	75	110	168	-	1	-	6	-	Y
DMP2045UFDB	U-DFN2020-6 (Type B)	20	8	Y	3.1	1.29	-	90	120	-	0.3	1	634	6.8	-	-
DMP2090UFDB	U-DFN2020-6 (Type B)	20	8	Y	3.2	1.39	-	90	120	-	0.3	1	634	6.8	-	-
DMP2240UDM	SOT26	20	12	N	2	0.6	-	150	200	240	0.45	1	320	-	-	-
DMP2110UVT	TSOT26	20	10	N	1.8	1.1	-	150	200	240	0.45	1	440	6	-	Y
DMP2200UFCL	U-DFN1616-6 (Type F)	20	8	Y	1.7	1.58	-	200	290	390	0.4	1.2	184	2.2	-	-
DMP2200UDW	SOT363	20	8	Y	0.9	0.6	-	260	500	1000	0.4	1.2	184	2.1	-	-
DMP2900UDW	SOT363	20	6	Y	0.63	0.46	-	750	1050	1500	0.5	1	49	0.7	-	Y
DMP2900UV	SOT563	20	6	Y	0.85	0.8	-	750	1050	1500	0.5	1	49	0.7	-	-
DMP2004DMK	SOT26	20	8	Y	0.55	0.5	-	900	1400	2000	0.5	1	95	-	-	-
DMP2004DWK	SOT363	20	8	Y	0.54	0.25	-	900	1400	2000	0.5	1	95	-	-	-
DMP2004VK	SOT563	20	8	Y	0.53	0.4	-	900	1400	2000	0.5	1	95	-	-	-
DMP22D5UDJ	SOT963	20	8	Y	0.36	0.38	-	1900	2400	3400	0.4	1	17	0.3	-	-
DMP22D4UDA	X2-DFN0806-6	20	8	Y	0.33	0.31	-	1900	2400	3400	0.4	1	28.5	0.4	-	-
DMP22D5UDA	X2-DFN0806-6	20	8	Y	0.35	0.35	-	1900	2400	3400	0.4	1	17	0.3	-	-

12V – 29V Dual Complementary



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =			V _{GS} (th) (V)		C _{ISS} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Automotive Compliant "Q" Available
		(V)	(±V)		@T _A =25°C	@T _A =25°C	4.5V	2.5V	1.8V	Min.	Max.			
DMC1016UPD	PowerDI5060-8 (Type C)	12, 20	8, 8	N, Y	9.5, 8.7	2.3	17, 20	25, 25	- , 40	-	15, 1	-	18, 32	-
DMC1018UPD(W)	PowerDI5060-8 (SWP) (Type C)	12, 20	8, 12	N	9.5, 6.9	2.3	17, 32	25, 52	-	0.6, 0.6	1.5, 1.5	1787	18.6	Y
DMC1015UPD	PowerDI5060-8 (Type C)	12, 20	8, 8	N	9.5, 6.8	2.3	17, 32	25, 53	-	-	1.5, 1.5	-	15.6, 15.4	-
DMC1029UFDB	U-DFN2020-6 (Type B)	12, 12	8, 8	N	5.6, 3.8	1.4	29, 61	34, 81	44, 115	0.4, 0.4	1, 1	914, 915	10.5, 10.7	-
DMC1229UFDB	U-DFN2020-6 (Type B)	12, 12	8, 8	N	5.6, 3.8	1.4	29, 61	34, 81	44, 115	0.4, 0.4	1, 1	914, 915	10.5, 10.7	-
DMC1030UFDB	U-DFN2020-6 (Type B)	12, 12	8, 8	Y	5.1, 3.9	1.36	34, 59	40, 81	50, 115	0.4, 0.4	1, 1	1003, 1028	12.2, 13	Y
DMC1028UVT	TSOT26	12, 20	8, 8	Y	6.1, 3.5	1.2	25, 80	32, 100	40, 140	-	1, 1	-	10.5, 6.7	-
DMC1028UFDB	U-DFN2020-6 (Type B)	12, 20	8, 8	Y	6.3, 4	1.36	25, 80	32, 100	40, 140	0.4, 0.4	1, 1	787, 576	10.5, 6.7	-
DMC2020USD	SO-8	20, 20	10, 10	Y	7.8, 6.3	1.8	20, 33	28, 45	-	0.5, 0.4	1.5, 1	1149, 1610	11.6, 15.4	-
DMC2025UFDB	U-DFN2020-6 (Type B)	20, 20	10, 8	Y	6.3, 5	1.4	25, 75	35, 140	-	0.5, 0.35	1, 1.4	486, 642	5.9, 8.8	-
DMC2053UFDB	U-DFN2020-6 (Type B)	20, 20	4.6, 3.1	N	12, 12	1.1	35, 75	43, 110	56, 168	0.4, 0.5	1, 1	369, 440	3.6, 5.9	Y
DMC2053UVT	TSOT26	20, 20	12, 12	N	4.6, 3.2	1.1	35, 74	43, 110	-	-	1, 1	-	3.6, 5.9	-
DMC2057UVT	TSOT26	20, 20	12, 8	N	4, 3.3	1.1	42, 72	60, 100	91, 160	0.4, 0.4	1.2, 1	416, 536	4.7, 6.5	-
DMC2041UFDB	U-DFN2020-6 (Type B)	20, 20	12, 12	Y	4.7, 3.2	1.4	40, 90	65, 137	-	0.35, 0.35	1.4, 1.4	713, 881	8, 11	-
DMC2700UDM	SOT26	20, 20	6, 6	Y	1.34, 1.14	1.12	400, 700	500, 900	700, 1300	0.5, 0.5	1, 1	65, 63	0.74, 0.62	Y
DMC2710UVT	TSOT26	20, 20	6, 6	Y	1.2, 0.9	0.8	400, 700	500, 900	700, 1300	0.45, 0.5	1, 1	42, 49	0.6, 0.7	-
DMC2710UV	SOT563	20, 20	6, 6	Y	1.1, 0.8	0.8	400, 700	500, 900	700, 1300	0.5, 0.5	1, 1	42, 49	0.6, 0.7	-
DMC2710UDW	SOT363	20, 20	6, 6	Y	0.75, 0.6	0.38	450, 750	660, 1050	750, 1500	0.5, 0.5	1, 1	42	0.6	-
DMC2004DWK	SOT363	20, 20	8, 8	Y	0.54, 0.43	0.25	550, 900	700, 1400	900, 2000	0.5, 0.5	1, 1	85	-	-
DMC2004LPK	X1-DFN1612-6	20, 20	8, 8	Y	0.75, 0.6	0.5	550, 900	700, 1400	900, 2000	0.5, 0.5	1, 1	85	-	-
DMC2450UV	SOT563	20, 20	12, 12	Y	1.03, 0.7	1	500, 1000	700, 1500	900, 2000	0.5, 0.5	0.9, 1	371, 461	0.5, 0.5	-
DMC2400UV	SOT563	20, 20	12, 8	Y	1.03, 0.7	1	500, 1000	700, 1500	900, 2000	0.5, 0.5	0.9, 1	37	0.5	-
DMC2991UDR4	X2-DFN1010-6 (Type UXC)	20, 20	0.5, 0.36	Y	8, 8	0.7	990, 1900	1200, 2400	1800, 3400	0.4, 0.4	1.0, 1.0	14.6, 17	0.28, 0.3	-
DMC2991UDJ	SOT963	20, 20	0.5, 0.36	Y	8, 8	0.38	990, 1900	1200, 2400	1800, 3400	0.4, 0.4	1, 1	215, 17	0.35, 0.3	-
DMC2990UDJ	SOT963	20, 20	8, 8	Y	0.45, 0.31	0.35	990, 1900	1200, 2400	1800, 3400	0.5, 0.4	1, 1	276, 28.7	0.5	Y
DMC2991UDA	X2-DFN0806-6	20, 20	0.48, 0.35	Y	8, 8	0.35	990, 1900	1200, 2400	1800, 3400	0.4, 0.4	1.0, 1.0	215, 17	0.35, 0.3	-
DMC21D1UDA	X2-DFN0806-6	20, 20	8, 8	Y	0.455, 0.328	0.3	990, 1900	1200, 2400	1800, 3400	-	1, 1	-	0.41, 0.4	-
DMC25D1UVT	TSOT26	25, 12	8, 8	Y	0.5, 3.9	1.3	4000, 55	- , 70	- , 100	0.65, 0.35	1.5, 1.5	276, 9.7	0.4, 24.5	-
DMC3730UVT	TSOT26	25, 25	8, 8	Y	0.68, 0.46	0.9	450, 1100	600, 1500*	730, 2200	0.45, 0.5	1.1, 1.1	50, 63	1.64, 1.1	-
DMC25D0UVT	TSOT26	25, 30	8, 12	N, Y	0.4, 2.6	1.2	4000, 125	- , 300	-	-	1.5	-	0.4, 10	-

SWP = Side Wall Plating *@2.7V_{GS}

30V N-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)	C _{iss} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Compliant *Q	175°C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Max.					
DMTH3M70LPSW	PowerDI5060-8 (SWP) (Type UX)	30	20	N	61	3.85	0.55	0.95	-	-	3	1112	69.4	152.7	Y	Y
DMT3M70LPSW	PowerDI5060-8 (SWP) (Type UX)	30	20	N	61	3.85	0.68	1.1	-	-	3	1112	69.4	152.7	Y	-
DMTH3M1MLPSW	PowerDI5060-8 (SWP) (Type UX)	30	20	N	40	3	0.95	1.5	-	-	2.3	5938	39	86	Y	Y
DMT3M1MLPSW	PowerDI5060-8 (SWP) (Type UX)	30	20	N	40	3	0.95	1.5	-	-	2.3	5938	39	86	Y	-
DMT30M9LPS	PowerDI5060-8	30	20	N	100*	2.6	1	1.6	-	-	3	12121	71.3	160.5	-	-
DMT3IM7LPS	PowerDI5060-8	30	20	N	30	2.4	1.7	2.4	-	-	3	5741	45	90	-	-
DMT3IM6LPS	PowerDI5060-8	30	20	N	35.8	2.5	1.35	2.4	-	-	3	7019	59.1	123	-	-
DMTH3002LPS	PowerDI5060-8	30	16	N	240*	2.5	1.6	2.5	-	-	2	-	37	77	-	Y
DMT3002LPS	PowerDI5060-8 (Type K)	30	16	N	240*	2.5	1.6	2.5	-	-	2	5000	37	77	-	-
DMT32M4LPSW	PowerDI5060-8 (SWP) (Type UX)	30	20	N	100*	2.3	1.7	2.8	-	-	3	3944	34	68	-	-
DMT32M5LFG	PowerDI3333-8	30	20	N	30	2.3	1.7	2.8	-	-	3	4066	34	67.7	-	-
DMT32M4LFG	PowerDI3333-8	30	20	N	30	1.1	1.7	2.8	-	-	3	4366	35.4	75	-	-
DMT3IM8LFVW	PowerDI3333-8/SWP (Type UX)	30	20	N	24	3.5	1.9	2.9	-	-	2.5	2979	20.3	43.1	Y	-
DMT3IM9LFVW	PowerDI3333-8/SWP (Type UX)	30	20	Y	24	3.6	1.9	2.9	-	-	2.5	3160	23.5	48.6	-	-
DMT32M5LPS(W)	PowerDI5060-8 (SWP)	30	20	N	150*	3.2	2	3	-	-	3	3944	34	68	-	-
DMTH32M5LPS	PowerDI5060-8	30	16	N	170*	3.2	2.2	3.2	-	-	3	944@25V	34	68	Y	Y
DMTH3002LK3	TO252 (DPAK)	30	16	N	150*	3.1	2.45	3.5	-	-	2	4336	30	69	-	Y
DMT3IM7LSS	SO-8	30	20	N	25	2.2	2.7	4	-	-	3	5492	43	84	-	-
DMN32M6LCA8	X4-DSN6025-8	30	20	Y	30	3.2	2.6	5.1	-	-	2.2	2780	42.7	-	-	-
DMT34M1LPS	PowerDI5060-8	30	20	N	21	2.2	3.2	5.2	-	-	3	2242	20	39	-	-
DMN3008SFG	PowerDI3333-8	30	20	N	17.6	2.1	4.4	5.5	-	-	2.3	3690	41	86	Y	-
DMT3003LFG	PowerDI3333-8	30	20	N	22	2.4	3.2	5.5	-	-	3	2370	20	44	Y	-
DMT3004LPS	PowerDI5060-8	30	20, 16	N	140*	2.7	3.8	6	-	-	3	-	-	43.7	-	-
DMTH3004LPS	PowerDI5060-8	30	20, 16	N	145*	3.2	3.8	6	-	-	3	-	-	43.7	Y	Y
DMTH3004LK3	TO252 (DPAK)	30	20, 16	N	75*	3	4	7	-	-	3	-	20	44	Y	Y
DMT3004LFG	PowerDI3333-8	30	20, 16	N	10.4	2.1	4.5	7	-	-	3	-	20	44	-	-
DMT34M8LFDE	U-DFN2020-6 (Type E)	30	20	N	19	2.2	4	7.25	-	-	2.5	1024	7.3	15.4	-	-
DMN39M1LFVW	PowerDI3333-8/SWP (Type UX)	30	20	N	87	2.7	5	7.4	-	-	2.5	2387	19	40	Y	-
DMN3009LFVW	PowerDI3333-8/SWP (Type UX)	30	20	N	60*	2	5	7.4	-	-	2.5	2000	20	42	Y	-
DMN3009SSS	SO-8	30	20	N	15	1.8	5.5	7.5	-	-	2.5	2000	20	42	-	-
DMN39M1LSS	SO-8	30	20	N	15	1.9	5.5	7.5	-	-	2.5	2311	21	42	Y	-
DMTH3004LFG	PowerDI3333-8	30	16	N	75*	2.5	5.5	8.5	-	-	3	2370	20	44	Y	Y
DMT35M7LFV	PowerDI3333-8 (Type UX)	30	20	Y	76*	1.98	5	8.5	-	-	2.4	1667	21	36	-	-
DMN39M1LK3	TO252 (DPAK)	30	20	N	17.9	2.6	5.5	9	-	-	2.5	2253	19.3	38.6	-	-
DMN3009SK3	TO252 (DPAK)	30	20	N	20	3.4	5.5	9	-	-	2.5	-	20	42	-	-
DMN3009SFG	PowerDI3333-8	30	20	N	16	2.1	5.5	9	-	-	2.5	2000	20	42	Y	-
DMT35M1LFVW	PowerDI3333-8/SWP (Type UX)	30	20	N	17	2.4	5.5	9	-	-	2.5	1057	3	6.9	-	-
DMT35M4LFVW	PowerDI3333-8 (SWP) (Type UX)	30	20	N	60*	2.2	6	9	-	-	2.5	982	7.9	16.1	-	-
DMN3009LFV	PowerDI3333-8 (Type UX)	30	20	N	60*	2	5.5	9	-	-	3	-	20	42	-	-
DMT35M4LPSW	PowerDI5060-8 (SWP) (Type UX)	30	20	N	71.1*	2.9	5.5	9.6	-	-	2.5	1029	7.9	16	-	-
DMT3006LPS	PowerDI5060-8	30	20	N	16	2.6	6	9.8	-	-	3	1155	8.4	16.7	-	-
DMT36M1LPS	PowerDI5060-8	30	20	N	16	2.6	6	9.8	-	-	3	1155	8.4	16.7	-	-
DMN3007LSS	SO-8	30	20	N	16	2.5	7	10	-	-	2.1	2714	31.2	64.2	-	-
DMT3006LFG	PowerDI3333-8	30	20	N	16	27.8*	6	10	-	-	3	1155	8.4	16.7	-	-
DMT3006LDK	V-DFN3030-8 (Type Q)	30	20	N	17.1	2.8	6.5	10	-	-	3	-	8.4	16.7	-	-
DMT3006LDF	U-DFN2020-6 (Type F)	30	20	N	14.1	2.1	7	10	-	-	3	-	8.4	16.7	-	-
DMT35M4LSS	SO-8	30	20	N	14	1.9	6	10.1	-	-	2.5	1007	3	6.7	-	-
DMN3010LFG	PowerDI3333-8	30	20	N	30	2.4	8.5	10.5	-	-	2.5	2075	16.1	37	-	-
DMT35M4LDF	U-DFN2020-6 (Type F)	30	20	N	13	1.7	6.9	10.5	-	-	2.5	-	8.1	14.9	-	-
DMT3006LFV	PowerDI3333-8 (Type UX)	30	20	N	60*	2	7	11	-	-	3	-	8.4	16.7	Y	-
DMN38MISCA10	X4-DSN3415-10	30	20	Y	16	3	7.8	11	-	-	2.3	1914	16.9	36.7	-	-
DMNH3010LK3	TO252 (DPAK)	30	20	N	15	3.2	9.5	11.5	-	-	2.5	-	16.1	37	-	Y
DMN3010LK3	TO252 (DPAK)	30	20	N	43	2.4	9.5	11.5	-	-	2.5	2075	17	37	-	-
DMN3010LSS	SO-8	30	20	N	16	2.5	9	13	-	-	2	2096	22.4	43.7	-	-
DMT35M4LDF4	X2-DFN2020-6 (Type W)	30	20	N	12	2.19	9	-	-	-	2.5	1009	8.1	14.9	-	-
DMT3009UFVW	PowerDI3333-8 (SWP) (Type UX)	30	12	Y	10.6	2.6	11	13	-	-	1.8	894	7.4	14.6	-	-
DMT3009LFVW	PowerDI3333-8 (SWP) (Type UX)	30	20	N	12	2.3	11	13	-	-	3	2000	5.8	12	Y	-
DMN3011LFVW	PowerDI3333-8/SWP (Type UX)	30	20	N	58*	2.6	11	15.2	-	-	2.25	1130	10	19.7	Y	-
DMS3014SFG	PowerDI3333-8	30	12	N	9	2.1	14.5	15.5	-	-	2.2	2296	19.3	45.7	-	-
DMN3016LK3	TO252 (DPAK)	30	20	N	12.4	2.8	12	16	-	-	2.3	1415	11.3	25.1	-	-
DMN3016LPS	PowerDI5060-8	30	20	N	10.8	2.75	12	16	-	-	2	-	11.3	25.1	-	-

SWP=Side Wall Plating *@T_C=25°C

30V N-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)	C _{ISS} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant "Q" Available	175°C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Max.					
DMN3016LSS	SO-8	30	20	N	10.3	2	12	16	-	-	2.5	1415	11.3	25.1	-	-
DMN3011LSS	SO-8	30	20	N	11	1.7	10	16	-	-	2.25	1130	10	19.7	Y	-
DMN3016LFDE	U-DFN2020-6 (Type E)	30	20	N	10	2.02	12	16	-	-	2	1415	11.3	25.1	-	-
DMN3016LFDF	U-DFN2020-6 (Type F)	30	20	N	10	2.02	12	16	-	-	2	-	11.3	25.1	-	-
DMN3011LFDF	U-DFN2020-6 (Type F)	30	20	N	10.8	2	12	16	-	-	2	1130	10	19.7	-	-
DMT3008LFDF	U-DFN2020-6 (Type F)	30	20	N	12	2.1	10	16	-	-	3	-	5.8	14	-	-
DMT3009LSS	SO-8	30	20	N	11	1.9	10	16.6	-	-	3	807	2.7	6.2	-	-
DMN3020UFDF	U-DFN2020-6 (Type F)	30	12	Y	10.4	2.03	-	19	25	40	1	-	15	27 @8V	-	-
DMN4800LSSL	SO-8	30	20	N	8	1.46	14	20	-	-	1.6	798	8.7	-	-	-
DMN4468LSS	SO-8	30	20	N	10	1.52	14	20	-	-	1.95	867	-	18.85	-	-
DMN4800LSS	SO-8	30	25	N	8.6	1.7	14	20	-	-	1.6	798	8.7	-	Y	-
DMN3020UTS	TSSOP-8	30	12	Y	6.8	1.4	-	20	25	50	1	-	15	27 @8V	-	-
DMN3021LFDF	U-DFN2020-6 (Type F)	30	20	N	9.3	2.03	15	20	-	-	2.2	-	6.7	14	-	-
DMN3029LFC	PowerDI3333-8	30	25	N	8	2.07	18.6	26.5	-	-	1.8	580	5.3	11.3	-	-
DMN3027LFC	PowerDI3333-8	30	25	N	8	2.07	18.6	26.5	-	-	1.8	580	5.3	11.3	-	-
DMN3025LFC	PowerDI3333-8	30	20	N	7.5	2	18	28	-	-	2	605	5.3	11.6	-	-
DMT3020LFVW	PowerDI3333-8 (SWP) (Type UX)	30	20	N	38*	2	17	28	-	-	2.5	393	3.6	7	-	-
DMT3020LFDF	U-DFN2020-6 (SWP)	30	20	N	8.4	1.8	17	28	-	-	2.5	-	3.6	7	Y	-
DMN3023L	SOT23	30	20	Y	6.2	1.3	25	28	68	-	1.8	-	8.3	18.4	-	-
DMN3028L	SOT23	30	20	Y	6.2	1.4	25	28	68	-	1.8	680	7.8	10.9	Y	-
DMN3030LSS	SO-8	30	25	N	9	2.5	18	30	-	-	2.1	741	7.6	16.7	-	-
DMN3025LFV	PowerDI3333-8 (Type UX)	30	20	N	25*	2.2	18	30	-	-	2	-	4.6	9.8	-	-
DMN3026LVT	TSOT26	30	20	N	6.6	1.5	23	30	-	-	2	643	5.7	12.5	Y	-
DMN3025LFDF	U-DFN2020-6 (Type F)	30	20	N	8.3	2.1	20.5	30	-	-	2	-	6	13.2	-	-
DMN3025LSS	SO-8	30	20	N	7.2	1.7	20	31	-	-	2	641	6	13.2	-	-
DMN3042LFDF	U-DFN2020-6 (Type F)	30	12	N	7	2.1	28	32	50	-	1.4	-	6.1	13.3	-	-
DMT3020LFDB	U-DFN2020-6 (Type B)	30	20	N	7.7	1.8	20	32	-	-	2.5	-	3.6	7	-	-
DMN3042L	SOT23	30	12	N	5.8	1.4	26.5	32	48	-	1.4	-	6.1	13.3	-	-
DMT3020LFCL	U-DFN1616-6 (Type K)	30	20	N	7.6	1.7	20	32	-	-	3	393	3.6	7	-	-
DMN3024SFG	PowerDI3333-8	30	25	N	7.5	2.2	23	33	-	-	2.4	479	5	10.5	-	-
DMN3032LE	SOT223	30	20	N	5.6	1.8	29	35	-	-	2	498	4.1	11.3	-	-
DMN3018SSS	SO-8	30	25	Y	7.3	1.7	21	35	-	-	2.1	697	6	13.2	-	-
DMN3018SFG	PowerDI3333-8	30	25	Y	8.5	2.2	21	35	-	-	2.1	697	6	13.2	Y	-
DMN3024LSS	SO-8	30	20	N	8.5	2.8	24	36	-	-	3	608	6.3	12.9	-	-
DMN3024LK3	TO252 (DPAK)	30	20	N	14.4	4.1	24	39	-	-	3	608	6.3	12.9	-	-
DMN3033LDM	SOT26	30	20	N	6.9	2	33	40	-	-	2.1	755	6.4	13	-	-
DMN3033LSN	SC59	30	20	N	6	1.4	30	40	-	-	2.1	755	10.5 @5V	-	Y	-
DMN3069L	SOT23	30	20	Y	5.3	1.3	30	40	-	-	1.8	309	4.3	8.1	-	-
DMN3404L	SOT23	30	20	N	4.2	1.4	28	42	-	-	2	498	5.3	11.3	-	-
DMN3032L	SOT23	30	20	N	5.4	1.3	31	45	-	-	2	481	5	-	Y	-
DMN3070SSN	SC59	30	20	Y	4.2	1.3	40	50	80	-	2.1	697	6	13.2	-	-
DMN3053L	SOT23	30	12	N	4	1.2	45	50	55	-	1.4	676	7.3	17.2	-	-
DMN3061LCA3	X4-DSN1006-3	30	12	Y	4.6	1.88	-	62	110	-	1.1	126	1.4	-	-	-
DMN3051LDM	SOT26	30	20	N	4	0.9	38	64	-	-	2.2	424	4.3	8.6	-	-
DMN3051L	SOT23	30	20	N	4.5	1.4	38	64	-	-	2.2	424	-	9	-	-
DMN3065LW	SOT323	30	12	N	4	0.77	52	65	85	-	1.5	465	5.5	11.7	-	-
DMN3066LVT	TSOT26	30	12	Y	3.6	1.3	-	67	98	-	1.5	328	4	-	Y	-
DMN3066L	SOT23	30	12	Y	3.6	1.33	-	67	98	-	1.5	353	4.1	-	Y	-
DMN3067LW	SOT323	30	12	Y	2.6	1.1	-	67	98	-	1.5	447	4.6	-	-	-
DMN3150L	SOT23	30	12	N	3.8	1.4	54	72	115	-	1.4	305	3.7	8.2	-	-
DMN3060LCA3	X4-DSN1006-3	30	12	Y	3.9	1.35	60 @8V	72	110	160	1.1	-	1.12	-	-	-
DMN3071LFR4	X2-DFN1010-3	30	20	N	3.4	1.1	65	75	-	-	2.5	-	2.1	4.5	-	-
DMN3071LVT	TSOT26	30	20	N	4	1	50	90	-	-	2.5	190	2.1	4.5	-	-
DMN3200U	SOT23	30	8	Y	2.2	0.65	-	90	110	200 @1.5V	1	290	-	-	-	-
DMN3061S	SOT23	30	20	N	2.3	1.23	59	98	196 @3.3V	-	1.8	233	2.9	5.5	Y	-
DMN3060LW	SOT323	30	12	N	2.6	0.64	60	100	-	-	1.8	395	5.6	-	-	-
DMN3061SW	SOT323	30	20	N	2.7	0.65	60	100	-	-	1.8	278	3.5	-	-	-
DMN3110S	SOT23	30	20	N	3.3	1.3	73	110	-	-	3	306	4.1	8.6	Y	-
DMN3112S	SOT23	30	20	N	5.8	1.4	57	112	-	-	2.2	268	-	-	-	-
DMN3300U	SOT23	30	12	N	2	1.3	-	150	200	250	1	193	-	-	-	-
DMN3731U	SOT23	30	8	Y	0.9	0.58	-	460	560	730	0.95	-	5.5	-	-	-

SWP=Side Wall Plating *@T_C=25°C

30V N-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)	C _{iss} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant "Q" Available	175°C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Max.					
DMN3732U	SOT23	30	8	Y	1	0.65	-	460	560	730	0.95	40.8	0.9	-	Y	-
DMN3731UFR4	X2-DFN1010-3	30	8	Y	1.3	1.32	-	460	560	1800	1	15.6	0.07	-	-	-
DMN3730UFB	X1-DFN1006-3	30	8	Y	0.91	0.69	-	460	560	730	0.95	64.3	1.6	-	-	-
DMN3730UFB4	X2-DFN1006-3	30	8	Y	0.91	0.69	-	460	560	730	0.95	64.3	1.6	-	-	-
DMN3731UFB4	X2-DFN1006-3	30	8	Y	1.2	0.97	-	460	560	730	0.95	73	5.5	-	-	-
DMN3732UFB4	X2-DFN1006-3	30	8	Y	1.3	1.12	-	460	560	730	0.95	40.8	0.9	-	Y	-
DMN3350LFB	X1-DFN1006-3	30	20	Y	1.6	1.3	350	559	-	-	1.6	38.4	1.1	-	-	-
DMN3900UFA	X2-DFN0806-3	30	8	Y	0.65	0.49	-	760	930	1500	0.95	42.2	0.7	-	-	-
DMN32D2LFB4	X2-DFN1006-3	30	10	Y	0.3	0.35	-	-	1500	2200	1.2	39	-	-	-	-
DMN32D0LFB4	X2-DFN1006-3	30	10	Y	0.44	0.35	-	1200	1500	2200	1.2	44.8	0.6	-	-	-
DMN31D6UT	SOT523	30	12	Y	0.35	0.32	-	1500	2000	-	1.4	-	0.35	-	-	-
DMN31D5UFA	X2-DFN0806-3	30	12	Y	0.4	0.38	-	1500	2000	3000	1	15.4	0.3	-	-	-
DMN31D5L	SOT23	30	20	Y	0.5	0.53	-	1500 @4V	2000	-	1.6	50	0.5	1.2	-	-
DMN31D5UFZ	X2-DFN0606-3	30	12	Y	0.22	0.393	-	1500	2000	3000	1	22.2	0.35	-	-	-
DMN31D4UFZ	X2-DFN0606-3	30	12	Y	0.31	0.3	-	1500	2000	3000	1	15.4	0.3	-	-	-
DMN31D5UFO	X2-DFN0604-3	30	12	Y	0.41	0.38	-	1500	2000	3000	1	-	0.38	-	-	-
DMN63D8L	SOT23	30	20	Y	0.35	0.52	2800	4200	13000	-	1.5	-	0.43	0.9	-	-
DMN63D8LW	SOT323	30	20	Y	0.35	0.52	2800	4200	13000	-	1.5	-	0.43	0.9	-	-
DMN313DLT	SOT523	30	20	Y	0.27	0.36	-	2000 @4V	3200	-	1.5	36.3	0.5	-	-	-
DMN33D8L	SOT23	30	20	Y	0.25	0.52	3000	3800 @5V	-	-	2.5	50	-	1.2	-	-
DMN33D8LT	SOT523	30	20	Y	0.115	0.3	-	5000 @4V	7000	-	1.5	48	0.55	1.23	Y	-

SWP=Side Wall Plating *@T_C=25°C

30V P-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)	C _{iss} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant "Q" Available	175°C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Max.					
DMP32M6SPS	PowerDI5060-8	30	20	N	100*	2.3	2.6	3.75	-	-	2.5	8594	75	158	-	-
DMP3004SSS	SO-8	30	20	Y	23.4	1.6	-	6.5	-	-	2.5	7693	73	156	-	-
DMP34M4SPS	PowerDI5060-8	30	25	N	87*	3	3.8	-	-	-	2.6	3775	-	127	-	-
DMPH3010LK3	TO252 (DPAK)	30	20	N	16	3.9	7.5	10	-	-	2.1	6807	66	139	Y	Y
DMP3007LK3	TO252 (DPAK)	30	20	Y	18.5	3*	7	10	-	-	2.8	2826	31.2	64.2	-	-
DMP3007LK3	TO252 (DPAK)	30	25	Y	18.5	3	7	10	-	-	2.8	2826	31.2	64.2	-	-
DMPH3010LPS	PowerDI5060-8	30	20	N	15	2.6	7.5	10	-	-	2.1	6807	66	139	Y	Y
DMPH33M8SPSW	PowerDI5060-8 (SWP) (Type Q)	30	20	N	100*	3.4	3.8	10	-	-	3	3775	40.7	80.8	Y	Y
DMP3007LSS	SO-8	30	25	Y	14	2.1	7	10	12	-	2.8	2826	31.2	64.2	-	-
DMP3006LPSW	PowerDI5060-8 (SWP) (Type UX)	30	20	Y	15	1.6	7.5	11	-	-	2.1	5639	51	106	Y	-
DMP3012LPS	PowerDI5060-8	30	20	N	13.2	2.36	9	12	-	-	2.1	6807	66	139	-	-
DMP3007SFG	PowerDI3333-8	30	25	Y	70*	2.8	6	13	-	-	3	2826	31.2	64.2	-	-
DMP3007SCG	V-DFN3333-8 (Type B)	30	25	Y	50*	2.4	6.8	13	-	-	3	2826	31.2	64.2	Y	-
DMP3007SPS	PowerDI5060-8	30	25	Y	90*	2.7	7	16	-	-	3	2826	31.2	64.2	Y	-
DMP3013SFV	PowerDI3333-8 (Type UX)	30	25	Y	12	1.94	9.5	17	-	-	3	1674	16.2 @5V	33.7	-	-
DMP3012SPSW	PowerDI5060-8 (SWP) (Type UX)	30	20	N	14	3.3	10	18	-	-	3	5929	56	109	-	-
DMP3011SPSW	PowerDI5060-8 (SWP) (Type UX)	30	25	Y	14	2.8	10	18	-	-	3	2380	25 @5V	46	-	-
DMP3011SSS	SO-8	30	25	Y	11	1.8	10	18	-	-	3	2380	25	46	-	-
DMP3011SFVW	PowerDI3333-8/SWP (Type UX)	30	25	Y	19.8	2.25	10	18	-	-	3	2380	25 @5V	46	Y	-
DMP3018SSS	SO-8	30	25	Y	10.5	1.7	12	21	-	-	3	2147	28	51	-	-
DMP3018SFV	PowerDI3333-8 (Type UX)	30	25	Y	11	1.9	12	21	-	-	3	2147	28 @5V	51	Y	-
DMP3020LSS	SO-8	30	25	N	12	2.5	14	25	-	-	2	1802	15.3	30.7	-	-
DMP3008SFG	PowerDI3333-8	30	20	N	8.6	2.2	17	25	-	-	2.1	2230	23	47	-	-
DMP3017SFK	U-DFN2523-6	30	25	Y	10.4	2.2	14	25	-	-	2.5	2207	21.6	42.7	-	-
DMP3013SFK	U-DFN2523-6	30	25	Y	10.5	2.1	14	25	-	-	3	1674	16.2 @5V	33.7	-	-
DMP3011SFK	U-DFN2523-6	30	25	Y	10.7	2.07	12	25	-	-	2.5	2380	25 @5V	46	-	-
DMP3018SFK	U-DFN2523-6	30	25	Y	10.2	2.2	14.5	25.5	-	-	3	2207	21.6	42.7	-	-
DMP3036SSS	SO-8	30	25	N	11.4	1.9	20	29	-	-	3	1931	8.8 @5V	16.5	-	-
DMP3036SFG	PowerDI3333-8	30	25	N	8.7	2.3	20	29	-	-	2.5	1931	8.8 @5V	16.5	-	-

SWP=Side Wall Plating *@T_C=25°C **@V_{GS}=5V

30V P-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th)	C _{ISS} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Compliant "Q" Available	175°C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Max.					
DMP3036SFV	PowerDI3333-8 (Type UX)	30	25	N	8.7	2.3	20	29	-	-	2.5	1931	8.8 @5V	16.5	-	-
DMP3014SFDE	U-DFN2020-6 (Type E)	30	25	Y	11.4	2.2	13.5	35	-	-	2.6	1015	9	18	-	-
DMP3021SPSW	PowerDI5060-8 (SWP) (Type UX)	30	25	Y	10.6	2.5	15	25**	-	-	2.5	1799	17.4 @5V	34	-	-
DMP3021SSS	SO-8	30	25	Y	10.4	1	15	25**	-	-	2.5	1799	17.4	34	-	-
DMP3021SFVW	PowerDI3333-8/SWP (Type UX)	30	25	Y	11	2.5	15	25**	-	-	2.5	1799	17.4 @5V	34	Y	-
DMP3025SFDF	U-DFN2020-6 (Type F)	30	25	Y	8.6	2.1	19	30**	-	-	2.6	1031	11	20	-	-
DMP3035LSS	SO-8	30	25	N	11	2.5	18	36	-	-	2	-	15.3	30.7	-	-
DMP3028LK3	TO252 (DPAK)	30	20	N	27*	2.8	25	38	-	-	2.4	1241	11	22	Y	-
DMP3028LPS(W)	PowerDI5060-8 (SWP) (Type UX)	30	20	N	21*	2.12	28	38	-	-	2.4	1372	11	22	Y	-
DMP2067LSS	SO-8	30	20	N	5.4	2	-	38	56	-	1.5	1575	27.9	15.5 @8V	-	-
DMP3028LFDE	U-DFN2020-6 (Type E)	30	20	N	6.8	2.03	25	38	-	-	2.4	1241	10.9	22	-	-
DMP3027LFDE	U-DFN2020-6 (Type E)	30	20	N	8.5	2.6	25	38	-	-	2.4	1142	11.2	21.8	Y	-
DMP3027LFDF	U-DFN2020-6 (Type F)	30	20	N	8.5	2.7	25	38	-	-	2.4	1142	11.2	21.8	-	-
DMP3026SFDF	U-DFN2020-6 (Type F)	30	25	Y	8.6	2	19	45	-	-	3	1204	9.2	19.6	-	-
DMP3026SFDE	U-DFN2020-6 (Type E)	30	25	Y	8.7	2	19	45	-	-	3	1204	9.2	19.6	-	-
DMP3037LSS	SO-8	30	20	N	5.8	1.6	32	50	-	-	2.4	931	9.7	19.3	Y	-
DMP3056LSS	SO-8	30	20	N	4.9	1.6	45	65	-	-	2.1	969	8.2	17.3	-	-
DMP3056LSS	SO-8	30	20	N	7.1	2.5	45	65	-	-	2.1	722	6.8	13.7	Y	-
DMP3045LFVW	PowerDI3333-8/SWP (Type UX)	30	20	Y	5.7	2.1	42	65	-	-	2.1	782	6.6	13.6	Y	-
DMP3056LDM	TSOT26	30	20	N	4.3	1.5	45	65	-	-	2.1	948	10.1	21.1	-	-
DMP3065LVT	TSOT26	30	20	Y	4.9	1.6	42	65	-	-	2.1	587	6.3	12.3	-	-
DMP3045LVT	TSOT26	30	20	Y	5.4	1.6	42	65	-	-	2.1	749	7	14.3	Y	-
DMP3056L	SOT23	30	25	N	4.3	1.38	50	70	-	-	2.1	642	5.8	11.8	-	-
DMP3050LVT	TSOT26	30	25	N	4.5	1.8	50	75	-	-	2	620	5.1	10.5	-	-
DMP3050LSS	SO-8	30	25	N	4.8	1.7	45	80	-	-	2	620	5.1	10.5	-	-
DMP3068L	SOT23	30	12	N	3.3	1.2	72	85	120	-	1.3	708	7.3	15.9	-	-
DMP3085LSS	SO-8	30	20	N	3.8	1.6	70	95	-	-	3	563	5.2	11	-	-
DMP3130LQ	SOT23	30	12	N	3.5	1.3	77	95	150	-	1.3	432	5.9	12	-	-
DMP3105LVT	TSOT26	30	12	N	3.9	1.75	75	98	150	-	1.5	839	9	19.8	-	-
DMP3097L	SOT23	30	20	N	2.7	1.52	65	99	-	-	2.1	-	6.6	13.4	Y	-
DMP3099L	SOT23	30	20	N	3.8	1.08	65	99	-	-	2.1	563	5.2	11	Y	-
DMP3068LVT	TSOT26	30	12	N	2.8	1.8	75	105	150	-	1.3	708	7.3	-	-	-
DMP3098LSS	SO-8	30	20	N	5.3	2.5	65	115	-	-	2.1	336	4	7.8	-	-
DMP3098LDM	SOT26	30	20	N	4	1.25	65	115	-	-	2.1	336	4	7.8	-	-
DMP3098L	SOT23	30	20	N	3.8	1.08	70	120	-	-	2.1	336	4	7.8	Y	-
DMP3096L	SOT23	30	20	Y	3.4	1.2	70	130	-	-	2.1	366	3.8	7.5	Y	-
DMP3165L	SOT23	30	20	N	3.3	1.3	90	134	-	-	2.1	300	1	2	-	-
DMP3125L	SOT23	30	20	N	2.5	1.2	95	145	-	-	2.1	254	3.1	-	-	-
DMP3160L	SOT23	30	20	N	2.7	1.08	122	190	-	-	2.1	-	4	8.2	-	-
DMP3030SN	SC59	30	20	Y	0.7	0.5	250	450	-	-	3	160	-	-	-	-
DMP31D1U	SOT23	30	8	Y	0.62	0.58	-	1000	1500	2000	1.1	54	1	-	Y	-
DMP31D0U	SOT23	30	8	Y	0.67	0.71	-	1000	1500	2000	1.1	76	0.9	1.5 @8V	-	-
DMP31D1UW	SOT23	30	8	N	0.6	0.57	-	1000	1500	2000	1.1	54	1	-	Y	-
DMP31D0UFB4	X2-DFN1006-3	30	8	Y	0.76	0.92	-	1000	1500	2000	1.1	76	0.9	1.5 @8V	-	-
DMP31D1UFB4	X2-DFN1006-3	30	8	Y	0.9	1.2	-	1000	1500	2000	1.1	54	1	-	Y	-
DMP32D5LFA	X2-DFN0806-3	30	8	Y	0.3	0.36	-	1500	2500	7500	1.2	40.9	0.7	-	-	-
DMP31D7L	SOT23	30	20	Y	0.58	0.46	900	1700	-	-	2.6	19	0.36	-	-	-
DMP31D7LW	SOT23	30	20	Y	0.52	0.37	900	1700	-	-	2.6	19	0.36	-	-	-
DMP31D7LT	SOT523	30	20	Y	0.36	0.33	900	1700	-	-	2.6	19	0.36	-	Y	-
DMP31D7LFB	X1-DFN1006-3	30	20	Y	0.81	0.89	900	1700	-	-	2.6	19	0.36	-	Y	-
DMP32D4S	SOT23	30	20	Y	0.3	0.54	2400	4000	-	-	2.4	51.2	0.6	1.2	-	-
DMP32D4SW	SOT23	30	20	Y	0.25	0.432	2400	4000	-	-	2.4	51.2	0.6	1.2	-	-
DMP32D4SFB	X1-DFN1006-3	30	20	Y	0.4	1.2	2400	4000	16000	-	2.3	51	0.6	1.3	-	-
DMP32D9UFA	X2-DFN0806-3	30	12	Y	0.21	0.36	-	5000	6000	7000	1	17	0.36	-	-	-
DMP32D9UFZ	X2-DFN0606-3	30	10	Y	0.2	0.39	-	5000	6000	7000	1	22.5	0.35	-	-	-
DMP32D8UFZ	X2-DFN0606-3	30	10	Y	0.2	0.29	-	5000	6000	7000	1	17	0.35	-	-	-
DMP32D9UFO	X2-DFN0604-3	30	12	Y	0.2	0.32	-	5000	6000	-	1	22	0.35	-	-	-
DMP32D5SFB	X1-DFN1006-3	30	25	Y	0.4	1.2	2400	-	-	-	2.3	51	0.62	1.25	-	-

SWP=Side Wall Plating *@T_C=25°C **@V_{GS}=5V

30V Dual N-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)	C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Component Q-Available
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Max				
DMT32M6LDG	PowerDI3333-8 (Type G)	30	16,12	N	21	1.1	2.5, 2.9	3.2, 3.6	-	-	2.2	2101, 2106	15.6, 15.1	31.7, 32	Y
DMT35M8LDG	PowerDI3333-8 (Type G)	30	12	N	17, 15.3	0.98	4.7, 5.8	5.7, 7.3	-	-	1.9	1510, 1032	14.5, 7.5	22.7, 16.3	-
DMT3006LPB	PowerDI5060-8 (Type S)	30	20	N	11, 14	1.7	11.1, 6	14, 10	-	-	3, 3	841, 1155	6.3, 8.4	12.6, 16.7	-
DMT3006LDV	PowerDI3333-8 (Type UXC)	30	20	N	25*	1.8	10	14	-	-	3	1155	8.4	16.7	-
DMN3006SCA6	X4-DSN3519-6	30	20	Y	13	1.8	5.5	9	-	-	2.2	2235	15	17.7	-
DMN3008SCPI0	X4-DSN3415-10	30	20	Y	14.6	2.7	7.8	11	-	-	2.3	1476	15.8	31.3	-
DMT3009LDV	PowerDI3333-8 (Type UXC)	30	20, 16	N	17.5*	2.4	11	17.5	25 @ 3.8V	-	3	823	5.8	12	-
DMT3009LEV	PowerDI3333-8 (Type UXD)	30	20, 16	N	20*	1.8	12	20	-	-	3	823	5.8	12	-
DMT3009UDT	V-DFN3030-8 (Type KS)	30	12	Y	10.6	1.9	11.1	15	-	-	1.8	894	7.4	14.6	-
DMT3009LDT	V-DFN3030-8 (Type K)	30	20, 16	N	30*	2	11.1	13.8	-	-	3	748	6.4	13.8	-
DMT3011LDT	V-DFN3030-8 (Type K)	30	20, 20/16	N	21.5, 28.8	1.9	20, 11.1	32, 13.8	-	-	3, 3	641, 748	6, 6.4	13.2, 13.8	-
DMN3012LEG	PowerDI3333-8 (Type D)	30	10	N	20*	2.2	-	12 @5V, 6 @5V	-	-	2.1, 1.15	650, 1137	4.7, 9.7	-	-
DMN3012LFG	PowerDI3333-8 (Type D)	30	10	N	20, 20*	2.16	-	12 @5V, 6 @5V	-	-	2.1, 1.15	650, 1137	4.7, 9.7	-	-
DMN3013LFG	PowerDI3333-8 (Type D)	30	10	Y	15, 15*	2.16	14.3, 14.3 @8V	16.1, 16.1	-	-	1.2, 1.2	387	3.3, 3.4	-	-
DMN3013LDG	PowerDI3333-8 (Type D)	30	10	Y	15*	2.16	-	16.1 @5Vgs	-	-	1.2, 1.2	387	3.3, 3.4	-	-
DMN3015LSD	SO-8	30	20	N	8.4	1.6	15	18	-	-	2.5	1415	11.3	25.1	-
DMN3016LDV	PowerDI3333-8 (Type UXC)	30	20	N	21*	1.8	12	17	-	-	2	1184	9.5	21	-
DMN3016LDN	V-DFN3030-8 (Type J)	30	20	N	7.3	1.6	20	24	-	-	2	1415	11.3	25.1	-
DMN3018SSD	SO-8	30	20	Y	6.7	1.5	22	30	-	-	2.1	697	6	13.2	-
DMT3020LSD	SO-8	30	20	N	16*	1.5	20	32	-	-	2.5	393	3.6	7	Y
DMT3020LDV	PowerDI3333-8 (Type UXC)	30	20	N	32*	1.9	20	32	-	-	2.5	393	3.6	7	-
DMT3020LDT	V-DFN3030-8	30	20	N	8*	1.95	20	32	-	-	2.5	393	3.6	7	-
DMT3020UFDB	U-DFN2020-6 (Type B)	30	12	Y	6.5	1.3	21	30	-	-	1.7	-	4.6	8.8	-
DMT3020LFDB	U-DFN2020-6 (Type B)	30	20	N	7.7	1.8	20	32	-	-	2.5	393	3.6	7	Y
DMG4822SSD	SO-8	30	25	N	10	1.42	20	31	-	-	3	479	5	10.5	Y
DMN3022LFG	PowerDI3333-8 (Type D)	30	10	N	15*	1.96	-	22, 8 @5V	-	-	2.1, 1.2	370, 766	2.8/6.1	-	-
DMN3022LDG	PowerDI3333-8 (Type D)	30	10	N	7.6	1.96	-	22, 8 @5V	-	-	2.1, 1.2	370, 766	2.8, 6.1	-	-
DMT3022UEV	PowerDI3333-8 (Type UXD)	30	12	Y	17*	1.8	22	28	-	-	1.8	903	6.9	13.9	-
DMN3024LSD	SO-8	30	20	N	7.2	2	24	36	-	-	3	608	6.3	12.9	-
DMN3032LFDBW	U-DFN2020-6 (SWP) (Type B)	30	20	N	5.5	1.37	30	42	-	-	2	500	5	10.6	Y
DMN3032LFDB	U-DFN2020-6 (Type B)	30	20	N	6.2	1.7	30	42	-	-	2	500	5	10.6	Y
DMN3032LFDBW	U-DFN2020-6 SWP	30	20	N	6.2	1.7	30	42	-	-	2	500	5	10.6	Y
DMN3033LSD	SO-8	30	20	N	6.9	2	20	27	-	-	2.1	725	6.4	13	Y
DMN3035LWN	V-DFN3020-8 (Type N)	30	20	N	5.5	1.78	35	45	-	-	2	399	4.5	9.9	-
DMN3055LFDB	U-DFN2020-6 (Type B)	30	12	N	5	1.36	-	40	75	-	1.5	458	5.3	11.2	-
DMN3060LVT	TSOT26	30	12	N	3.6	1.16	60	100	-	-	-	395	5.6	11.3	-
DMN3061SVT	TSOT26	30	20	N	3.4	1.08	60	100	-	-	1.8	278	3.5	6.6	-
DMN3135LVT	TSOT26	30	20	N	3.5	1.27	60	100	-	-	2.2	305	4.1	9	-
DMN3190LDW	SOT363	30	20	Y	1	0.4	190	335	-	-	2.8	87	0.9	2	-
DMN3270UVT	TSOT26	30	5, 0.5	N	1.6	1.08	-	270	350	-	0.9	161	3.07	-	-
DMN3350LDW	SOT363	30	20	Y	0.89	0.48	400	700	-	-	1.6	38.4	1.1	-	Y
DMN3401LDW	SOT363	30	20	Y	0.8	0.35	400	700	-	-	1.6	50	0.5	1.2	-
DMN3401LV	SOT563	30	20	Y	0.8	0.5	400	700	-	-	1.6	50	0.5	-	Y
DMN32D4SDW	SOT363	30	20	Y	0.65	0.35	400	700	-	-	1.6	50	0.6	1.3	-
DMN3732UVT	TSOT26	30	8	N	1.1	0.8	-	460	560	730	0.95	40.8	0.9	-	Y
DMN31D5UDW	SOT363	30	12	Y	0.43	0.43	-	1500	2000	3000	0.9	15.4	0.3	-	-
DMN31D5UDR4	X2-DFN1010-6 (Type UXC)	30	12	Y	0.5	0.37	-	1500	2000	3000	0.9	22.2	0.05	-	-
DMN31D5UDJ	SOT963	30	12	Y	0.22	0.35	-	1500	2000	3000	1	22.6	15	0.38	-
DMN31D5UDA	X2-DFN0806-6	30	12	Y	0.4	0.37	-	1500	2000	3000	1	22.6	0.38	-	-
DMN32D0LV	SOT563	30	10	Y	0.68	0.48	-	1200	1500	2200	1.2	44.8	0.62	-	Y
DMN32D2LDF	SOT353	30	10	Y	0.4	0.28	-	1200	1500 @4V	2200	1.2	39	-	-	-
DMN33D8LDW	SOT363	30	20	Y	0.25	0.35	2400	3000	7000	20000	1.5	48	0.55	1.23	-
DMN63D8LDW	SOT363	30	20	Y	0.26	0.4	2800	4200	13000	-	1.5	22	0.43	0.87	-
DMN33D8LV	SOT563	30	20	Y	0.35	0.43	2400	3000	7000	-	1.5	48	0.55	1.23	-
DMN63D8LV	SOT563	30	20	Y	0.26	0.45	2800	4200	13000	-	1.5	22	0.43	0.87	-
DMN33D9LV	SOT563	30	20	Y	0.35	0.43	2400	3000	7000	-	1.4	48	0.55	1.23	-

SWP=Side Wall Plating *@T_C=25°C

Highest Efficiency from LDMOS 30V Half-Bridge Power



The DMN3012LEG, DMN3013LDC, and DMN3022LDC are the first in a new generation of discrete MOSFETs, offering industry-leading efficiency in a package measuring just 3.3mm x 3.3mm, providing significant cost, power and space savings in a range of power conversion and control applications.

Integrating dual MOSFETs in a single package reduces the board space, which typically requires two separate devices, by up to 50%, and when used in DC/DC synchronous buck converters and half-bridge power topologies, reduces the size of many power converter solutions.

Industry-lowest power losses are realized through the Lateral Diffused MOS (LDMOS) design optimizing high power density, high-efficiency, and high-frequency capabilities along with ultra-low internal inductance, low on-resistance, and low capacitance.

The low-profile package (1.2mm typ.) meets all designs in computing / tablet PC products.

The DIODES Advantage

Improves System Efficiency

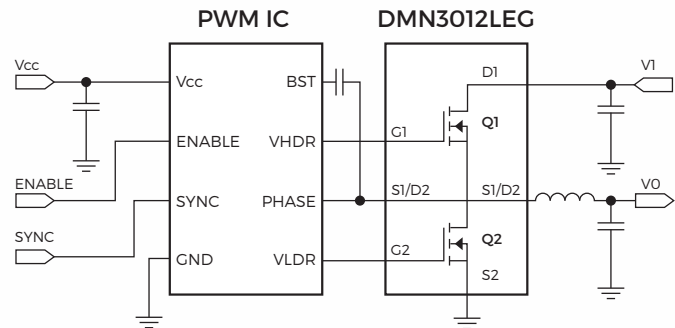
- Superior peak power efficiency of 95%
- Low input capacitances provide fast switching speeds
- Improved performance at light load
- Optimized for 5V gate drive applications

Reduced System Temperature

- Low on-resistance provides low conduction loss
- Ultra-low package inductance reduces switching loss
- Underside pad improves thermal resistance and power handling

Improved Reliability

- Unclamped inductive switch (UIS) ruggedness tested at production



30V Dual P-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =		V _{GS} (th) (V)	C _{ISS} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant "Q" Available
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	Max				
DMP3011SPDW	PowerDI5060-8/SWP (Type UXD)	30	25	Y	12.1	2.9	13	20	3	2380	25 @5V	46	-
DMP3021SPDW	PowerDI5060-8/SWP (Type UXD)	30	25	Y	10	2.7	18	28 @5V	2.5	1799	17.4 @5V	34	-
DMP3028LSD	SO-8	30	20	N	6	1.7	25	38	3	1241	10.9	22	-
DMP3036SSD	SO-8	30	25	N	10.6	1.7	20	29 @5V	3	1633	8.8 @5V	16.5	-
DMP3048LSD	SO-8	30	12	N	4.8	1.7	48	57	1.3	1438	13.5	29.6	-
DMP3056LSD	SO-8	30	20	N	6.9	2.5	45	65	2.1	722	6.8	13.7	Y
DMP3085LSD	SO-8	30	20	N	3.9	1.7	70	95	3	563	5.2	11	-
DMP3098LSD	SO-8	30	20	N	4.4	1.8	65	115	2.1	336	4	7.8	-
DMP3164LVT	TSOT26	30	12	N	2.8	1.16	95	140	2.1	324	4.4	8.6	-
DMP3165SVT	TSOT26	30	20	N	2.7	1.08	95	140	2.2	287	3.5	6.9	Y
DMP31DIUDW	SOT363	30	8	N	0.6	0.57	-	1000	1.1	54	1	-	Y
DMP31DIUVT	TSOT26	30	8	N	0.7	0.9	-	1000	1.1	50	1	-	Y
DMP31D7LDW	SOT363	30	20	Y	0.55	0.4	900	1700	2.6	19	0.36	0.8	-
DMP31D7LV	SOT563	30	20	Y	0.62	0.8	900	1700	2.6	19	0.36	0.8	Y
DMP32D9UDA	X2-DFN0806-6	30	12	Y	0.22	0.36	-	5000	1	22	0.35	-	-

SWP=Side Wall Plating

30V Dual Complementary



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =			V _{GS} (th) (V)		C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Automotive Compliant Q-Available
		(V)	(±V)		@T _A =25°C	@T _A =25°C	4.5V	2.5V	1.8V	Min.	Max.			
DMC25D0UVT	TSOT26	25, 30	8, 12	Y	0.4, 2.6	1.2	-	4000, 125	300	1.5, 1.5	26.2, 854	0.4, 10	0.7 @8V, 21 @-10V	-
DMC3016LNS	PowerDI3333-8 (Type UXB)	30, 30	20, 20	N	9, 6.8	2	16, 28	20, 38	-	2, 2.4	1184, 1188	9.5, 9.5	-	-
DMC3016LDV	PowerDI3333-8 (Type UXC)	30, 30	20, 20	N	21, 15	1.8	12, 25	17, 38	-	2, 2.4	-	9.5	21, 19.7	-
DMC3016LSD	SO-8	30, 30	20, 20	N	8.2, 6.2	1.2	16, 28	20, 38	-	3, 3	1415, 1241	11.3, 10.9	25.1, 22	-
DMC3021LSD	SO-8	30, 30	20, 20	N	8.5, 7	2.5	21, 39	32, 53	-	2.1, 2.2	767, 1002	7.8, 10	16.1, 21.1	Y
DMC3026LSD	SO-8	30, 30	20	N	6.5, 6.2	1.6	25, 28	29, 38	-	3	14.6, 17	6, 10.9	13.2	-
DMC3028LSD	SO-8	30, 30	20, 20	N	7.1, 7.4	2.1	28, 25	45, 41	-	3, 3	472, 1678	5.2, 16.4	10.5, 31.6	-
DMC3028LSDX	SO-8	30, 30	20, 20	N	7.2, 7.6	1.2	27, 25	35, 41	-	3, 3	641, 1241	6, 10.9	13.2, 22	Y
DMC3025LSD	SO-8	30, 30	20, 20	N	8.5, 5.5	1.2	20, 45	32, 85	-	2, 2	501, 590	4.6, 5.1	9.8, 10.5	Y
DMC3025LDV	PowerDI3333-8 (Type UXC)	30, 30	20, 20	N	15, 15	1.9	25	35, 38	-	2, 2.4	-	4.6, 9.5	9.8, 19.7	-
DMC3025LNS	PowerDI3333-8 (Type UXB)	30, 30	20, 20	N	7.2, 6.8	1.8	25, 28	35, 38	-	2, 2.4	500, 1188	4.6, 9.5	-	-
DMC3032LSD	SO-8	30, 30	20, 20	N	8.1, 7	2.5	32, 39	46, 53	-	2.1, 2.2	404.5, 1002	-, 10.1	9.2, 21.1	-
DMC3060LVT	TSOT26	30, 30	12, 12	N	3.6, 2.8	1.16	60, 95	100, 140	-	1.8, 2.1	395, 324	5.6, 4.4	11.3, 8.6	Y
DMC31D5UDJ	SOT963	30, 30	12, 12	Y	0.22, 0.2	0.35	-	1500, 5000	2000, 6000	1, 1	22.6, 21.8	0.38, 0.35	-	-
DMC31D5UDA	X2-DFN0806-6	30, 30	12, 12	Y	0.4, 0.22	0.37	-	1500, 5000	2000, 6000	1, 1	22.6, 21.8	0.38, 0.35	-	-
DMC3071LVT	TSOT26	30, 30	20, 20	N	4.6, 3.3	1.1	50, 95	90, 140	-	2.5, 2.5	190, 254	2.1, 3.1	4.5, 6.5	-
DMC3032LFDB	U-DFN2020-6 (Type B)	30, 30	20, 20	N	5.3, 3.4	1.28	30, 70	42, 100	-	2.0, 2.1	500, 336	5.0, 4.0	10.6, 7.8	-
DMC3400SDW	SOT363	30, 30	20, 20	Y	0.65, 0.45	0.39	400, 900	700, 1R7	-	1.6, 2.6	55, 54	0.6, 0.6	1.4, 1.3	-
DMC3401LDW	SOT363	30, 30	20, 20	Y	0.8, 0.55	0.4	400, 900	700, 1700	-	1.6, 2.6	50, 19	0.5, 0.36	1.2, 0.8	-
DMC3730UFL3	X2-DFN1310-6 (Type B)	30, 30	8, 8	Y	1.1, 0.7	0.81	-	460, 1500	560, 1500	0.95, 1.1	65.9, 22.6	0.9, 0.38	-	-

31V - 50V N-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =			V _{GS} (th) (V)	C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Compliant Q-Available	175°C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	Max.					
DMTH4M40LPGW†	PowerDI8080-4	40	20	N	TBD	TBD	0.4	0.64	-	-	TBD	TBD	TBD	Y	Y
DMTH4M40SPGW†	PowerDI8080-4	40	20	N	TBD	TBD	0.48	TBD	TBD	-	TBD	TBD	TBD	Y	Y
DMTH4M70SPGW	PowerDI8080-5	40	20	N	460*	5.6	0.7	-	-	4	10053	-	117.1	Y	Y
DMTH4M75LPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	337*	3.5	0.75	1.3	-	3	9308	50	111	Y	Y
DMTH4M75SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	337*	3.9	0.75	-	-	4	9434	-	115	Y	Y
DMTH4001STLW	PowerDI1012-8 (TOLL)	40	20	N	300*	6	0.85	-	-	4	13185	-	150	Y	Y
DMTH4001SPGW†	PowerDI8080-4	40	20	N	TBD		0.85				-	-	-	Y	Y
DMTH4M90SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	278*	2.6	0.9	-	-	4	9434	-	115	Y	Y
DMTH4M90LPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	356*	4.2	0.9	1.5	-	3	111	-	50	Y	Y
DMTH41M2SPS	PowerDI5060-8 (Type K)	40	20	N	225*	3.4	1.2	-	-	4	11085	-	138	Y	Y
DMTH41M1LPSW†	PowerDI5060	40	20	N	-	-	1.1	-	-	3	-	-	-	Y	Y
DMTH41M3LPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	214*	3.3	1.5	-	-	3	5002	-	62	Y	Y
DMTH41M6SPGW†	PowerDI8080-4	40	20	N	TBD	TBD	1.6	TBD	TBD	TBD	-	-	-	Y	Y
DMTH41M3SPSW	PowerDI5060-8	40	20	N	191*	3.75	1.7	-	-	4	5433	-	61	Y	Y
DMT4002LPS	PowerDI5060-8	40	20	N	100*	2.3	1.8	3.1	-	3	6771	55.2	116.1	-	-
DMTH41M8SPS	PowerDI5060-8	40	20	N	100*	3.03	1.8	-	-	4	6968	-	79.5	Y	Y
DMTH42M4SPS	PowerDI5060-8 (Type K)	40	20	N	200*	3.06	2.4	-	-	4	6968	-	79.5	Y	Y
DMTH4004LPS	PowerDI5060-8	40	20	N	100*	2.6	2.5	4	-	3	-	34.6	82.2	Y	Y
DMNH4005SCT	TO220AB	40	20	N	150*	165*	-	4	-	3	-	23	48	Y	Y
DMTH4004LPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	100*	2.83	2.5	5	-	3	5220	32.4	69.6	Y	Y
DMTH42M5SPSW†	PowerDI5060-8 (SWP) (Type UX)	40	20	N	154.7*	4	-	-	-	4	2449	-	29.3	Y	Y
DMTH42M5LPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	142*	3.72	2.5	-	-	2.5	2246	-	32	Y	Y
DMT4004LPS	PowerDI5060-8	40	20	N	90*	2.6	2.5	4	-	3	-	35	83	-	-
DMTH4004SPS	PowerDI5060-8 (SWP) (Type UX)	40	20	N	100*	3.6	2.7	-	-	4	-	-	68.6	Y	Y
DMTH43M8LFG	PowerDI3333-8	40	20	N	24	2.62	3	-	-	2.5	-	-	40.1	Y	Y
DMTH43M7LFG	PowerDI3333-8	40	20	N	100*	3.5	3	5	-	2.5	2182	-	30	Y	Y
DMTH4004LK3	TO252 (DPAK)	40	20	N	100*	3.9	3	5	-	3	-	35	83	Y	Y
DMTH4004SCTB	TO263AB (D2PAK)	40	20	N	100*	4.7	3	-	-	4	-	-	68.6	Y	Y
DMTH4002SCTB	TO263AB (D2PAK)	40	20	N	192*	166.7*	3	-	-	4	7180	-	77.5	-	Y

† In development SWP=Side Wall Plating *@T_C=25°C

31V - 50V N-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =			V _{GS} (th) (V)	C _{iss} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant* or Available	175°C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	Max.					
DMT4003SCT	TO220AB	40	20	N	205*	2.4	3	-	-	4	6865	-	75.6	-	-
DMTH4004SK3	TO252 (DPAK)	40	20	N	70	3.9	3.2	-	-	4	4305	-	68.8	Y	Y
DMTH43M8LPS(W)	PowerDI5060-8 (SWP) (Type UX)	40	20	N	22	2.7	3.3	-	-	2.5	-	17.6	38.5	Y	Y
DMTH43M8LK3	TO252 (DPAK)	40	20	N	17.6	3.1	3.6	-	-	2.5	-	17.6	38.5	Y	Y
DMTH4005SPS(W)	PowerDI5060-8 (SWP) (Type UX)	40	20	N	100*	2.6	3.7	-	-	4	-	-	49.1	Y	Y
DMT43M8LFV	PowerDI3333-8	40	20	N	87	2.25	4	5.5	-	-	3212	21.1	44.4	-	-
DMNH4005SPS(W)	PowerDI5060-8 (SWP) (Type UX)	40	20	N	120*	2.8	4	-	-	3	2847	23	48	Y	Y
DMTH43M8LFVW	PowerDI3333-8/SWP (Type UX)	40	20	N	23	3.6	4.3	7.5	-	2.5	2737	16.9	36.9	Y	Y
DMTH4005SK3	TO252 (DPAK)	40	20	N	95*	2.1	4.5	-	-	4	-	-	49.1	Y	Y
DMTH4005SCT	TO220-3	40	20	N	100*	2.8	4.7	-	-	4	3062	-	49.1	-	Y
DMT4005SCT	TO220-3	40	20	N	100*	2.3	4.7	-	-	4	-	-	49.1	-	-
DMTH45M5LFVW	PowerDI3333-8/SWP (Type UX)	40	20	N	18	3.5	5.5	7.9	-	2.3	978	3.6	13.9	Y	Y
DMTH45M5SFVW	PowerDI3333-8/SWP (Type UX)	40	20	N	18	3.5	5.5	-	-	3.5	1083	-	13.2	Y	Y
DMTH45M5LPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	86*	3.5	5.5	7.9	-	2.3	978	6.3	13.9	Y	Y
DMTH45M5SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	86*	3.5	5.5	-	-	3.5	1083	-	13.2	Y	Y
DMTH45M5SK3†	TO252 (DPAK)	40	20	N	71	-	5.5	-	-	-	1083	-	13.2	Y	Y
DMNH4004SPS	PowerDI5060-8	40	20	N	100*	2.8	6	-	-	3.5	2284	-	40	-	Y
DMNH4006SK3	TO252 (DPAK)	40	20	N	18	3.6	6	-	-	4	-	-	51	Y	Y
DMTH4007SK3	TO252 (DPAK)	40	20	N	76	3.1	6	-	-	4	2082	-	41.9	-	Y
DMNH45M7SCT	TO220AB	40	20	N	220*	24.0*	6	-	-	3	4043	31.6	64.7	-	Y
DMTH4007LPS(W)	PowerDI5060-8 (SWP) (Type UX)	40	20	N	100*	2.7	6.5	9.8	-	3	-	12.4	29.1	Y	Y
DMNH4006SPS(W)	PowerDI5060-8 (SWP) (Type UX)	40	20	N	110*	3	7	-	-	4	2280	-	50.9	Y	Y
DMTH47M2LPSW	PowerDI5060-8	40	20	N	73*	3.8	7.3	12	-	2.3	891	5.9	12.6	Y	Y
DMTH4007LK3	TO252 (DPAK)	40	20	N	70*	2.6	7.3	9.8	-	3	-	12.4	29.1	Y	Y
DMN4008LFG	PowerDI3333-8	40	20	N	19.2	2.3	7.5	10	20 @3.3V	3	3537	34	74	-	-
DMT47M2SFVW	PowerDI3333	40	20	N	49.1*	27.1*	7.5	-	-	4	897	-	12.1	Y	-
DMTH47M2SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	73*	3.3	7.5	-	-	4	897	-	12.1	Y	Y
DMTH47M2SK3	TO252 (DPAK)	40	20	N	62*	3.5	7.5	-	-	4	897	-	12.1	-	Y
DMTH4007SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	15.7	2.8	7.6	-	-	4	2082	-	41.9	Y	Y
DMTH4007SPS	PowerDI5060-8	40	20	N	100*	2.8	7.6	-	-	4	-	-	41.9	Y	Y
DMT4008LFV	PowerDI3333-8 (Type UX)	40	20	N	54.8*	1.9	7.9	12	-	3	1179	8.3	17.1	-	-
DMT4008LSS	SO-8	40	20	N	12.8	2.09	8.5	12.5	-	3	-	9.4	18.6	-	-
DMTH4008LPS	PowerDI5060-8	40	20	N	14.4	2.99	8.8	-	-	3	-	7.4	15.3	Y	Y
DMTH4008LPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	14.4	2.99	8.8	13	-	3	1088	7.4	15.3	Y	Y
DMTH47M2LFVW	PowerDI3333-8/SWP (Type UX)	40	20	N	13.6	2.9	8.9	13.5	-	2.3	881	5.8	12.3	Y	Y
DMTH48M3SFVW	PowerDI3333-8 (SWP)	40	20	N	14.6	2.82	8.9	-	-	4	897	-	12.1	Y	Y
DMT4008LDFD	U-DFN2020-6 (Type F)	40	20	N	11.8	2	9.5	15.5	-	3	-	8.3	17.1	-	-
DMNH4011SPS(W)	PowerDI5060-8 (SWP) (Type UX)	40	20	N	13	2.5	10	-	-	4	-	-	25.5	Y	Y
DMNH4011SK3	TO252 (DPAK)	40	20	N	50*	2.6	10	-	-	4	-	-	25.5	Y	Y
DMTH4008LDFDW	U-DFN2020-6 (SWP) (Type F)	40	20	N	11.6	2.35	11.5	18	-	3	1030	6.8	14.2	Y	Y
DMT4011LFG	PowerDI3333-8	40	20, 16	N	10.8	2	11.5	17.8	-	3	-	7	15.1	-	-
DMT4011LSS	SO-8	40	20	Y	10.6	2.02	11.5	17.6	-	-	829	7.2	14.3	-	-
DMN4010LK3	TO252 (DPAK)	40	20	N	39	2.4	11.5	14.5	-	3	1810	17	37	-	-
DMN4010LFG	PowerDI3333-8	40	20	N	11.5	2.45	12	15	-	3	1810	17	37	-	-
DMTH4014LFVW	PowerDI3333-8	40	20	N	11.5	3.1	13.7	26	-	3	750	5.7	11.2	Y	Y
DMTH4014LPSW	PowerDI5060-8	40	20	N	43.5*	4	14.5	25	-	3	750	5.7	11.2	Y	Y
DMTH4014SPSW	PowerDI5060-8	40	20	N	43.5*	4	14.8	-	-	4	805	-	10.6	Y	Y
DMN4020LFDE	U-DFN2020-6 (Type E)	40	20	N	8	2.03	20	28	-	2.4	1060	8.8	19.1	-	-
DMT4031LSD	SO-8	40	12	Y	6.3	1.5	23	41	-	2.5	362	3.9	7	Y	-
DMN4026SK3	TO252 (DPAK)	40	20	N	28*	3.4	24	32	-	3	-	-	21.3	-	-
DMT4031LDFD	U-DFN2020-6 (Type F)	40	16	Y	6.8	2	26	47	-	2.5	362	3.9	7	-	-
DMN4030LK3	TO252 (DPAK)	40	20	N	13.7	2.14	30	50	-	3	604	6.5	12.9	Y	-
DMN4034SSS	SO-8	40	20	N	7.2	2.8	34	59	-	3	453	4.9	10	-	-
DMN4036LK3	TO252 (DPAK)	40	20	N	12.2	4.1	36	61	-	3	453	4.9	9.2	-	-
DMN4035L	SOT23	40	20	N	4.6	1.4	42	52	-	3	574	5.9	12.5	Y	-
DMN4060SVT	TSOT26	45	20	N	6.1	1.8	46	62	-	3	-	-	22.4	-	-
DMT5012LFVW	PowerDI3333-8 (SWP) (Type UX)	50	20	N	51.4	51.4	13	20	-	2.3	738	10.5	17.6	-	-
DMN5040LSS	SO-8	50	20	N	5.2	1.6	40	60	-	3	-	6.5	14.5	-	-
DMN53DOLT	SOT523	50	20	Y	0.35	0.3	1600	2500	4500	1.5	46	0.6	-	-	-
DMN53DOL	SOT23	50	20	Y	0.5	0.54	1600	2500	4500	1.5	46	0.6	-	Y	-

† In development SWP=Side Wall Plating *@T_C=25°C

Innovative Side Wall Feature Enhances AOI Efficiency

Automated Optical Inspection (AOI) technology is widely used across the electronics manufacturing industry.

Diodes Incorporated's side wall plateable (SWP) feature ensures AOI compatibility for its PowerDI and DFN packages. As device and PCB footprints shrink, inspecting solder joint quality becomes challenging.

The SWP feature includes a dimple in the lead-frame solder connection, making solder joints visible to AOI systems during assembly.

This feature not only improves solder joint visibility but also enhances joint strength, thereby improving product reliability within electronics manufacturing.

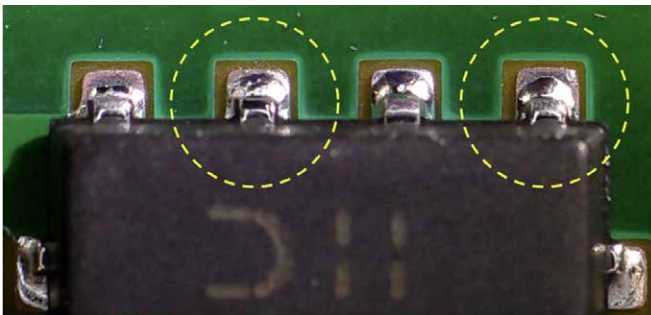
The DIODES Advantage

Enhanced Solder Joint Visibility for AOI

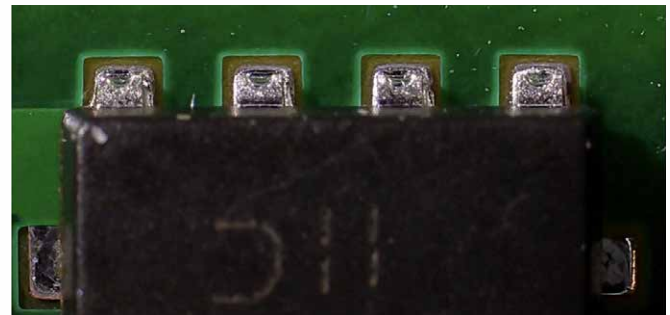
- Improved quality assurance
- Reduces manual inspection time

Stronger Solder Joints

- Improves product robustness and reliability



Uncertainty when determining solder joint quality leads to unnecessary manual inspection time.



Dimples fill with solder



Lead sidewall dimple feature on the PowerDI5060-8 package

31V - 50V N-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =			V _{GS} (th) (V)	C _{ISS} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Compliant "Q" Analysis	175 °C Rated
		(V)	(±V)		@T _A =25° C	@T _A =25° C	10V	4.5V	2.5V	Max.					
BSN20	SOT23	50	20	N	0.5	0.6	1800	2000	-	1.5	21.8 @10V	-	0.8	-	-
DMN53D0LW	SOT323	50	20	N	0.36	0.42	2000	3000 @5V	-	1.5	45.8	0.6	1.2	-	-
BSS138W	SOT323	50	20	N	0.2	0.2	3500	-	-	1.5	50 @10V	-	-	-	-
BSS138	SOT23	50	20	N	0.2	0.3	3500	-	-	1.5	50 @10V	-	-	-	-
DMN52D0LT	SOT523	50	12	Y	0.35 @5V	0.5	-	2000 @5V	2500	1.2	40	0.8	1.5	-	-
DMN52D0UW	SOT323	50	12	Y	0.38 @5V	0.6	-	2000 @5V	2500	1	39	0.8	1.4	Y	-
DMN53D0U	SOT23	50	12	Y	0.3	0.52	-	2000 @5V	2500	1	37	0.6	-	-	-
BSS138K	SOT23	50	20	Y	0.31	0.54	-	3500	-	1.5	-	0.45	0.95	-	-
DMN52D0U	SOT23	50	12	Y	0.4 @5V	0.7	-	2000 @5V	2500	1	39	0.8	1.5	Y	-

31V - 50V P-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =		V _{GS} (th) (V)	C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Compliant Available	175°C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	Max.					
DMP4006SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	115*	3.4	5.2	7.9 @6V	3	6855	-	-	Y	-
DMP4010SK3	TO252 (DPAK)	40	25	N	15	3.3	9.9	14	2.5	4234	42.7	91	Y	-
DMP4011SPS	PowerDI5060-8	40	20	N	11.7	2.3	10	14	2.5	2747	25	52	Y	-
DMP4011SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	11.7	2.3	10	14	2.5	2747	25	52	Y	-
DMP4016SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	86*	3.9	10	14	2.5	5697	53	112	Y	-
DMPH4016SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	90.7*	4.6	10	14	2.5	5697	53	112	Y	Y
DMP4016SK3	TO252 (DPAK)	40	20	N	75*	4	11	15	2.5	5697	53	112	Y	-
DMPH4016SK3	TO252 (DPAK)	40	20	N	80*	4.9	11	15	2.5	5697	53	112	Y	Y
DMP4015SK3	TO252 (DPAK)	40	25	N	14	3.5	11	15	2.5	4234	47.5 @-5V	-	-	-
DMPH4015SK3	TO252 (DPAK)	40	25	N	14	3.3	11	15	2.5	4234	42.7	91	Y	Y
DMPH4015SPS	PowerDI5060-8	40	25	N	12	2.6	11	15	2.5	4234	42.7	91	Y	Y
DMP4016SSS	SO-8	40	20	N	10.8	2.1	11	15	2.5	5697	53	112	Y	-
DMPH4016SSS	SO-8	40	20	N	11	2.5	11	15	2.5	5697	53	112	Y	Y
DMP4015SSS	SO-8	40	25	N	10.1	1.82	11	15	2.5	4234	47.5 @-5V	-	Y	Y
DMP4011SK3	TO252 (DPAK)	40	20	N	14	3.1	11	19	2.5	2747	25	52	Y	-
DMPH4011SK3	TO252 (DPAK)	40	20	N	79*	3.7	11	19	2.5	4497	-	-	Y	Y
DMP4009SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	79*	3.9	11	19	2.5	5697	53	112	Y	-
DMPH4009SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	83.4*	4.6	11	19	2.5	5697	53	112	Y	Y
DMP4009SSS	SO-8	40	20	N	10	2.1	11	19	2.5	5697	53	112	Y	-
DMPH4009SSS	SO-8	40	20	N	11	2.5	11	19	2.5	5697	53	112	Y	Y
DMP4013LFG	PowerDI3333-8	40	20	N	10.3	2.1	13	18	3	3426	32.5	68.6	Y	-
DMPH4013SPSW	PowerDI5060-8 (SWP) (Type UX)	40	20	N	69*	3.3	13	23	3	4763	39	87	Y	Y
DMPH4013SK3	TO252 (DPAK)	40	20	N	55*	3.7	15	23	3	4004	31	67	Y	Y
DMP4025LK3	TO252 (DPAK)	40	20	N	8.6	2.78	25	45	1.8	1643	14	33.7	Y	-
DMP4026LK3	TO252 (DPAK)	40	20	N	40*	3.5	25	45	1.8	2064	23.5	45.8	Y	-
DMP4026LSS	SO-8	40	20	N	7.2	2	25	45	1.8	2083	23.5	45	Y	-
DMP4025LSS	SO-8	40	20	N	8	2.4	25	45	1.8	1640	14	33.7	Y	-
DMP4025SFG	PowerDI3333-8	40	20	N	7.2	1.95	25	45	1.8	1643	14	33.7	-	-
DMP4026SFVW	PowerDI3333-8/SWP (Type UX)	40	20	N	8.9	3.3	25	45	1.8	2064	23.5	45.8	Y	-
DMPH4026SFVW	PowerDI3333-8/SWP (Type UX)	40	20	N	9.3	3.9	25	45	1.8	2064	23.5	45.8	Y	Y
DMP4026SFG	PowerDI3333-8	40	20	N	28*	33*	25	45	1.8	2275	25	48	Y	-
DMPH4023SK3	TO252 (DPAK)	40	20	N	50*	3.6	26	-	3	1091	-	18.7	Y	Y
DMPH4029LFG	PowerDI3333-8	40	20	N	8	2.8	29	45	3	1626	17	34	Y	Y
DMP4047LFDE	U-DFN2020-6 (Type E)	40	20	N	6	2.1	33	50	2.2	1382	11.2	23.2	-	-
DMP4047SK3	TO252 (DPAK)	40	20	N	20*	2.7	45	55	3	1328	11.2	23.2	-	-
DMP4050SSS	SO-8	40	20	N	6	2.8	50	79	3	674	6.9	13.9	-	-
DMP4051LK3	TO252 (DPAK)	40	20	N	10.5	4.18	51	85	3	674	7	14	-	-
DMP4065SK3	TO252 (Standard)	40	20	N	15*	3	70	104	3	650	6.1	12.2	-	-
DMP4065S	SOT23	40	20	N	3.4	1.4	80	100	3	587	6.1	12.2	Y	-
BS250F	SOT23	45	20	N	0.09	0.33	14000	-	3.5	25 @-10V	-	-	-	-
DMP56D0UFB	X1-DFN1006-3	50	8	Y	0.2	0.425	-	6000 @-4V	1.2	50.54	0.58	-	-	-
BSS84	SOT23	50	20	N	0.13	0.3	-	10000 @-5V	2	24.6	0.28	0.59	-	-
DMP510DL	SOT23	50	30	N	0.18	0.5	-	10000 @-5V	2	24.6	-	-	-	-
BSS84W	SOT323	50	20	N	0.13	0.2	-	10000 @-5V	2	45 max	-	-	-	-
DMP510DLW	SOT323	50	20	N	0.174	0.47	-	10000 @-5V	2	24.6	0.28	0.56	-	-

SWP=Side Wall Plating *@T_C=25°C

Application Focus

MOSFETs for DC to DC Conversion

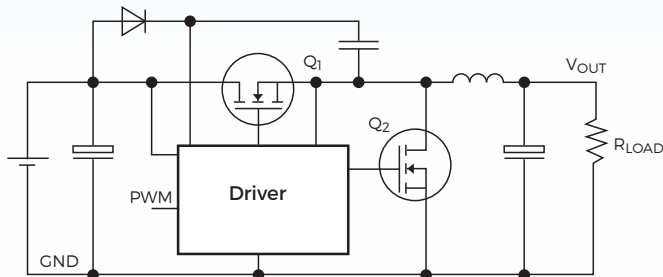
MOSFET REQUIREMENTS FOR DC to DC CONVERSION

High-Side MOSFET (Q1)

- Low gate charge (Q_{GD})
- Low gate resistance (R_g)
- Low input capacitance (C_{iss})

Low-Side MOSFET (Q2)

- Low $R_{DS(ON)}$ - minimize conduction losses



As well as the nominal maximum power that the DC/DC converter can deliver, the two MOSFETs must handle voltage spikes caused by parasitic inductances and a current level equal to the maximum output current, plus 50 percent of the ripple current. The losses from the high side (Q1) and low side (Q2) are important. Not only will static losses from the on-resistance through the transistor cause lower efficiency, but so will losses incurred during switching.

Q1 - High-Side MOSFET

In high-frequency synchronous conversion topologies, the high-side MOSFET can often be switched at frequencies twice that of the low-side MOSFET. Therefore, the gate charge, gate resistance, and input capacitance are key parameters.

Q2 - Low-Side MOSFET

The low-side MOSFET is usually dominated by conduction losses ($R_{DS(ON)}$) with additional conduction losses for dead time.

Highlighted Products

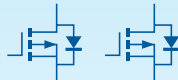
- DMTH4008LFDWQ - High Side
- DMTH43M8LFGQ - Low Side

40V - 50V Dual N-channel

Part Number	Package	V_{DS}	V_{GS}	ESD Diode	I_{DS} (A)	P_D (W)	$R_{DS(ON)}$ (mΩ max) at $V_{GS}=$				$V_{GS(th)}$ (V)	C_{iss} typ (pF)	Q_G typ @ $V_{GS} = 4.5V$ (nC)	Q_G typ @ $V_{GS} = 10V$ (nC)	Automotive Compliant* Available	175°C Rated
		(V)	(±V)		@ $T_A = 25^\circ C$	@ $T_A = 25^\circ C$	10V	4.5V	2.5V	1.8V	Max					
DMTH43M8LPDW	PowerDI5060-8/SWP (Type UXD)	40	20	N	110*	3	4.2	6	-	-	2.5	2796	19.4	41.9	Y	
DMTH43M8SPDW	PowerDI5060-8/SWP (Type UXD)	40	20	N	105*	3	4.5	-	-	-	4	2958	17	40	Y	Y
DMTH45M5SPDW	PowerDI5060-8/SWP (Type UXD)	40	20	N	79*	3.3	5.5	-	-	-	3.5	1083	-	13.2	Y	Y
DMTH45M5LPDW	PowerDI5060-8/SWP (Type UXD)	40	20	N	79*	3	5.5	7.9	-	-	2.3	978	6.3	13.9	Y	Y
DMTH4007SPDW	PowerDI5060-8/SWP (Type UXD)	40	20	N	12.5	2.6	8.6	-	-	-	4	2026	-	41.9	Y	Y
DMTH4007SPD	PowerDI5060-8 (Type C)	40	20	N	45*	37.5*	8.6	-	-	-	4	2026	-	41.9	Y	Y
DMT47M2LDV	PowerDI3333	40	20	N	30.2*	14.8*	10.8	15	-	-	2.3	891	6.72	14	Y	-
DMTH4008LPDW	PowerDI5060	40	20	N	46.2*	39.4*	12.3	17.5	-	-	2.3	881	5.8	12.3	Y	Y
DMNH4015SSD	SO-8	40	20	N	8.6	2	15	20	-	-	3	1938	15	33	Y	-
DMTH4012LPDW†	PowerDI5060-8/SWP (Type UXD)	40	20	N	29*	2.4	14	22.5	-	-	3	553	1.8	3.8	Y	Y
DMTH4014LPD(W)	PowerDI5060-8/SWP (Type UXD)	40	20	N	10.6	2.41	15	25	-	-	3	733	5.2	10.2	Y	Y
DMTH4011SPD(W)	PowerDI5060-8/SWP (Type UXD)	40	20	N	11.1	2.6	15	-	-	-	4	805	-	10.6	Y	Y
DMTH4014LDVW	PowerDI3333-8	40	20	N	10.2	2.6	15	25	-	-	3	-	5.7	11.2	Y	Y
DMT4014LDV	PowerDI3333-8	40	20	N	8.5	2.1	19	29	-	-	3	750	5.7	11.2	-	-
DMT4015LDV	PowerDI3333-8	40	16	Y	7.8	2	20	25	-	-	2.5	808	8.6	15.7	-	-
DMNH4026SSD	SO-8	40	20	N	7.5	2	24	32	-	-	3	1060	8.8	19.1	Y	-
DMN4026SSD	SO-8	40	20	N	9	1.8	24	32	-	-	3	1060	8.8	19.1	-	-
DMN4027SSD	SO-8	40	20	N	7.1	2.1	27	47	-	-	3	604	6.3	12.9	-	-
DMN4031SSD	SO-8	40	20	N	7	2.6	31	50	-	-	3	945	8.4	18.6	Y	-
DMN4034SSD	SO-8	40	20	N	6.3	1.25	34	59	-	-	3	453	4.9	10	-	-
DMN53D0LDW	SOT363	50	20	Y	0.36	0.31	1600	2500	4500	-	1.5	46	0.6	-	Y	-
DMN53D0LV	SOT563	50	20	Y	0.35	0.43	1600	2500	4500	-	1.5	46	0.6	-	Y	-
BSS138DW	SOT363	50	20	N	0.2	0.2	3500	-	-	-	1.5	50 (max)	-	-	Y	-
DMN52D0UDW	SOT363	50	12	Y	0.35 @ 5V	0.5	-	2000 @ 5V	2500	4000	1	42.3	0.7	1.5	Y	-
DMN52D0UDM	SOT26	50	12	Y	0.41 @ 5V	0.74	-	2000 @ 5V	2500	4000	1	42.4	0.9	1.6	Y	-
DMN52D0UVT	TSOT26	50	12	Y	0.43 @ 5V	0.7	-	2000 @ 5V	2500	4000	1	41	0.7	1.4	Y	-
DMN52D0UV	SOT563	50	12	Y	0.48 @ 5V	0.89	-	2000 @ 5V	2500	4000	1	39	0.8	1.5	Y	-
DMN52D0UV	SOT563	50	12	Y	0.48 @ 5V	0.89	-	2000 @ 5V	2500	4000	1	39	0.8	1.5	-	-

† In development SWP=Side Wall Plating *@ $T_C=25^\circ C$

40V - 60V Dual P-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =		V _{GS} (th) (V)	C _{iss} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant Available	175 °C Rated
		(V)	(±V)		@T _A =25 °C	@T _A =25 °C	10V	4.5V	Max.					
DMPH4023SPDW	PowerDI5060-8/SWP (Type UXD)	40	20	N	27*	3.1	26	-	3	1091	-	18.7	Y	Y
DMP4047SSD	SO-8	40	20	N	5.1	1.8	45	55	3	1154	10.6	21.5	Y	-
DMP4050SSD	SO-8	40	20	N	5.2	2.14	50	79	3	674	6.9	13.9	Y	-
DMP56D0UV	SOT563	50	8	Y	0.16	0.4	-	6000 @4V	1.2	50.54	0.58	-	-	-
DMP58D1LV	SOT563	50	20	N	0.22 @5V	0.78	-	8000 @5V	2.0	37	0.6 @5V	1.2	Y	-
BSS84DW	SOT363	50	20	N	0.13	0.3	-	10000 @5V	2	45 (max)	-	-	-	-
DMPH6050SPD(W)	PowerDI5060-8/SWP (Type UXD)	60	20	N	6.3	2.8	48	60	3	1525	14.5	30.6	Y	Y
DMPH6050SSD	SO-8	60	20	N	5.2	2	48	60	3	1525	14.5	30.6	Y	Y
DMP6050SSD	SO-8	60	20	N	4.8	1.7	55	70	3	1293	11.9	24	-	-
DMPH6051SSD	SO-8	60	20	N	4.1	1.9	60	80	3	2079	17	36	Y	Y
DMP6051SSD	SO-8	60	20	N	4.3	1.6	60	80	3	2079	17	36	Y	-
DMP6110SSD	SO-8	60	20	N	4.5	1.7	105	130	3	969	8.2	17.2	Y	-
DMP68D1LV	SOT563	60	20	Y	0.238	0.8	-	8000 @5V	2.1	42	0.6 @5V	-	Y	-

SWP=Side Wall Plating *@T_C=25°C

35V - 60V Dual Complementary



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =			V _{GS} (th) (V)		C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Automotive Compliant "Q" Available
		(V)	(±V)		@T _A =25°C	@T _A =25°C	4.5V	2.5V	1.8V	Min.	Max.			
DMC4015SSD	SO-8	40, 40	20, 20	N	12.2, 8.8	1.7	15, 29	20, 45	3, 3	1810, 1626	19, 17	40, 34	-	-
DMC4047LSD	SO-8	40, 40	20, 20	N	6.9, 5.1	1.8	24, 45	32, 55	2.4, 2.2	1060, 1154	8.8, 10.6	19.1, 21.5	-	-
DMC4028SSD	SO-8	40, 40	20, 20	N	7.2, 5.2	2.16	28, 50	49, 79	3, 3	604, 674	6.5, 7	12.9, 14	Y	-
DMC4040SSD	SO-8	40, 40	20, 20	N	7.5, 7.3	2.14	25, 25	40, 45	1.8, 1.8	1790, 1643	16, 14	37.6, 33.7	Y	Y
DMC4029SSD	SO-8	40, 40	20, 20	N	9, 6.5	1.8	24, 45	32, 55	3, 3	1060, 1154	8.8, 10.6	19.1, 21.5	-	-
DMC4029SK4	TO252-4	40, 40	20, 20	N	8.3, 6.1	2.9	24, 45	32, 55	3, 3	1060, 1154	8.8, 10.6	19.1, 21.5	-	-
DMC4050SSD	SO-8	40, 40	20, 20	N	5.5, 5.8	2.14	45, 45	60, 60	1.8, 1.8	1790, 1643	-	37.56, 33.66	Y	Y
DMC67D8UFDB	U-DFN2020-6 (Type B)	60, 20	20, 12	Y	0.39, 2.9	0.89	4000, -	4100, 72	2.5, 1.25	41, 443	0.4, 7.3	-	Y	Y
BSS8402DW	SOT363	60, 50	20, 20	N	0.115, 0.13	0.2	13500, -	7500, 10000 @5V	2.5, 2	22 @25V, 45 @25V(max)	-	-	Y	-
DMC62D0SV	SOT563	60, 50	20, 20	Y	0.3, 0.2	0.84	1700, 1700	3000, 3000	2.5, 2.5	30, 26	0.4, 0.4	-	Y	-
DMC6040SSD	SO-8	60, 60	20, 20	N	6.5, 3.9	1.56	40, 110	55, 130	3, 3	1130 @15V, 1030	9.4, 9.5	20.8, 19.4	Y	-
DMC6070LND	PowerDI3333-8 (Type UXB)	60, 60	20, 20	N	3.1, 2.4	1.4	85, 150	120, 250	3, 3	731, 612	5.2, 4.3	11.5, 8.9	-	Y
DMC6022SSD	SO-8	60, 60	20, 20	N	6.5	2	160, 250	34(6V), 70	3, 3	2110, 1525	14, 14.5	32.0, 30.6	-	-
DMC62D2SV	SOT563	60, 60	20, 20	Y	0.48, 0.32	0.8	1700, 4000	3000, 6000	2.5, 3	41, 40	0.51, 0.5	1.04, 1.1	Y	-

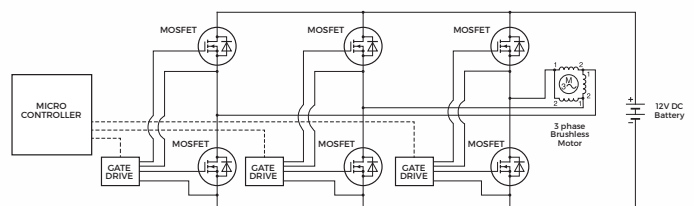
Application Focus

Automotive Brushless DC Motor Control

Brushless DC (BLDC) motor control provides improved performance, longer life, reduced noise, and greater ease of use compared to equivalent mechanical solutions.

3-phase BLDC systems are widely used in automotive applications such as fuel pumps, water pumps, anti-lock braking systems (ABS), and power steering systems. The motor power depends on the vehicle application and performance. In BLDC motor systems, MOSFETs are typically configured in a 3-phase bridge arrangement to drive the DC motor and must be capable of handling start-up and stalled motor currents of up to six times the continuous current rating of the motor.

MOSFETs Driving 3-Phase BLDC Motor



The DIODES Advantage

- **Low R_{DS(ON)}**
Reduced conduction losses
- **Low Q_{GD}**
Reduced switching losses
- **100% Avalanche Rated**
Ensures robust design able to withstand the reverse avalanche energy generated by the BLDC
- **Rated to +175°C** For use in high-ambient temperature environments
- **Low Thermal Resistance Package**
Maintains low operating temperature

51V - 99V N-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)	C _{ISS} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Qualified	175 °C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Max.					
DMNH6011LK3	TO252 (DPAK)	55	12	N	80*	3	12	18	-	-	2	3077@30V	23.4	49.1	Y	Y
DMTH6M70STLW†	PowerDI5060-8 (SWP) (Type UX)	60	20	N	-	-	0.88	1.27@6V	-	-	2-4	-	-	-	Y	Y
DMTH6M70SPGW†	PowerDI8080-5	60	20	N	455*	4.7	0.85	-	-	-	2-4	15859	-	260	Y	Y
DMT61M5SPSW	PowerDI5060-8	60	20	N	215*	139	1.5	-	-	-	4	8306	-	130.6	-	-
DMTH61M5SPSW	PowerDI5060-8	60	20	N	225*	167	1.5	-	-	-	4	8306	-	130.6	Y	Y
DMTH61M8LPS	PowerDI5060-8	60	20	N	225*	187.5	1.6	2.8	-	-	3	8320	53.3	115	Y	Y
DMT61M8SPS	PowerDI5060-8 (Type K)	60	20	N	205*	139*	1.6	-	-	-	4	8306	-	130.6	-	-
DMTH61M8SPS	PowerDI5060-8 (Type K)	60	20	N	215*	167*	1.6	-	-	-	4	8306	-	130.6	Y	Y
DMTH6002LPS	PowerDI5060-8	60	20	N	100*	167*	2	3	-	-	3	6555	63.6	130.8	-	Y
DMTH6002LPSW	PowerDI5060-8	60	20	N	190*	190	2	3.3	-	-	3	8289	68	131	Y	Y
DMT6002LPS	PowerDI5060-8 (Type K)	60	20	N	100*	167*	2	3 @6V	-	-	3	6555	63.6	130.8	-	-
DMT62M7SPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	163*	125	2.7	-	-	-	4	4973	-	68.7	-	-
DMTH62M7SPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	170*	150	2.7	-	-	-	4	4973	-	68.7	Y	Y
DMTH62M8LPS	PowerDI5060-8	60	20	N	100*	115*	2.8	4.4	-	-	3	4515	47.4	96.3	-	Y
DMTH62M8SPS	PowerDI5060-8	60	20	N	100*	125*	2.8	-	-	-	4	4556	-	95.4	-	Y
DMT6004LPS	PowerDI5060-8	60	20	N	100*	139*	3.1	4.5	-	-	3	4515	47.4	96.3	-	-
DMTH6004LPS	PowerDI5060-8	60	20	N	100*	138*	3.1	4.5	-	-	3	4515	47.4	96.3	Y	Y
DMT6004SPS	PowerDI5060-8	60	20	N	100*	139*	3.1	-	-	-	4	4556	-	95.4	-	-
DMTH6004LPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	100*	138	3.1	-	-	-	3	5399	-	78.3	Y	Y
DMTH6004SPS	PowerDI5060-8	60	20	N	100*	167*	3.1	-	-	-	4	4556	-	95.4	Y	Y
DMTH6004SPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	100*	167	3.1	-	-	-	4	4556	-	95.4	Y	Y
DMTH6004SCTB	TO263AB (D2PAK)	60	20	N	100*	136*	3.4	-	-	-	4	4556	-	95.4	Y	Y
DMT6004SCT	TO220AB	60	20	N	100*	113*	3.65	-	-	-	4	4556	-	95.4	-	-
DMTH6004SCT	TO220AB	60	20	N	100*	136*	3.65	-	-	-	4	4556	-	95.4	-	Y
DMTH6004SK3	TO252 (DPAK)	60	20	N	100*	180*	3.8	-	-	-	4	4556	-	95.4	Y	Y
DMTH63M5LFG	PowerDI3333-8	60	20	N	24*	63.3	4	-	-	-	2.5	2378	19.9	41.2	Y	Y
DMT63M5LFG	PowerDI3333-8	60	20	N	44*	52.7	4	-	-	-	2.5	2378	19.9	41.2	-	-
DMTH63M6LPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	105*	84.7	4.1	6.2	-	-	2.5	2479	23	44.8	Y	Y
DMT6005LFG	PowerDI3333-8	60	20	N	100*	1.98	4.1	7	-	-	2.5	3150	23.6	48.7	-	-
DMTH6005LFG	PowerDI3333-8	60	20	N	100*	2.38	4.1	7	-	-	2.5	3150	23.6	48.7	-	Y
DMT64M3SK3	TO252 (DPAK)	60	20	N	131*	116	4.2	-	-	-	4	6019	-	83	-	-
DMT64M2LPSW	PowerDI5060-8	60	20	N	100*	83.3*	4.4	6.4	-	-	2.5	2799	24.1	46.7	-	-
DMT6005LPS	PowerDI5060-8	60	20	N	100*	125*	4.5	6.5	-	-	3	2962	23.1	47.1	-	-
DMT64M8LCG	V-DFN3333-8 (Type B)	60	20	Y	161	2.160	4.8	6.5	-	-	2.4	2664	26.1	47.5	-	-
DMT64M8LSS	SO-8	60	20	Y	17	2.200	5	6.9	-	-	2.3	2664	26.1	47.5	-	-
DMTH6005LPS	PowerDI5060-8	60	20	N	100*	150*	5.5	10	-	-	3	2962	23.1	47.1	Y	Y
DMTH6005LPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	100*	150	5.5	-	-	-	3	2962	-	47.1	Y	Y
DMTH6005LK3	TO252 (DPAK)	60	20	N	90*	2.1	5.6	10	-	-	3	2962	23.1	47.1	Y	Y
DMT67M8LCG	V-DFN3333-8 (Type B)	60	20	Y	64.6*	2.2	5.7	8.1	-	-	2.5	2130	20	37.5	Y	-
DMT6007LFG	PowerDI3333-8	60	20	N	80*	2.2	6	8.5	-	-	2	2090	19.3	41.3	Y	-
DMT6005LSS	SO-8	60	20	N	13.5	1.7	6	8.9	-	-	3	2962	23.1	47.1	-	-
DMT6005LCT	TO220-3	60	20	N	100*	104*	6	10	-	-	3	2962	23.1	47.1	-	-
DMTH6005LCT	TO220-3	60	20	N	100*	125*	6	10	-	-	3	2962	23.1	47.1	-	Y
DMT67M8LPSW	PowerDI5060-8	60	20	Y	82*	62.5*	6.2	8.5	-	-	2.5	2130	20	37.5	-	-
DMT6006SPS	PowerDI5060-8	60	20	N	16.2	89.3	6.2	-	-	-	4	1721	-	27.9	-	-
DMTH6006SPS	PowerDI5060-8	60	20	N	17.8	107	6.2	-	-	-	4	1721	-	27.9	-	Y
DMT6006LK3	TO252 (DPAK)	60	20	N	88*	88	6.5	10	-	-	2.5	2162	18.1	34.9	-	-
DMTH6006LPSW	PowerDI5060-8	60	20	N	100*	100*	6.5	10	-	-	2.5	2162	18.1	34.9	Y	Y
DMT6006LSS	SO-8	60	20	N	14.6	2.08	6.5	10	-	-	2.5	2162	18.1	34.9	-	-
DMT67M8LSS	SO-8	60	20	Y	14.8	2.2	6.6	8.4	-	-	3	2130	20	37.5	-	-
DMT67M8LK3	TO252 (DPAK)	60	20	Y	87*	87	7	10	-	-	2.5	2130	20	37.5	-	-
DMTH6010SCT	TO220-3	60	20	N	100*	125*	7.2	-	-	-	4	1940	-	36.3	-	Y
DMT6010SCT	TO220-3	60	20	N	98*	104*	7.2	-	-	-	4	1940	-	36.3	-	-
DMNH6009SPS	PowerDI5060-8	60	20	N	95*	3.3	7.3	15	-	-	3	1882	18.5	37.3	-	Y
DMNH6009SPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	95*	3.3	7.3	15	-	-	3	1882	18.5	37.3	-	Y
DMT6008LFG	PowerDI3333-8	60	12	Y	60*	41*	7.5	11.5	-	-	2	2713	22.4	50.4	-	-
DMT6010LFG	PowerDI3333-8	60	20	N	30*	2.2	7.5	11.5	-	-	2	2090	19.3	41.3	-	-
DMT68M8LPS	PowerDI5060-8	60	20	Y	69.2*	56.8*	7.9	10.8	-	-	3	2078	14.4	30	-	-
DMTH6010LK3	TO252 (DPAK)	60	20	N	70*	60*	8	12	-	-	3	2090	19.3	41.3	Y	Y
DMTH6010LPS	PowerDI5060-8	60	20	N	100*	136*	8	12	-	-	3	2090	19.3	41.3	Y	Y
DMT6010LPS	PowerDI5060-8	60	20	N	80*	113*	8	12	-	-	3	2090	19.3	41.3	-	-
DMTH6010LPSW	PDI5060	60	20	-	80*	2.9	8	12	-	-	3	2090	19.3	41.3	Y	Y

† In development SWP=Side Wall Plating *@T_C=25°C

51V - 99V N-Channel (Cont.)



Part Number	Package	V _{DS} (V)	V _{GS} (±V)	ESD Diode	I _{DS} (A) @T _A =25°C	P _D (W) @T _A =25°C	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{CS} (th) (V) Max.	C _{ISS} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant * AEC-Q101	175°C rated
							10V	4.5V	2.5V	1.8V						
DMT6010LSS	SO-8	60	20	N	14	2	8	12	-	-	2	2090	19.3	41.3	-	-
DMNH6008SCT	TO220AB	60	20	N	130*	210*	8	-	-	-	4	2596	21	40	Y	Y
DMTH6010SK3	TO252 (DPAK)	60	20	N	16.3	3.1	8	-	-	-	4	2841	-	38.1	Y	Y
DMTH6010SPS	PowerDI5060-8	60	20	N	100*	167*	8	-	-	-	4	2841	-	38.1	-	Y
DMNH6008SPS	PowerDI5060-8	60	20	N	88*	3.3	8	-	-	-	4	2597	21.2	40.1	Y	Y
DMNH6008SPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	16.5	3.3	8	-	-	-	4	2597	21.2	40.1	Y	Y
DMT69M5LFVW	PowerDI3333-8	60	20	N	40.6*	2.74	8.3	12.5	-	-	2.5	1406	15.4	28.4	Y	-
DMT69M5LCG	V-DFN3333-8 (Type B)	60	20	N	52.1*	2.64	8.3	12.5	-	-	2.5	1406	15.4	28.4	-	-
DMT68M8LSS	SO-8	60	20	Y	12.1	1.9	8.5	12	-	-	3	2107	15.6	31.8	-	-
DMT6009LSS	SO-8	60	20	N	10.8	1.6	9.5	12	-	-	2	1925	15.6	33.5	-	-
DMT69M8LFV	PowerDI3333-8 (Type UX)	60	16	N	45*	42*	9.5	13.3	-	-	3	1925	15.6	33.5	-	-
DMTH69M8LFVW	PowerDI3333-8	60	16	N	45.4*	29.4*	9.5	13.3	-	-	3	1925	15.6	33.5	Y	Y
DMT68M8LFV	PowerDI3333-8	60	20	Y	54.1*	2.7	9.5	13.3	-	-	3	2078	14.4	30	-	-
DMT6009LFG	PowerDI3333-8	60	16	N	34*	19.2*	10	11.7	-	-	2	1925	15.6	33.5	-	-
DMT6009LPS	PowerDI5060-8	60	16	N	87*	113*	10	12	-	-	2	1925	15.6	33.5	-	-
DMTH6009LPS	PowerDI5060-8	60	16	N	89.5*	136*	10	12	-	-	2	1925	15.6	33.5	Y	Y
DMTH6009LPSW	PowerDI5060-8 (SWP) (Type UX)	60	16	N	89.5*	136	10	12	-	-	2	1925	-	33.5	Y	Y
DMT6009LK3	TO252 (DPAK)	60	16	N	57*	50*	10	12.8	-	-	2	1925	15.6	33.5	-	-
DMTH6009LK3	TO252 (DPAK)	60	16	N	59*	60*	10	12.8	-	-	2	1925	15.6	33.5	Y	Y
DMTH6009SPS	PowerDI5060-8	60	20	N	89.5*	136*	10	13.5	-	-	2.8	1572	13.9	29.3	-	Y
DMN6010SCTB	TO263AB (D2PAK)	60	20	N	128*	312	10	-	-	-	4	2692	-	46	Y	-
DMNH6010SCTB	TO263AB (D2PAK)	60	20	N	133*	375	10	-	-	-	4	2692	-	46	Y	Y
DMT69M5LH3	TO251	60	20	N	75*	96	10.5	15	-	-	2.5	1406	15.4	28.4	-	-
DMT6012LSS	SO-8	60	20	Y	10.4	1.8	11	14	-	-	2	1522	10.7	22.2	-	-
DMT6011LSS	SO-8	60	20	Y	11.4	2.100	11	14.5	-	-	2.5	1072	11.8	22.2	-	-
DMNH6012SPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	215*	3.100	11	-	-	-	4	1926	16.3	35.2	Y	Y
DMNH6012SPS	PowerDI5060-8	60	20	N	50*	3.1	11	-	-	-	4	1926	16.3	35.2	Y	Y
DMT6009LCT	TO220-3	60	16	N	37.2*	25*	12	14.5	-	-	2	1925	15.6	33.5	-	-
DMT6012LFV	PowerDI3333-8	60	20	Y	43.3*	1.95	12	15	-	-	2.5	1522 @30V	10.7	22.2	-	-
DMT6012LPSW	PowerDI5060-8	60	20	Y	31.5*	3.1	12	17	-	-	2.5	1522	10.7	22.2	-	-
DMNH6012LK3	TO252 (DPAK)	60	20	N	60*	3.8	12	18	-	-	3	1926	16.3	35.2	Y	Y
DMN6013LFG	PowerDI3333-8	60	20	N	10.3*	2.1	13	18	-	-	3	2577	26.6	55.4	Y	-
DMTH6012LPSW	PD5060	60	20	-	50.5*	2.8	14	21	-	-	2.3	785	7.3	13.6	-	Y
DMT616MLSS	SO-8	60	20	N	10	2.06	14	21	-	-	2.2	785	7.3	13.6	-	-
DMT6012LDF	U-DFN2020-6 (Type F)	60	20	N	9.5	1.9	14	21	-	-	2.3	785	7.3	13.6	-	-
DMTH6011LPDW†	PowerDI5060-8 (SWP) (Type UXD)	60	20	N	-	-	14	22	-	-	1.4-2.5	-	-	-	Y	Y
DMT6013LSS	SO-8	60	20	N	10	2.1	14.3	21	-	-	2.5	1081	8.5	15	-	-
DMT6013LDF	U-DFN2020-6 (Type F)	60	20	N	10	1.9	15	21.5	-	-	2.3	1081	8.5	15	-	-
DMT6016LPS	PowerDI5060-8	60	20	N	32*	2.55	15	24	-	-	2.5	864	8.4	17	-	-
DMT6015LSS	SO-8	60	16	Y	9.2	2.1	16	21	-	-	2.5	1103	8.9	18.9	-	-
DMT6015LFVW	PowerDI3333-8	60	16	Y	10	28.4	16	22	-	-	2.5	808	8.6	15.7	-	-
DMT6015LFV	PowerDI3333-8 (Type UX)	60	16	Y	35*	30*	16	22	-	-	2.5	1103	8.9	18.9	-	-
DMT6015LPS	PowerDI5060-8	60	16	Y	31*	2.7	16	24	-	-	2.5	1103	8.9	18.9	-	-
DMTH6016LPS	PowerDI5060-8	60	20	N	37.1*	3	16	24	-	-	2.5	864	8.4	17	Y	Y
DMT615MLFV	PowerDI3333-8	60	20	Y	38*	1.76	16	26	-	-	3	1039	7.8	15.5	-	-
DMTH6016LFVW	PowerDI3333-8 (SWP) (Type UX)	60	20	N	41*	2.38	16	27	-	-	2.5	939	7.3	15.1	Y	Y
DMT6016LDF	U-DFN2020-6 (Type F)	60	20	N	8.9	1.9	16	27	-	-	3	864	8.4	17	-	-
DMTH6016LPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	37.1*	37.5	16	-	-	-	2.5	864	8.4	17	Y	Y
DMT6016LPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	43*	41.67*	16.5	26	-	-	-	864	8.4	17	-	-
DMTH6016LK3	TO252 (DPAK)	60	20	N	10.8	3.2	17	24	-	-	3	864	8.4	17	Y	Y
DMN6017SK3	TO252 (DPAK)	60	20	N	11	3.3	18	20	-	-	3	2711	26	55	-	-
DMN6017SFV	PowerDI3333-8 (Type UX)	60	20	N	35*	2	18	20	-	-	3	2711 @15V	26	55	-	-
DMT6017LSS	SO-8	60	20	N	9.2	2.1	18	23	-	-	2.5	864	8.4	17	-	-
DMTH6016LDFW	U-DFN2020-6 (SWP) (Type F)	60	20	N	9.4	2.3	18	27.5	-	-	3	925	7.5	15.3	Y	Y
DMT6016LSS	SO-8	60	20	N	9.2	2.1	18	28	-	-	2.5	864	8.4	17	-	-
DMNH6021SK3	TO252 (DPAK)	60	20	N	50*	3.7	23	28	-	-	3	1143	12.1	20.1	Y	Y
DMNH6021SPSW	PowerDI5060-8	60	20	N	163*	44	23	28	-	-	3	1132	9.7	20.1	Y	Y
DMNH6021SPS	PowerDI5060-8	60	20	N	55*	3	23	28	-	-	3	1016	9.5	19.7	Y	Y
DMT6030LFCL	U-DFN1616-6	60	20	N	6.5	1.580	25	34	-	-	2.5	639	4.5	9.1	-	-
DMT6030LFDF	U-DFN2020-6 (Type F)	60	20	N	6.8	9.62	25.5	35	-	-	2.5	639	4.5	9.1	-	-
DMTH6030LFDFW	U-DFN2020-6/SWP (Type UXG)	60	20	N	17.5	16.5	29	-	-	-	2.5	452	-	41.2	Y	Y
DMN6022SSS	SO-8	60	20	N	6.9	2.1	29	34 @6V	-	-	-	2110	14	32	-	-

† In development SWP=Side Wall Plating *@T_C=25°C

51V - 99V N-Channel (Cont.)



Part Number	Package	V _{DS} (V)	V _{GS} (±V)	ESD Diode	I _{DS} (A) @T _A =25°C	P _D (W) @T _A =25°C	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V) Max.	C _{ISS} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Grade Available	175°C Rated
							10V	4.5V	2.5V	1.8V						
DMN6040SFDE	U-DFN2020-6 (Type E)	60	20	N	6.5	2.03	38	47	-	-	3	1287 @25V	10.4	22.4	Y	-
DMN6040SK3	TO252 (DPAK)	60	20	N	20*	2.84	40	50	-	-	3	1287 @25V	10.4	22.4	Y	-
DMN6040SE	SOT223	60	20	N	5	2	40	55	-	-	3	1287 @25V	10.4	22.4	-	-
DMN6040SSS	SO-8	60	20	N	5.5	2	40	55	-	-	3	1287 @25V	10.4	22.4	-	-
DMN6040SVT	TSOT26	60	20	N	6.3	1.8	44	60	-	-	3	1287 @25V	10.4	22.4	Y	-
DMN6041SVT	TSOT26	60	20	N	4.1	1.700	48	60	-	-	3	1190	10	21	Y	-
DMNH6069SFVW	PowerDI3333-8/SWP (Type UX)	60	20	N	5	38	50	63	-	-	3	740	6.4	14	Y	Y
DMN6069SFG	PowerDI3333-8	60	20	N	18*	2.4	50	63	-	-	3	740	6.4	14	Y	-
DMNH6042SK3	TO252 (DPAK)	60	20	N	25*	3.5	50	65	-	-	3	492	4.2	8.8	Y	Y
DMNH6042SPSW	PowerDI5060-8 (SWP) (Type UX)	60	20	N	190*	2.900	50	65	-	-	3	25	4.2	8.8	Y	Y
DMNH6042SPS	PowerDI5060-8	60	20	N	24*	2.9	50	65	-	-	3	584 @25V	4.2	8.8	Y	Y
DMN6066SSS	SO-8	60	20	N	5	2.8	66	97	-	-	3	502	5.4	10.3	-	-
DMN6068LK3	TO252 (DPAK)	60	20	N	8.5	4.12	68	100	-	-	3	502	5.55	10.3	Y	-
DMN6068SE	SOT223	60	20	N	5.6	3.7	68	100	-	-	3	502	5.55	10.3	-	-
DMN6069SE	SOT223	60	20	N	4.3	2.2	69	100	-	-	3	825	7.2	16	-	-
DMN6069SFVW	PowerDI3333-8	60	20	N	4	2.500	69	100	-	-	3	0	6.4	14	Y	-
DMN6070SY	SOT89	60	20	N	4.1	2.1	85	110	-	-	3	588 @30V	5.6	12.3	-	-
DMN6075S	SOT23	60	20	N	2.5	1.15	85	120	-	-	3	606 @20V	5.6	12.3	Y	-
DMN6070SFCL	X1-DFN1616-6 (Type E)	60	20	N	3	1.8	85	120 @4V	-	-	3	606 @20V	5.6	12.3	-	-
DMN6140L	SOT23	60	20	N	2.3	1.3	140	170	-	-	3	315 @40V	4.1 @5V	8.6	Y	-
DMN62D1SFB	X1-DFN1006-3	60	20	Y	0.41	0.47	1400	1600	-	-	2.3	40 @40V	0.73	1.39	-	-
DMN62D1SFBW	U-DFN1006-3/SWP (Type UX)	60	20	Y	0.538	0.800	1400	1600	-	-	2.3	43	0.8	1.4	Y	-
DMN601WK	SOT323	60	20	Y	0.3	0.2	2000	3000	-	-	2.5	50(max) @25V	-	-	Y	-
DMN62D0U	SOT23	60	20	Y	0.38	0.59	-	2000	2500	3000	1	32	0.5	-	-	-
DMN62D0UV	SOT563	60	20	Y	0.49	0.740	-	2000	2500	3000	1	32	0.5	-	-	-
DMN62D0UT	SOT523	60	20	Y	0.32	0.34	-	2000	2500	3000	1	32	0.5	-	-	-
DMN62D0LFB	X1-DFN1006-3	60	20	Y	0.1	0.470	-	2500	2500	-	1	-	-	-	-	-
DMN61D8L	SOT23	60	12	Y	0.47	0.61	-	1800 @5V	2400 @3V	-	2	12.9 @12V	0.74 @5V	-	Y	-
DMN62D2UDM	SOT26	60	20	Y	0.44	0.800	-	2000 @5V	2500	4000	1	41	0.8	-	Y	-
DMN62D2UVT	TSOT26	60	20	Y	0.455	0.900	-	2000 @5V	2500	4000	1	41	0.8	-	Y	-
DMN62D2U	SOT23	60	20	Y	0.39	0.600	-	2000 @5V	2500	4000	1	41	0.8	-	Y	-
DMN62D2UDW	SOT363	60	20	Y	0.34	0.500	-	2000 @5V	2500	4000	1	41	0.8	-	-	-
DMN62D2UW	SOT323	60	20	Y	0.391	0.600	-	2000 @5V	2500	4000	1	41	0.8	-	Y	-
DMN62D2UV	SOT563	60	20	Y	0.45	0.800	-	2000 @5V	2500	4000	1	41	0.8	-	Y	-
DMN62D2UT	SOT523	60	20	Y	0.334	0.500	-	2000 @5V	2500	4000	1	41	0.8	-	Y	-
DMN62D0LFD	X1-DFN1212-3	60	20	Y	0.31	0.48	-	2000 @4V	2500	3000	1	31 @25V	0.5	-	-	-
DMN62D1LFD	U-DFN1212-3 (Type C)	60	20	Y	0.4	0.5	-	2000 @4V	2500	3000	1	36 @25V	0.55	-	Y	-
DMN62D1LFB	X1-DFN1006-3	60	20	Y	0.32	0.5	-	2000 @4V	2500	3000	1	32 @25V	0.45	-	-	-
DMN62D4LFB4	X2-DFN1006-3	60	20	Y	0.527	1.200	2000	3000 @5V	-	-	2.5	41	0.51	1.04	-	-
DMN601K	SOT23	60	20	Y	0.3	0.35	2000	3000 @5V	-	-	2.5	50(max) @25V	-	-	-	-
2N7002K	SOT23	60	20	Y	0.38	0.54	2000	3000 @5V	-	-	2.5	30 @25V	0.3	-	-	-
DMN63D1L	SOT23	60	20	Y	0.38	0.56	2000	3000 @5V	-	-	2.5	30 @25V	0.304	-	-	-
DMN63D1LW	SOT323	60	20	Y	0.38	0.41	2000	3000 @5V	-	-	2.5	30 @25V	0.3	-	-	-
DMN62D0SFD	X1-DFN1212-3	60	20	Y	0.63	0.89	2000	3000 @5V	-	-	2.5	30.2 @25V	0.39	0.87	-	-
DMN601TK	SOT523	60	20	Y	0.3	0.15	2000	3000 @5V	-	-	2.5	50(max) @25V	-	-	-	-
DMN63D1LT	SOT523	60	20	Y	0.32	0.33	2000	3000 @5V	-	-	2.5	30 @25V	0.392	-	-	-
DMN601LT	SOT523	60	20	Y	0.356	0.500	2000	3000 @5V	-	-	2.5	47	0.7	1.3	Y	-
2N7002E	SOT23	60	20	N	0.3	0.37	3000	4000	-	-	2.5	22 @25V	0.223	-	-	-
DMN65D8L	SOT23	60	20	Y	0.31	0.54	3000	4000 @5V	-	-	2	22 @25V	0.43	0.87	Y	-
DMN65D8LW	SOT323	60	20	Y	0.3	0.43	3000	4000 @5V	-	-	2	22 @25V	0.43	0.87	-	-
DMN65D8LFB	X1-DFN1006-3	60	20	Y	0.26	0.84	3000	4000 @5V	-	-	2	25 @25V	-	-	-	-
DMN65D9L	SOT23	60	16	Y	0.335	0.67	4000	4100 @5V	4200 @4V	-	2.5	41	0.4	-	-	-
MMBF170	SOT23	60	20	N	0.5	0.3	5000	5300	-	-	3	22 @10V	-	-	Y	-
DMN65D7LFR4	X2-DFN1010-4	60	20	Y	0.26	0.000	5000	5300	-	-	2.5	41	0.51	1.04	-	-
BS170P	TO92	60	20	N	0.27	0.625	5000	-	-	-	3	60	-	-	-	-
BS170F	SOT23	60	20	N	0.15	0.33	5000	-	-	-	3	60 @10V	-	-	-	-
BS870	SOT23	60	20	N	0.25	0.3	5000	-	-	-	3	22 @10V	-	-	Y	-
DMN67D7L	SOT23	60	40	N	0.21	0.57	5000	-	-	-	2.5	22 @25V	0.361	0.821	-	-
DMN65D8LT	SOT523	60	20	Y	0.21	0.300	5000	-	-	-	2	24	0.4	-	-	-
DMN66D0LT	SOT523	60	20	Y	0.115	0.2	5000	6000 @5V	-	-	2	23 @25V	-	-	-	-
2N7002	SOT23	60	20	N	0.21	0.54	5000	7500 @5V	-	-	2.5	22 @25V	223	-	-	-

† In development SWP=Side Wall Plating *@T_C=25°C

51V - 99V N-Channel (Cont.)

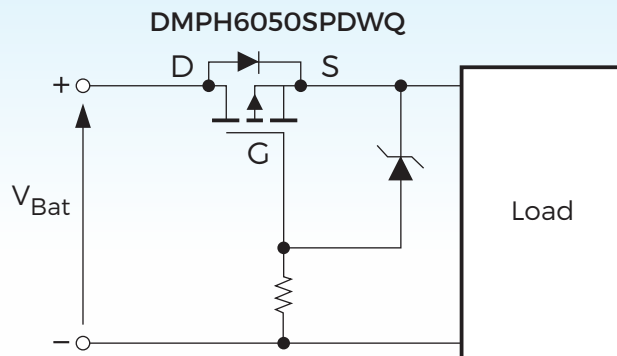


Part Number	Package	V_{DS} V_{GS}		ESD Diode	I_{DS} (A)		P_D (W)		$R_{DS(ON)}$ (m Ω max) at V_{GS} =				V_{GS} (th) (V)	C_{iss} typ (pF)	Q_G typ @ V_{GS} = 4.5V (nC)	Q_G typ @ V_{GS} = 10V (nC)	Automotive Compliant ¹ ²	175 °C Rated
		(V)	($\pm$ V)		@ T_A = 25°C	@ T_A = 25°C	@ T_A = 25°C	@ T_A = 25°C	10V	4.5V	2.5V	1.8V						
DMN67D8L	SOT23	60	30	N	0.21	0.57	5000	7500 @5V	-	-	-	-	2.5	22 @25V	0.361	0.821	-	-
DMN67D8LW	SOT323	60	30	N	0.24	0.47	5000	7500 @5V	-	-	-	-	2.5	22 @25V	0.361	0.821	-	-
VN10LF	SOT23	60	20	N	0.15	0.33	5000	7500 @5V	-	-	-	-	2.5	-	-	-	-	-
DMN67D8LT	SOT523	60	20	N	0.21	0.350	5000	7500 @5V	-	-	-	-	2.5	22	0.361	0.821	-	-
2N7002H	SOT23	60	20	N	0.21	0.51	-	7500 @5V	-	-	-	-	3	26 @25V	0.352	-	-	-
2N7002W	SOT323	60	20	N	0.115	0.2	13500 @125C	7500 @5V	-	-	-	-	2	22 @25V	-	-	-	-
2N7002T	SOT523	60	20	N	0.115	0.15	13500 @125C	7500 @5V	-	-	-	-	2	22 @25V	-	-	-	-
2N7002A	SOT23	60	20	Y	0.22	0.54	5000 @125C	6000 @5V	-	-	-	-	2	23 @25V	-	-	Y	-
DMT64M1LPSW	PowerDI5060-8 (SWP) (Type UX)	65	20	N	81.7*	44*	4.4	6.3	-	-	-	-	2.5	2626 @30V	28.9	51.4	-	-
DMT64M1LCG	V-DFN3333-8 (Type B)	65	20	N	16.7	2.600	5.4	7.3	-	-	-	-	2.5	2626	28.9	51.4	-	-
DMT6017LFDF	U-DFN2020-6 (Type F)	65	16	Y	8.1	1.76	18	23	-	-	-	-	2.3	891 @30V	7.5	15.3	-	-
DMT6017LFV	PowerDI3333-8	65	16	Y	36*	2.12	20	23	-	-	-	-	2.3	891 @30V	7.5	15.3	-	-
DMT6017LDV	PowerDI3333-8	65	16	Y	25.3*	2.340	22	29	-	-	-	-	2.3	891	7.5	15.3	-	-
DMN62D4LFB	X1-DFN1006-3	65	20	Y	0.407	0.500	2000	3000 @5V	-	-	-	-	2.5	40	0.6	1.1	-	-
DMN68M7SCT	TO220AB	68	20	N	100*	125*	8	-	-	-	-	-	3	4260 @30V	36	72.9	-	-
DMTH81M2STTW	PowerDI1015-16	80	20	N	430*	517	1.35	-	-	-	-	-	4	12602	-	216	Y	Y
DMTH81M2STLW	PowerDI1012-8 (TO2L)	80	20	N	354*	348	1.35	-	-	-	-	-	4	12608	-	231	Y	Y
DMTH81M2SPGW	PowerDI8080-5	80	20	N	390*	417	1.25	-	-	-	-	-	4	10969	-	171	Y	Y
DMTH8001STLW	PowerDI1012-8 (TO2L)	80	20	N	270*	250	1.7	-	-	-	-	-	4	8894	-	138	Y	Y
DMTH8003STLW	PowerDI1012-8 (TO2L)	80	20	N	173*	150	2.5	-	-	-	-	-	4	8191	-	124	Y	Y
DMTH82M6SPSW	PowerDI5060-8 (SWP) (Type UX)	80	20	N	174*	150	2.6	-	-	-	-	-	4	5466	-	87	Y	Y
DMTH83M2SPSW	PowerDI5060-8 (SWP) (Type UX)	80	20	N	165*	150	2.9	-	-	-	-	-	4	5466	-	87	Y	Y
DMT8003SPSW	PowerDI5060-8 (SWP) (Type UX)	80	20	N	92*	83	3.9	11 @6V	-	-	-	-	4	9081	-	136	Y	-
DMT8007LPSW	PowerDI5060-8	80	20	N	100*	104	6.5	9.5	-	-	-	-	2.8	2682	22.8	45.3	-	-
DMT8008LFG	PowerDI3333-8	80	20	N	48*	23.5*	6.9	10.4	-	-	-	-	2.5	2254	18.3	37.7	-	-
DMTH8008LFG	PowerDI3333-8	80	20	N	70*	50*	6.9	10.4	-	-	-	-	2.5	2254	18.3	37.7	Y	Y
DMT8008LK3	TO252 (Standard)	80	20	N	95*	3	7	11	-	-	-	-	2.8	2345	21.7	41.5	-	-
DMTH8008SFG	PowerDI3333-8	80	20	N	68*	50*	7	10.5 @6V	-	-	-	-	4	1945	18.4 @5V	31.7	-	Y
DMT8008SCT	TO220AB	80	20	N	111*	167	7.5	-	-	-	-	-	4	1950	-	34	-	-
DMT8008LPS	PowerDI5060-8	80	20	N	83*	83*	7.8	11	-	-	-	-	2.8	2345	21.7	41.2	-	-
DMT8008SK3	TO252 (Standard)	80	20	N	90*	3	7.8	-	-	-	-	-	4	1950	-	34	-	-
DMT8008SPS	PowerDI5060-8	80	20	N	83*	83*	7.8	11 @6V	-	-	-	-	4	1950	23 @6V	34	-	-
DMT8008LSS	SO-8	80	20	N	13	2.2	8	12	-	-	-	-	2.8	2840	24	47	-	-
DMTH8012LK3	TO252 (DPAK)	80	20	N	50*	60*	16	21	-	-	-	-	3	1949	15	34	Y	Y
DMT8012LFG	PowerDI3333-8	80	20	N	35*	30*	16	22 @6V	-	-	-	-	3	1949	15	34	-	-
DMT8012LSS	SO-8	80	20	N	9.7	2	16.5	20	-	-	-	-	3	1949	15	34	-	-
DMT8012LPS	PowerDI5060-8	80	20	N	65*	113*	17	21	-	-	-	-	3	1949	15	34	-	-
DMTH8012LPS	PowerDI5060-8	80	20	N	72*	136*	17	21	-	-	-	-	3	1949	15	34	Y	Y
DMT8012LK3	TO252 (DPAK)	80	20	N	44*	50*	17	22	-	-	-	-	3	1949	15	34	-	-
DMTH8012LPSW	PowerDI5060-8 (SWP) (Type Q)	80	20	N	53.7*	83.3*	17	23.5	-	-	-	-	3	1949	15	34	-	Y
DMTH8028LPSW	PowerDI5060-8 (SWP) (Type UX)	80	20	N	41.7*	41.7	25	41	-	-	-	-	2.5	641	5.4	10.4	Y	Y
DMTH8028LFVW	PowerDI3333-8/SWP (Type UX)	80	20	N	27*	3.500	25	41	-	-	-	-	2.5	631	5.4	10.4	Y	Y

SWP=Side Wall Plating *@ T_C =25°C

Application Focus

Automotive MOSFETs for reverse battery protection



Application Requirements

Protect against reverse polarity connection of the battery during vehicle maintenance. During the reconnection of a vehicle's battery, it is possible to reverse the battery polarities, thus causing damage to the vehicle's electronics.

- Simple, Low-Cost, and Minimal Component Count
- Minimal Power Losses
- Pulse Ruggedness to ISO7637
- AEC-Q101 and PPAP Supported

Example Product: 60V P-Channel MOSFET

- DMPH6050SPDWQ

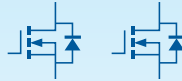
51V - 99V P-Channel



Part Number	Package	V _{DS} (V)	V _{GS} (±V)	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =		V _{GS} (th) (V)	C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Capability Available	175°C Rated
					@T _A =25°C	@T _A =25°C	10V	4.5V						
DMP6018LPS	PowerDI5060-8	60	20	N	60*	2.6	18	26	2.5	3505	7.1	13.7	Y	-
DMP6023LSS	SO-8	60	20	N	6.6	1.6	25	33	3	2569	26.5	53.1	-	-
DMP6023LFG	PowerDI3333-8	60	20	N	7.7	2.1	25	33	3	2569	26.5	53.1	Y	-
DMP6023LE	SOT223	60	20	N	7	2	28	35	3	2569	26.5	53.1	Y	-
DMPH6023SK3	TO252 (DPAK)	60	20	N	7.3	3.2	33	40	3	2569	26.5	53.1	Y	Y
DMPH6050SK3	TO252 (DPAK)	60	20	N	7.2	3.8	50	70	3	1377	12	25	Y	Y
DMP6050SPS(W)	PowerDI5060-8 (SWP)	60	20	N	26*	2.4	50	70	3	2163	14	30	-	Y
DMPH6050SFG	PowerDI3333-8	60	20	N	6.1	2.8	50	70	3	-	11.9	24.1	Y	Y
DMP6050SFG	PowerDI3333-8	60	20	N	4.8	1.8	50	70	3	1293	11.9	24	-	-
DMP6051SSS	SO-8	60	20	N	4.3	2	60	80	3	2079	17	36	Y	-
DMPH6051SSS	SO-8	60	20	N	4.4	2.4	60	80	3	2079	17	36	Y	Y
DMP6051SFVW	PowerDI3333-8/SWP (Type UX)	60	20	N	18.8*	2.7	60	80	3	2087	17	36	Y	-
DMPH6051SFVW	PowerDI3333-8/SWP (Type UX)	60	20	N	20.6*	3.2	60	80	3	2087	17	36	Y	Y
DMP6111SVT	TSOT26	60	20	N	2.7	1.6	-	115	3	1283	11.2	23.2	Y	-
DMP6110SSS	SO-8	60	20	N	4.5	2	110	130	3	1030	9.5	19.4	Y	-
DMP6110SVT	TSOT26	60	20	N	7.3	1.8	105	130	3	969	8.2	17.2	Y	-
DMP6110SFDF	U-DFN2020-6 (Type F)	60	20	N	3.5	1.97	110	130	3	969	8.2	17.2	Y	-
DMP6180SK3	TO252 (DPAK)	60	20	N	14*	2.7	110	140	2.7	984.7	8.1	17.1	Y	-
DMP6185SK3	TO252 (DPAK)	60	20	N	9.4	2.8	150	185	3	708	6.2	14	-	-
DMP6185SE	SOT223	60	20	N	3	2.2	150	185	3	708	6.2	14	Y	-
DMP6250SFDF	U-DFN2020-6 (Type F)	60	20	N	3.2	2	155	240	3	612 @ -20V	4.3	8.9	-	-
DMPH6250S	SOT23	60	20	N	2.4	1.62	155	240	3	512	4	8.3	Y	Y
DMP6250SE	SOT223	60	20	N	2.1	1.8	250	300	3	551	4.8	9.7	-	-
DMP6350S	SOT23	60	20	N	1.5	1.17	350	550	3	206	2	4.1	Y	-
DMP610DL	SOT23	60	30	N	0.18	0.5	10000 @ 5V	-	2	24.6	0.28	0.56	-	-
DMP68D0LFB	X1-DFN1006-3	65	20	N	0.318	1.21	-	-	2.1	-	-	-	-	-
DMP68DIL	SOT23	60	20	Y	0.206	0.6	7500	8000 @ 5V	2.1	42	0.6 @ 5V	-	Y	-
DMP68DILFB	X1-DFN1006-3	65	20	Y	0.29	1.2	-	8000 @ 5V	2.1	42	0.6 @ 5V	-	-	-

SWP=Side Wall Plating *@T_C=25°C

60V - 65V Dual N-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =				V _{GS} (th) (V)	C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Compliant [†] Available	175 °C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	1.8V	Max					
DMTH6010LPD	PowerDI5060-8 (Type C)	60	20	N	13.1	2.8	11	16	-	-	3	2615	20.3	40.2	Y	Y
DMTH6010LPDW	PowerDI5060-8/SWP (Type UXD)	60	20	N	13.1	2.8	11	16	-	-	3	2615	20.3	40.2	Y	Y
DMT69M9LPDW	PowerDI5060-8	60	16	N	11	2.5	12.5	16.8	-	-	2	0	15.6	33.5	-	-
DMTH69M9LPDW	PowerDI5060-8/SWP (Type UXD)	60	16	N	49*	2.8	12.5	-	-	-	2	2178	-	32	Y	Y
DMT6011LPDW	PowerDI5060-8	60	20	Y	10.3	2.5	14	22	-	-	2.5	0	11.8	22.2	-	-
DMTH6011LPDW [†]	PowerDI5060-8 (SWP)	60	20	N	TBA	TBA	-	22	-	-	TBA	TBA	TBA	TBA	Y	Y
DMT6015LPDW	PowerDI5060-8 SWP (Type UXD)	60	16	Y	9.4	2.4	18	24.5	-	-	2.5	808	8.6	15.7	-	-
DMTH6015LPDW	PowerDI5060-8	60	16	Y	9.4	2.6	20	27	-	-	2.5	825	7.1	14.3	Y	Y
DMTH6016LPD	PowerDI5060-8 (Type C)	60	20	N	9.2	2.5	19	28	-	-	2.5	864	8.4	17	Y	Y
DMTH6016LSD	SO-8	60	20	N	7.6	1.9	19.5	28	-	-	2.5	864	8.4	17	Y	Y
DMNH6021SPD(W)	PowerDI5060-8 (SWP) (Type C)	60	20	N	8.2	2.8	25	40	-	-	3	1143 @25V	12 @6V	20.1	Y	-
DMNH6035SPDW	PowerDI5060-8	60	20	N	33*	2.4	35	44	-	-	3	879	-	16	Y	Y
DMN6040SSD	SO-8	60	20	N	5	1.7	40	55	-	-	3	1287 @25V	10.4	22.4	Y	-
DMNH6042SPD	PowerDI5060-8 (Type C)	60	20	N	5.7	2.5	50	65	-	-	3	584 @25V	4.2	8.8	Y	-
DMNH6065SPDW	PowerDI5060-8	60	20	N	27*	2.4	65	79	-	-	3	466	4.6	9.5	Y	Y
DMNH6042SSD	SO-8	60	20	N	5.3	2.1	50	65	-	-	3	584 @25V	4.2	8.8	Y	-
DMNH6065SSD	SO-8	60	20	N	3.8	1.5	65	88	-	-	3	0	5.6	11.3	Y	Y
DMN6066SSD	SO-8	60	20	N	4.4	2.1	66	97	-	-	3	502	5.4	10.3	-	-
DMN6070SSD	SO-8	60	20	N	3.3	1.5	80	100	-	-	3	588	5.6	12.3	-	-
DMNH6022SSD	SO-8	60	20	N	7.1	2.1	27	30 @6V	-	-	3	2127 @25V	14	32	Y	-
DMN6022SSD	SO-8	60	20	N	6	1.5	29	34 @6V	-	-	3	2110	14	32	-	-
DMTH6015LDVW	PowerDI3333-8	60	16	Y	9.2	3	20.5	27	-	-	2.5	825	7.1	14.3	Y	Y
DMT6018LDR	V-DFN3030-8 (Type H)	60	20	N	8.8	1.9	17	26	-	-	3	869	6.2	13.9	-	-
DMN601DMK	SOT26	60	20	Y	0.51	0.98	2400	4000 @4V	-	-	2.5	30 @25V	304	-	-	-
DMN61D8LVT	TSOT26	60	12	Y	0.63	1.09	-	-	2400 @3V	-	2	12.9 @12V	0.74 @5V	-	Y	-
DMN62D0UDW	SOT363	60	20	Y	0.35	0.41	-	2000	2500	3000	1	32	0.5	-	Y	-
DMN63D1LDW	SOT363	60	20	Y	0.25	0.39	2000	3000	-	-	2.5	30@25V	0.304	-	-	-
DMN62D4LDW	SOT363	60	20	N	0.261	0.45	3000	4000	-	-	2	41	0.51	1.04	-	-
DMN65D8LDW	SOT363	60	20	Y	0.2	0.4	6000	8000	-	-	2	22 @25V	0.43	0.87	Y	-
DMN62D2UDW	SOT363	60	20	Y	0.34	0.5	-	2000 @5V	2500	4000	1	41	0.8	-	Y	-
DMN61D9UDW	SOT363	60	20	Y	0.35	0.41	-	2000 @5V	2500	3500	1	28.5	0.4	-	Y	-
DMN601DWK	SOT363	60	20	Y	0.305	0.2	2000	3000 @5V	-	-	2.5	50 (max) @25V	0.304	-	Y	-
2N7002DWS	SOT363	60	20	Y	0.247	0.37	4000	4100 @5V	-	-	2.5	41 @25V	0.4	-	-	-
DMN66D0LDW	SOT363	60	20	Y	0.115	0.25	5000	6000 @5V	-	-	2	23 @25V	-	-	-	-
2N7002DW	SOT363	60	20	N	0.23	0.4	13500	7500 @5V	-	-	2	22 @25V	-	-	-	-
DMN67D8LDW	SOT363	60	30	N	0.23	0.41	5000	7500 @5V	-	-	2.5	22 @25V	0.361	0.821	-	-
DMN63D1LV	SOT563	60	20	Y	0.55	0.94	2000	3000 @5V	-	-	2.5	30 @25V	0.392	-	-	-
2N7002VAC	SOT563	60	20	N	0.28	0.15	13500	7500 @5V	-	-	2.5	50 (max) @25V	-	-	-	-
2N7002VC	SOT563	60	20	N	0.28	0.15	13500	7500 @5V	-	-	2.5	50 (max) @25V	-	-	-	-
DMT6017LDV	PowerDI3333-8	65	16	Y	25.3*	2.34	22	29	-	-	2.3	891 @30V	7.5	15.3	-	-
DMT8020LDG	PowerDI3333-8 (Type G)	80	20	N	6.7	1.8	20	30	-	-	2.5	892	9	17	-	-
DMTH8030LPDW	PowerDI5060-8/SWP (Type UXD)	80	20	N	28.5*	3.1	26	45	-	-	2.5	631	5.4	10.4	Y	Y

[†] In development SWP=Side Wall Plating *@T_C=25°C

$\geq 100V$ N-Channel



Part Number	Package	V_{DS}	V_{GS}	ESD Diode	I_{DS} (A)	P_D (W)	$R_{DS(ON)}$ (m Ω max) at $V_{GS} =$			V_{GS} (th) (V)	C_{iss} typ (pF)	Q_G typ @ $V_{GS} = 4.5V$ (nC)	Q_G typ @ $V_{GS} = 10V$ (nC)	Automotive Compliant "Q" Available	175°C Rated
		(V)	($\pm V$)		@ $T_A = 25^\circ C$	@ $T_A = 25^\circ C$	10V	4.5V	2.5V	Max.					
DMTH10H1M5STTW	PowerDI1015 (Top-cooled)	100	20	N	386*	4.92	1.7	2.5 @ 6V	-	4	13039	-	214	Y	Y
DMTH10H1M5STLW*	PowerDI1012-8 (TOLL)	100	20	N	291*	5.7	1.7	2.5 @ 6V	-	4	13767	-	203	Y	Y
DMTH10H1M7STLW	PowerDI1012-8 (TOLL)	100	20	N	250*	6	2	-	-	4	9871	-	147	Y	Y
DMTH10H1M7SPGW*	PowerDI8080-5	100	20	N	TBD	-	2	-	-	-	-	-	-	Y	Y
DMTH10H2M5STLW	PowerDI1012-8	100	20	N	248*	230.8*	2.5	-	-	4	8450	-	124.4	Y	Y
DMTH10H003SPSW	PowerDI5060-8	100	20	N	166*	2.6	3	-	-	4	0	-	85	-	Y
DMTH10H2M2LPSW	PowerDI5060-8 (SWP) (Type UX)	100	20	N	153*	4	3.2	4.5	-	2.5	6239	58	116	Y	Y
DMTH10H4M5LPS	PowerDI5060-8	100	20	N	100*	113*	4.3	6.2	-	2.5	4843	-	80	-	-
DMTH10H4M5LPS(W)	PowerDI5060-8 (SWP)	100	20	N	100*	136*	4.3	6.2	-	2.5	4843	-	80	Y	Y
DMTH10H4M6SPS(W)	PowerDI5060-8 (SWP)	100	20	N	100*	136*	4.6	-	-	4	4327	-	66	-	Y
DMTH10H005LCT	TO220AB	100	20	N	140*	2.9	5	-	-	3.5	3688	-	114	-	Y
DMTH10H005SCT	TO220AB	100	20	N	140*	2.9	5	-	-	4	8474	-	111.7	-	Y
DMTH10H009LPS	PowerDI5060-8	100	20	N	100*	125*	8	12.5	-	2.5	2309	20.2	40.2	Y	Y
DMTH10H009LPS	PowerDI5060-8	100	20	N	90*	104*	8	12.5	-	2.5	2309	20.2	40.2	-	-
DMTH10H010LPS	PowerDI5060-8	100	20	N	98*	139*	8.3	20	-	3	4166	-	58.4	-	-
DMTH10H009LFC	PowerDI3333-8	100	20	N	14	2.5	8.5	12.5	-	2.5	-	-	41	Y	Y
DMTH10H009LFC	PowerDI3333-8	100	20	N	50*	2	8.5	12.5	-	2.5	2361	-	41	-	-
DMTH10H009SPS	PowerDI5060-8	100	20	N	80*	83*	8.5	-	-	4	2085	-	30	-	-
DMTH10H9M9LCT	TO220AB	100	20	N	101*	2.3	8.5	14	-	2.5	2309	-	40.2	-	-
DMTH10H010LPS	PowerDI5060-8	100	20	N	98.4*	125*	8.6	20	-	3	2592	-	53.7	-	Y
DMTH10H009LFC	V-DFN3333-8	100	20	N	47*	2.1	8.8	12.9	-	2.5	2309	20.2	-	-	-
DMTH10H010SPS	PowerDI5060-8	100	20	N	113*	139*	8.8	11.5 @ 6V	-	4	4468	-	56.4	-	-
DMTH10H010SPS(W)	PowerDI5060-8 (SWP) (Type UX)	100	20	N	123*	166*	8.8	11.5 @ 6V	-	4	4468	-	56.4	Y	Y
DMTH10H010LK3	TO252 DPAK	100	20	N	68.8*	3	8.8	15	-	2.8	2592	-	53.7	-	-
DMTH10H9M9SCT	TO220AB	100	20	N	99*	2.3	8.8	-	-	3.9	2085	-	30	-	-
DMTH10H009SPS	PowerDI5060-8	100	20	N	88*	100*	8.9	-	-	4	2085	-	30	Y	Y
DMTH10H009LSS	SO-8	100	20	N	13	2.5	9	13.8	-	3	2309	20.2	40.2	-	-
DMTH10H009LH3	TO251	100	20	N	84*	96*	9	13	-	2.5	2309	20.2	-	-	-
DMTH10H9M9SH3	TO251	100	20	N	84*	3	9	-	-	4	2085	-	30	-	-
DMTH10H009LK3	TO252 DPAK	100	20	N	90*	3	9	13	-	2.5	2309	20	-	-	-
DMTH10H009SK3	TO252 DPAK	100	20	N	91*	3.2	9.1	-	-	4	2028	-	34	-	-
DMTH10H009SSS	SO-8	100	20	N	12	2.1	9.2	-	-	4	2085	-	29.8	-	-
DMTH10H009SCG	V-DFN3333-8 (Type B)	100	20	N	48*	2.7	9.5	-	-	4	2085	-	30	-	-
DMTH10H010LSS	SO-8	100	20	N	11.5	1.9	9.5	14.5	-	2.8	4166	-	58.4	-	-
DMTH10H010LCTB	TO263AB (D2PAK)	100	20	N	100*	3.9	9.5	17	-	3.5	2592	-	53.7	-	Y
DMTH10H010SCT	TO220AB	100	20	N	100*	2.5	9.5	-	-	4	4468	-	56.4	-	Y
DMTH10H010LCT	TO220-3	100	20	N	108*	2.4	9.5	-	-	3.5	4166	-	58.4	-	Y
DMTH10H010LCT	TO220AB	100	20	N	98*	2	9.5	20	-	3	4166	-	58.4	-	-
DMTH10H003SPSW	PowerDI5060-8	100	20	N	152*	2.2	10	-	-	4	5542	-	85	Y	-
DMTH10H015LFC	PowerDI3333-8	100	20	N	42*	2	13.5	23.5	-	3.5	1871	-	33.3	-	-
DMTH10H015SK3	TO252 (DPAK)	100	20	N	54*	2.9	14	20 @ 6V	-	4	2343	-	30.1	-	-
DMTH10H015SK3	TO252 (DPAK)	100	20	N	59*	3.7	14	-	-	4	2343	-	30.1	Y	Y
DMTH10H015SPS	PDI5060	100	20	N	46*	1.3	14.5	19.5 @ 6V	-	4	2343	-	30.1	-	-
DMTH10H015SPS(W)	PowerDI5060-8 (SWP) (Type UX)	100	20	N	50.5*	55*	14.5	19.5 @ 6V	-	4	2343	-	30.1	Y	Y
DMTH10H015LCC	V-DFN3333-8	100	20	N	34*	2.1	15	26	-	3.5	1871	-	33.3	-	-
DMTH10H014LSS	SO-8	100	20	N	8.9	1.67	15	25	-	3	1871	-	33.3	-	-
DMTH10H015LK3	TO252 (DPAK)	100	20	N	52.5*	3.5	15	25	-	3.5	1871	-	33.3	-	Y
DMTH10H015LK3	TO252 (DPAK)	100	20	N	52.7*	2.9	15	25	-	3.5	1871	-	33.3	-	-
DMTH10H015LSS	SO-8	100	20	N	8.3	1.67	16	25	-	3	1871	-	33.3	-	-
DMTH10H015LPS(W)	PowerDI5060-8	100	20	N	44*	1.3	16	25	-	3	1871	-	33.3	Y	-
DMTH10H015LPS(W)	PowerDI5060-8 (SWP) (Type UX)	100	20	N	44*	1.3	16	25	-	3	1871	-	33.3	Y	Y
DMTH10H025LK3	TO252 (DPAK)	100	20	N	47.2*	2.6	22	43.7	-	3	1477	-	21	-	-
DMTH10H025LK3	TO252 (DPAK)	100	20	N	51.7*	3.1	22	43.7	-	3	1477	-	21	Y	Y
DMTH10H025SSS	SO-8	100	20	N	7.4	1.9	23	30 @ 6V	-	4	1544	13.4 @ 6V	21.4	-	-
DMTH10H025LPS(W)	PowerDI5060-8 (SWP) (Type UX)	100	20	N	9.3	3.2	23	30 @ 6V	-	3	1477	-	21	Y	Y
DMTH10H025SK3	TO252	100	20	N	41.2*	2.5	23	30 @ 6V	-	4	1544	21.4	-	-	-
DMTH10H025SK3	TO252 (DPAK)	100	20	N	46.3*	3.7	23	30 @ 6V	-	4	1544	13.4 @ 6V	21.4	-	Y
DMTH10H025LSS	SO-8	100	20	N	7.1	1.9	25	45	-	3	1639	-	22.9	-	-
DMNH10H028SPS(W)	PowerDI5060-8 (SWP)	100	20	N	40*	2.9	28	-	-	4	2245	22 @ 6V	36	Y	Y
DMNH10H021SPSW	PowerDI5060-8 (SWP)	100	20	N	58*	4.4	28	-	-	4	3789	-	71	-	Y
DMNH10H028SK3	TO252 (DPAK)	100	20	N	55*	3.7	28	-	-	3.3	2245	-	36	Y	Y
DMNH10H028SCT	TO220AB	100	20	N	60*	2.8	28	-	-	4	1942	-	31.9	-	Y

* In development SWP=Side Wall Plating *@ $T_C=25^\circ C$

$\geq 100\text{V}$ N-Channel (Cont.)



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =			V _{GS} (th) (V)	C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Compliant*	175°C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	Max.				Available	
DMTH10H032LFVW	PowerDI3333-8/SWP (Type UX)	100	20	N	26*	3.8	30	50	-	2.5	683	6.3	11.9	Y	Y
DMT10H032LFDF	U-DFN2020-6 Type F	100	20	N	6	1.6	32	46	-	2.5	683	6.3	11.9	-	-
DMT10H032LFVW	PowerDI3333-8	100	20	N	17*	2.5	32	50	-	2.5	683	6.3	11.9	-	-
DMT10H032SFVW	PowerDI3333-8	100	20	N	35*	-	32	-	-	4	544	4.3	8	-	-
DMT10H032LSS	SO-8	100	20	N	5	1.9	32	49	-	2.5	683	6.3	11.9	-	-
DMTH10H032SPSW	PowerDI5060-8 (SWP) (Type UX)	100	20	N	25*	3.2	32	-	-	4	544	4.3	8	Y	Y
DMTH10H032LPSW	PowerDI5060-8 (SWP)	100	20	N	33*	3.4	32	50	-	2.5	683	6.3	11.9	Y	Y
DMT10H032LK3	TO252 (DPAK)	100	20	N	26*	3	32	48	-	2.5	683	6.3	11.9	-	-
DMHT10H032LFJ	V-DFN5045-12	100	20	N	6	1.9	33	50	-	2.5	683	6.3	11.9	-	Y
DMT10H052LFDF	U-DFN2020-6 Type F	100	20	N	5	1.9	52	75	-	3	258	2.9	5.4	-	-
DMTH10H072LPS	PowerDI5060-8	100	20	N	20*	3	57	96	-	3	266	2.8	5.1	-	Y
DMT10H072LFDF	U-DFN2020-6 Type F	100	20	N	4	1.8	62	110	-	3	228	2.5	4.5	Y	-
DMT10H072LFV	PowerDI3333-8	100	20	N	20*	2	62	109	-	2.8	228	2.5	4.5	-	-
DMT10H075LE	SOT223	100	20	N	4	2.4*	65	105	-	3	228	2.5	4.5	-	-
DMTH10H071LFDFW	U-DFN2020-6/SWP (Type UXC)	100	20	N	4.6	3	68	116	-	3	296	3.4	6.4	Y	Y
DMN10H099SFG	PowerDI3333-8	100	20	N	4.2	2.31	80	99 @6V	-	3	1127	12.2	25.2	-	-
DMN10H099SK3	TO252 DPAK	100	20	N	17*	34*	80	99 @6V	-	3	1172	12.2	25.2	-	-
DMN10H100SK3	TO252 DPAK	100	20	N	18*	37*	80	100	-	3	1172	12.2	25.2	-	-
DMN10H120SFG	PowerDI3333-8	100	20	N	3.8	2.4	110	122 @6V	-	3	549	5.2	10.6	-	-
DMN10H120SE	SOT223	100	20	N	3.6	2.1	110	122	-	3	549	5.2	10	-	-
DMN10H170SFG	PowerDI3333-8	100	20	N	2.9	2	122	133	-	3	870.7 @25V	7	14.9	Y	-
DMN10H170SK3	TO252 (DPAK)	100	20	N	12*	42*	140	160	-	3	1167 @25V	4.9	9.7	Y	-
DMN10H170SFDE	U-DFN2020-6 (Type E)	100	20	N	2.9	2.03	160	200	-	3	1167 @25V	4.9	9.7	-	-
DMN10H170SVT	TSOT26	100	20	N	2.6	1.7	160	200	-	3	1167 @25V	4.9	9.7	Y	-
DMN10H220L	TSOT23	100	16	N	1.6	1.3	220	250	-	2.5	401 @25V	4.1	8.3	Y	-
DMN10H220LVT	TSOT26	100	16	N	2.24	1.67	220	250	-	2.5	401 @25V	4.1	8.3	-	-
DMN10H220LE	SOT223	100	20	N	2.3	1.8	220	250	-	2.5	401 @25V	4.1	8.3	-	-
DMN10H220LK3	TO252	100	20	N	7.5*	18.7*	220	250	-	2.5	384 @25V	3.7	6.7	-	-
DMN10H220LDV	PowerDI3333-8 (Type UXC)	100	20	N	10.5*	40*	222	270	-	2.5	366	3.7	6.7	-	-
DMN10H220LFVW	PowerDI3333-8 SWP (Type UX)	100	20	N	11*	41*	222	270	-	2.5	366	3.7	6.7	-	-
DMN10H220LFDF	U-DFN2020-6 (Type F)	100	20	N	2.2	1.6	225	290	-	2.5	384 @25V	3.7	6.7	-	-
DMN10H700S	SOT23	100	20	N	0.7	0.5	700	-	-	4	235	-	4.6	-	-
BSS123W	SOT323	100	20	N	0.17	0.2	6000	10000	-	2	29 @25V	-	-	Y	-
BSS123	SOT23	100	20	N	0.17	0.3	6000	10000	-	2	22 @25V	-	-	-	-
DMT12H065LFDF	U-DFN2020-6 (Type F)	115	12	N	4.3	1.8	65	70	-	2.2	252	-	5.5	-	-
DMT12H060LCA9	X4-DSN1515-9	115	5.5	Y	3.5	1.9	-	85	90	1.4	560	-	-	-	Y
DMT12H090LFDF4	X2-DFN2020-6	115	12	N	3.4	1.6	90	100	-	2.2	251	-	6	-	-
DMT12H060LFDF	U-DFN2020-6 (Type F)	115	8	Y	4.4	2	-	65	70	1.4	475	7.8	-	-	Y
DMT12H007LPS	PowerDI5060-8	120	20	N	90*	2.9	7.8	14.1	-	2.5	3224	-	49	-	-
DMT12H007SPS	PowerDI5060-8	120	20	N	80*	2.9	8.9	-	-	4	3142	-	44	-	Y
DMTH12H007SPS(W)	PowerDI5060-8 (SWP) (Type UX)	120	20	N	84*	3.5	8.9	-	-	4	3142	-	44	Y	Y
DMTH12H007SK3	TO252 (DPAK)	120	20	N	86*	75	8.9	-	-	4	3142	-	44	-	Y
DMN13H750S	SOT23	130	20	N	1	1.26	750	850	-	4	231 @25V	-	5.6	-	-
DMTH15H4M2STTW*	PDI1015 (Top-cooled)	150	20	O	TBD	-	4.5	-	-	-	-	-	-	Y	Y
DMTH15H009HPSW*	PowerDI5060-8 (SWP) (Type UX)	150	20	N	TBD	-	9	-	-	5	-	-	-	Y	Y
DMTH15H010HPSW*	PowerDI5060-8 (SWP) (Type UX)	150	20	N	TBD	-	12.5	-	-	5	-	-	-	Y	Y
DMTH15H017LPSW	PowerDI5060-8 (SWP) (Type UX)	150	20	N	8	2.8	17.5	25.5	-	2.6	3369	-	50	Y	Y
DMT15H017LPS(W)	PowerDI5060-8 (SWP) (Type UX)	150	20	N	9.4	2.3	17.5	25.5	-	2.6	3369	-	50	-	-
DMT15H017SK3	TO252 (DPAK)	150	20	N	68*	3.2	18.5	-	-	4	2344	-	34	-	-
DMTH15H017SPS(W)	PowerDI5060-8 (SWP) (Type UX)	150	20	N	11	3.2	19	-	-	4	2344	-	34	Y	Y
DMT15H035SCT	TO220AB	150	20	N	46*	2.2	35	-	-	4	1600	-	25	-	-
DMT15H053SSS	SO-8	150	20	N	5.2	2	53	-	-	4	814	-	11.5	-	-
DMT15H053SK3	TO252 (DPAK)	150	20	N	21*	2.8	60	-	-	4	814	-	11.5	-	-
DMT15H053SPSW	PowerDI5060-8 (SWP) (Type UX)	150	20	N	24*	3.3	66	-	-	4	814	-	11.5	Y	-
DMTH15H053SPSW	PowerDI5060-8 (SWP) (Type UX)	150	20	N	25*	4	66	-	-	4	814	-	11.5	Y	Y
DMT15H067SSS	SO-8	150	20	N	4.5	2	67	-	-	4	425	-	6.4	-	-
DMN15H310SE	SOT223	150	20	N	2	1.9	310	330 @5V	-	3	405 @25V	4.6 @5V	8.7	-	-
DMN15H310SK3	TO252 (DPAK)	150	20	N	8.3*	32*	310	-	-	3	405 @25V	4.6 @5V	8.7	-	-
DMTH15H4M2STLW*	PowerDI1012-8 (TOLL)	150	20	N	189	5.8	3.6	-	-	2-4	13098	TBD	237	Y	Y
DMN24H3D5L	SOT23	240	20	N	0.48	1.26	3500	3500	6000 @3V	2.5	188 @25V	-	6.6	-	-
DMN24H11DS	SOT23	240	20	N	0.27	1.2	11000	12000	-	3	76.8 @25V	-	3.7	Y	-
DMN30H4DOL	SOT23	300	20	N	0.25	0.47	4000	4000	-	3	187.3 @25V	-	7.6	-	-

* In development SWP=Side Wall Plating *@T_C=25°C

≥100V N-Channel (Cont.)



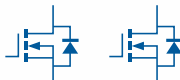
Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =			V _{GS} (th) (V)	C _{iss} typ (pF)	Q _C typ @ V _{GS} = 4.5V (nC)	Q _C typ @ V _{GS} = 10V (nC)	Automotive Compliant "Q"	175 °C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	Max.					
DMN30H4D0LFDE	U-DFN2020-6 (Type E)	300	20	N	0.55	1.98	4000	4000	-	2.8	187.3 @25V	-	7.6	-	-
DMN60H080DS	SOT23	600	20	Y	0.08	1.1	100000	290000	-	3	25 @25V	-	1.7	-	-
BSS127S	SOT23	600	20	N	0.07	1.25	160000	19000 @5V	-	4.5	21.8 @25V	-	1.08	-	-
BSS127SSN	SC59	600	20	N	0.07	1.25	160000	19000 @5V	-	4.5	21.8 @25V	-	1.08	-	-

≥100V P-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =			V _{GS} (th) (V)	C _{iss} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant "Q"	175 °C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	2.5V	Max.					
DMP10H088SPS(W)	PowerDI5060-8 (SWP) (Type UX)	100	20	N	20*	2.2	83	89 @6V		4	1808	17.5 @6V	27.7	Y	-
DMP10H400SK3	TO252 (DPAK)	100	20	N	9*	42*	240	300	-	3	1239 @25V	8.4	17.5	-	-
DMP10H400SE	SOT223	100	20	N	2.3	2	250	300	-	3	1239 (max) @-25V	8.4	17.5	Y	-
DMP10H4D2S	SOT23	100	20	Y	0.27	0.44	4200	-	-	3	87 @-25V	-	1.8	Y	-
DMP45H4D9HJ3	TO251 (Type TH)	450	30	N	4.6*	104*	4900	-	-	5	547 @-25V	-	13.7	-	-
DMP45H4D9HK3	TO252 (DPAK)	450	30	N	4.7*	104*	4900	-	-	5	564 @-25V	-	13.7	-	-
DMP65H9DOHSS	SO-8 (Standard B)	600	30	Y	0.3	1.9	9000			4	0		17	Y	-
DMP65H11DOHSS	SO-8 (Standard B)	600	30	Y	0.27	1.9	11000			4	0		13	Y	-
DMP65H13DOHSS	SO-8 (Standard B)	600	30	N	0.25	1.9	13000			4	0		13.4	Y	-
DMP25H18DLFDE	U-DFN2020-6 (Type E)	250	40	N	0.26	1.4	14000	-	18000 @3.5V	2.5	81 @-25V	-	2.8	-	-
DMP65H20DOHSS	SO-8 (Standard B)	600	30	Y	0.2	1.9	20000			4	0		9.7	Y	-
DMP45H21DHE	SOT223	450	30	N	0.6*	12.5*	21000	-	-	5	1,003	-	4.2	-	-
DMP45H150DHE	SOT223	450	30	N	0.25*	13.9*	150000	-	-	4	59.2 @-25V	-	1.8	-	-

≥100V Dual N-Channel



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =		V _{GS} (th) (V)		C _{ISS} typ (pF)	Q _G typ @ V _{GS} = 4.5V (nC)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant "Q" Available	175°C Rated
		(V)	(±V)		@T _A =25°C	@T _A =25°C	10V	4.5V	Min	Max					
DMTH10H013LPDW*	PowerDI5060-8/SWP (Type UXD)	100	20	N	58*	91*	13	23	1	3	1641	11.5	26	Y	-
DMTH10H017LPD	PowerDI5060-8	100	20	N	13	2.6	17.4	30.3	-	3	1986	14.4	28.6	Y	Y
DMT10H017LPD	PowerDI5060-8 (Type E)	100	20	N	54.7*	2.2	17.4	30.3	1	3	1986	14.4	28.6	-	-
DMTH10H017LPD	PowerDI5060-8	100	20	N	59*	2.6	17.4	30.3	1	3	1986	14.4	28.6	Y	Y
DMTH10H025LPDW	PowerDI5060-8/SWP (Type UXD)	100	20	N	42*	3.4	23	45	1	3	1463	-	22	Y	Y
DMTH10H032LDVW	PowerDI3333-8/SWP (Type UXD)	100	20	N	7.2	3.3	32	-	1.3	2.5	683	6.3	11.9	Y	Y
DMTH10H032LPDW	PowerDI5060-8/SWP (Type UXD)	100	20	N	24*	3	32	50	1.3	2.5	683	6.3	11.9	Y	Y
DMT10H032LDVW	PowerDI3333-8/SWP (Type UXD)	100	20	N	6.9	2.8	32	-	1.3	2.5	683	6.3	11.9	Y	-
DMTH10H038SPDW	PowerDI5060-8	100	20	N	25*	2.7	33	-	2	4	544	4.3	8	Y	Y
DMTH10H032SDVW	PowerDI3333-8/SWP (Type UXD)	100	20	N	6.2	2.7	35	-	2	4	544	4.3	8	Y	Y
DMT10H032SDVW	PowerDI3333-8/SWP (Type UXD)	100	20	N	6	2.3	35	-	2	4	544	4.3	8	Y	-
DMT10H032LDV	PowerDI3333-8	100	20	N	18*	2.4	36	50	1.3	2.5	683	6.3	11.9	-	-
DMT10H072LDV	PowerDI3333-8 (Type UXC)	100	20	N	12	2.2	66	114	1	3	228	2.5	4.5	-	-
DMN10H220LPDW	PowerDI5060-8	100	20	N	8	2.2	222	270	1	2.5	384 @25V	3.7	6.7	-	-
DMN10H220LDV	PowerDI3333-8	100	20	N	10.5*	1.8	-	270	-	2.5	366	3.9	7.3	-	-
DMN10H6D2LFDB	U-DFN2020-6 (Type B)	100	20	Y	0.27	1	6000	10000	-	2	0	0.6	1.2	-	-

≥100V Dual Complementary



Part Number	Package	V _{DS}	V _{GS}	ESD Diode	I _{DS} (A)	P _D (W)	R _{DS(ON)} (mΩ max) at V _{GS} =		V _{GS} (th) (V)	C _{ISS} typ (pF)	Q _G typ @ V _{GS} = 10V (nC)	Automotive Compliant 'Q'	175 °C Rated
		(V)	(±V)		@T _A =25 °C	@T _A =25 °C	10V	4.5V	Max.				
DMC10H172SSD	SO-8	100, 100	20, 20	N	2, 1.7	1.5	160, 250	200, 300	3, 3	1145, 1030	9.6, 9.0		
DMC10H220LSD	SO-8	100, 100	20, 20	N	1.7, 1.7	1.1	220, 250	260, 300	3, 3	340, 1030	8.3, 17.5		

* In development SWP=Side Wall Plating *@T_C=25 °C

MOSFET H-Bridges Reduce Footprint by 50%

Packaging dual N-channel and dual P-channel MOSFETs in DFN5045 and SO-8 packages, Diodes Incorporated has provided a unique solution that enables designers to reduce the PCB space and component count required by low-power, full H-bridge applications.

In just a single footprint, these H-bridges can replace the equivalent of four single or two dual parts in space-limited single-phase brushed and brushless motor driving, inductive wireless charging circuits, and DC-DC converters.

The H-bridges' space-saving advantage is complemented by the low $R_{DS(ON)}$ performance of the MOSFETs.

The minimal conduction losses resulting from the low on-resistance mean the H-bridge tolerates higher continuous current under motor stall conditions.

30V - 100V H-Bridge



Part Number	Package	Type	V_{DS}	V_{GS}	ESD Diode	I_{DS} (A)	P_D (W)	$R_{DS(ON)}$ (mΩ max) at $V_{GS}=$		$V_{GS(th)}$ (V)	C_{ISS} typ (pF)	Q_G typ @ $V_{GS} = 4.5V$ (nC)	Q_G typ @ $V_{GS} = 10V$ (nC)	Automotive Compliant 'a'
			(V)	(±V)		@ $T_A=25^{\circ}C$	@ $T_A=25^{\circ}C$	10V	4.5V	Max.				
DMHT3006LFJ	V-DFN5045-12 (Type C)	4N	30	20	N	13	2.1	10	15	3	1171	9	17	-
DMHC3025LSD	SO-8	2N + 2P	30	20	N	6, 4.2	1.5	25, 50	40, 80	-	590, 631	-	11.7, 11.4	Y
DMHC4035LSD	SO-8	2N + 2P	40	20	N	4.5, 3.7	1.5	45, 65	58, 100	-	574, 587	-	12.5, 11.1	Y
DMHC6070LSD	SO-8	2N + 2P	60	20	N	3.1, 2.4	1.6	100, 170	120, 250	-	731, 618	-	11.5, 8.9	-
DMHT6016LFJ	V-DFN5045-12 (Type B)	4N	60	20	N	10.6	2.7	22	30	3	864	8.4	17	-
DMHC10H170SFJ	V-DFN5045-12	2N + 2P	100	20	N	2.9, 2.3	2.1	160, 250	200, 300	-	1167, 1239 @25V	-	9.7, 17.5	-
DMHT10H032LFJ	V-DFN5045-12 (Type C)	4N	100	20	N	6	1.9	33	50	2.5	683	6.3	11.9	-



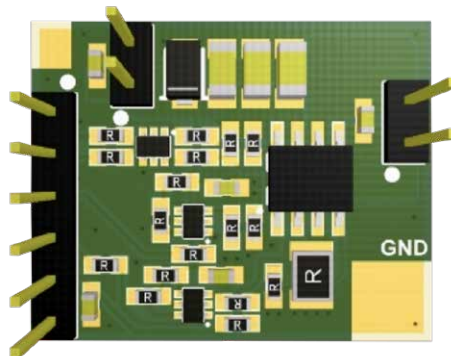
The DIODES Advantage

- Reduce footprint**
 In DFN5045 (5mm x 4.5mm) and SO-8 (5mm x 6mm) packages, these H-bridges can save PCB space and reduce component count and assembly costs
- Low $R_{DS(ON)}$**
 Minimized conduction losses enables these H-bridges to tolerate high continuous current under motor stall conditions.
- High pulsed current capability**
 Allows for a high in-rush current to be drawn safely during the start-up of inductive loads

H-Bridge Evaluation Board

This board includes driver transistors to allow the H-Bridge (DMHC4035LSD) to be driven from 3.3V Micro.

For more details and quotations, please contact your nearest Diodes sales office or representative.



IntelliFET® Self-protected MOSFETs

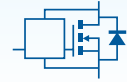
Diodes incorporated designs, develops, and manufactures a range of self-protected MOSFETs that provide general-purpose switching.

These are especially suited for loads with high in-rush current such as found in inductive circuits.

Switching all types of resistive, inductive, and capacitive loads, these devices feature overtemperature, overvoltage, and overcurrent protection, enabling circuit designers to dramatically increase reliability.

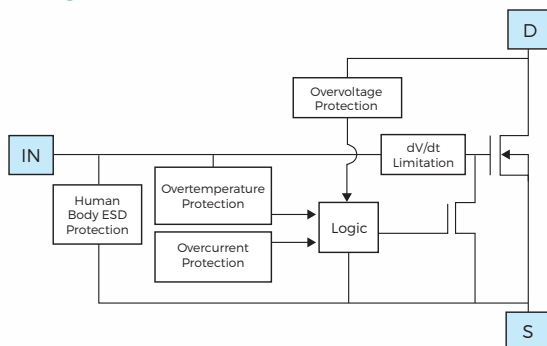
The Diodes IntelliFET portfolio is packaged in SOT23F, SOT223, SM8, and SO-8.

IntelliFET Low-side Power Switches (Single/Dual)

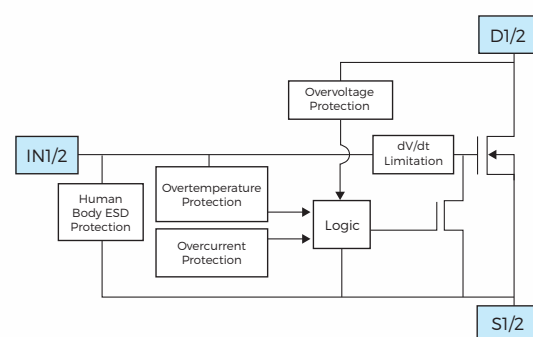


Part Number	Package	I_D V_{IN} = 5V	P_D	$R_{DS(ON)}$ (max)			$V_{DS(SC)}$ V_{IN} = 5V	EAS	T_J	Automotive Compliant "Q" Available
				@ V_{IN} (3V)	@ V_{IN} (5V)	@ V_{IN} (10V)				
		(A)	(W)	(mΩ)	(mΩ)	(mΩ)				
Single										
BSP75G	SOT223 (Type DN)	1.4	2.5	-	675	550	36	550	150	Y
BSP75N	SOT223 (Type DN)	1.1	1.5	-	675	550	36	550	150	Y
ZXMS6001N3	SOT223 (Type DN)	1.1	1.5	2000	675	-	36	550	150	Y
ZXMS6003G	SOT223 (Type DN)	1.4	2.5	-	675	500	36	550	150	-
ZXMS6004DG	SOT223 (Type DN)	1.3	3	600	500	-	36	490	150	Y
ZXMS6004FF	SOT23F	1.3	1.5	600	500	-	36	90	150	Y
ZXMS6004FFTA	SOT23F	1.3	1.5	600	500	-	36	90	150	Y
ZXMS6004N8	SO-8	1.3	1.65	600	500	-	36	120	150	Y
ZXMS6004SG	SOT223 (Type DN)	1.3	1.6	600	500	-	36	480	150	Y
ZXMS6005DG	SOT223 (Type DN)	2	3	250	200	-	24	490	150	Y
ZXMS6005N8	SO-8	2	1.65	250	200	-	24	120	150	Y
ZXMS6005SG	SOT223 (Type DN)	2	1.6	250	200	-	24	480	150	Y
ZXMS6006DG	SOT223 (Type DN)	2.8	3	125	100	-	16	490	150	Y
ZXMS6006SG	SOT223 (Type DN)	2.8	1.6	125	100	-	16	480	150	Y
ZXMS6008FF	SOT23F	0.9	1.5	800	700	-	36	90	150	Y
ZXMS6008N8	SO-8	1.1	1.98	800	700	-	36	210	150	Y
Dual										
ZXMS6004DN8	SO-8	1.2	1.56	600	500	-	36	120	150	Y
ZXMS6004DT8	SM-8	1.2	2.13	600	500	-	36	210	150	Y
ZXMS6005DN8	SO-8	1.8	1.56	250	200	-	16	120	150	Y
ZXMS6005DT8	SM-8	1.8	2.13	250	200	-	24	210	150	Y
ZXMS6006DN8	SO-8	2.8	1.67	125	100	-	16	210	150	Y
ZXMS6006DT8	SM-8	2.8	2.13	125	100	-	16	210	150	Y
ZXMS6008DN8	SO-8	1.1	1.67	800	700	-	36	210	150	Y

Single-channel



Dual-channel

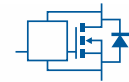




The DIODES Advantage

- **Overtoltage, Over-Temperature and Overcurrent Protection**
Improved robustness and reliability for harsh environment.
- **Low $R_{DS(ON)}$**
Low $R_{DS(ON)}$ minimizes the conduction losses through the device.
- **3V and 5.5V Inputs**
IntelliFET portfolio can be driven directly from a microcontroller.

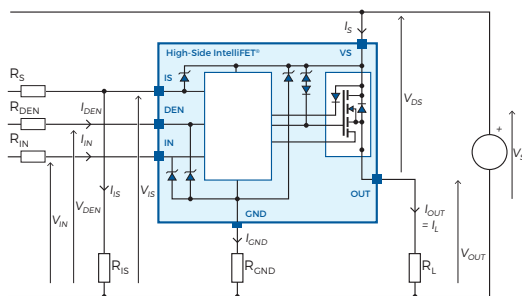
IntelliFET High-side Power Switches (Single/Dual)



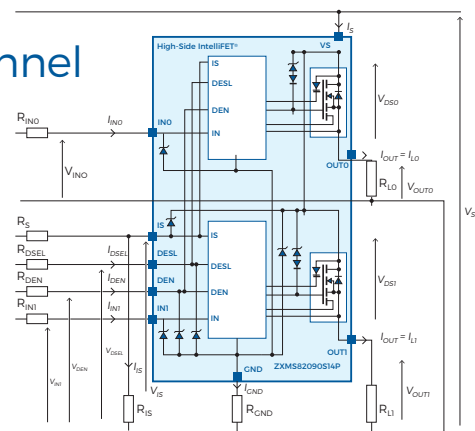
Part Number	Package	Channels	$R_{DS(ON)}$ Typ. @ $T_J = 25^\circ$	$R_{DS(ON)}$ Max @ $T_J = 150^\circ$	I_L (NOM)	I_L (SC) Min	K_{ILIS} Current Sense Ratio	Recommended Operating Voltage Max	P_{TOT} Max	Operating Temp Min	Operating Temp Max	Turn-OFF Time Max	Turn-ON Time Max	Automotive Compliant Q^* Available
			(m Ω)	(m Ω)	(A)	(A)		(V)	(W)	($^\circ$ C)	($^\circ$ C)	(μ s)	(μ s)	
Single														
ZXMS81020S14P†	SO-14EP	1	20	40	6.5	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Y
ZXMS81030SP	SO-8EP (Type E)	1	30	60	5	36	2150	28	1.7	-40	150	230	230	Y
ZXMS81045SP	SO-8EP (Type E)	1	34	90	4	25	1200	18	1.6	-40	150	230	230	Y
ZXMS81090SP	SO-8EP (Type E)	1	90	200	3	15	1480	18	1.6	-40	150	300	230	Y
ZXMS81200SP	SO-8EP (Type E)	1	200	400	1.5	6	300	18	1.6	-40	150	260	160	Y
Dual														
ZXMS82030S14P	SO-14EP	2	30	60	6	36	2150	28	2.1	-40	150	230	230	Y
ZXMS82045S14P	SO-14EP	2	45	90	4.5	25	1500	28	2	-40	150	230	230	Y
ZXMS82090S14P	SO-14EP	2	75	180	3.5	17	1500	18	1.9	-40	150	230	230	Y
ZXMS82120S14P	SO-14EP	2	100	240	2.5	10	550	18	1.8	-40	150	230	230	Y
ZXMS82180S14P	SO-14EP	2	150	360	2	8	550	18	1.6	-40	150	230	230	Y

† In development

Single-channel



Dual-channel



Low-Side SmartFET Relay Driver

Part Number	Package	V_{DS}	V_{GS}	I_{DS} (A) @ $T_A = 25^\circ$ C	P_D (W) @ $T_A = 25^\circ$ C	$R_{DS(ON)}$ (m Ω max) at $V_{GS} = 5V$	C_{ISS} typ	Q_C typ @ $V_{GS} = 5V$	ESD	E2
		(V)	($\pm$ V)	(A)	(W)	(m Ω)	pF	(nC)	(HBM)	(mJ)
DMN61D8LVT	SOT26	60	12	0.47	0.61	1800	12.9	0.74	4kV	200
DMN61D8L	SOT23	60	12	0.47	0.6	1800	12.9	0.74	4kV	200

Smart Load Switches



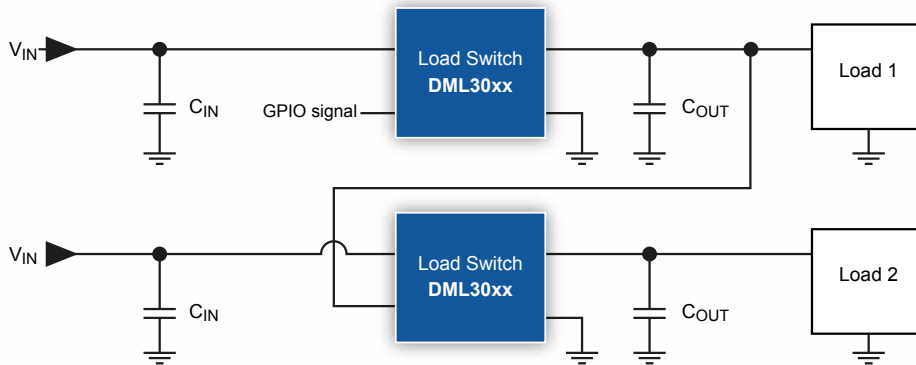
The DIODES Advantage

Features DML10xx Family

- Integrated N-MOSFET with Ultra-Low-Resistance
- Input Voltage Range 0.8 V to 4 V
- Under Voltage Lockout
- Low Quiescent Current

DML30xx Family has additional features

- Advanced Controller with Charge Pump
- Wide Input Voltage Range 0.5 V to 22V
- Soft-Start via Adjustable Slew Rate Control (SR)
- Power Good Signal (PG)
- Thermal Shutdown
- Short-Circuit Protection (SC)
- Extremely Low Standby Current
- Load Bleed (Quick Discharge)

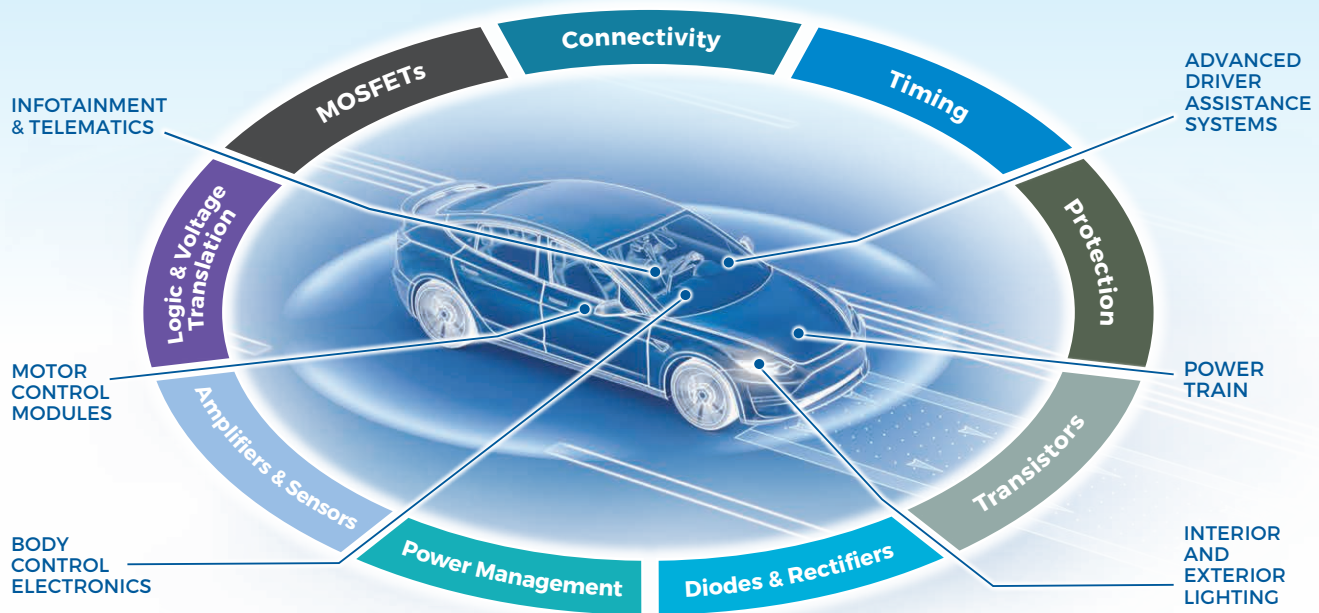


Load Switches

Part Number	Package	Operating Ranges (V)			Max Continuous Current ID (A)	RON typ (mΩ)	Function			Automotive Compliant "Q" Available
		Vin	Vcc	Vout			SR	PG	SC	
DML1008LDS	V-DFN3030-8 (Type R)	0.8-4	3.2-5.5	-0.3-6	6	8mΩ @ Vin = 1.05V, VCC = 5V	-	-	-	N
DML1010FDK	U-DFN2020-8 (Type K)	0.8-4	3.2-5.5	-0.3-6	6	8mΩ @ Vin = 1.05V, VCC = 5V	-	-	-	N
DML1012ALDS	V-DFN3030-8 (Type R)	0.5-24	3.2-5.5	-0.3-6	6	8mΩ @ Vin = 5V, VCC = 5V	-	-	-	Y
DML1012LDS	V-DFN3030-8 (Type R)	0.8-4	-0.3-6	3.2-5.5	6	8mΩ @ Vin = 1.05V, VCC = 5V	-	-	-	N
DML10M8LDS	V-DFN3030-8 (Type R)	0.8-4	3.2-5.5	-0.3-6	6	8mΩ @ Vin = 1.05V, VCC = 5V	-	-	-	N
DML2010LFDS	V-DFN2020-8 (Type N)	0.5-13.5	-0.3-8	3-5.5	10.5	7mΩ @ Vin = 1.8V, Vcc = 3.3V	Y	Y	Y	N
DML22990LWG	V-DFN3020-10 (Type C)	0.6-5.5	2.5-5.5	-0.3-6	10	3.9mΩ @ Vin = 3.3V, Vcc = 3.3V	-	Y	-	N
DML3006LFDS	V-DFN2020-8 (Type F)	0.5-13.5	-0.3-18	3-5.5	11	10.8mΩ @ Vin = 1.8V, Vcc = 3.3V	-	Y	Y	N
DML3008LFDS	V-DFN2020-8 (Type N)	0.5-20	-0.3-24	3-5.5	10	9mΩ @ Vin = 1.8V, Vcc = 3.3V	-	Y	Y	N
DML3009LDC	V-DFN3030-12 (Type B)	0.5-13.5	3.0-5.5	-0.3-18	15	4.8mΩ @ Vin=1.8V, Vcc = 5V	Y	Y	Y	N
DML3010ALFDS	V-DFN2020-8 (Type N)	0.5-20	-0.3-24	3-5.5	11	10mΩ @ Vin = 1.8V, Vcc = 3.3V	-	Y	Y	N
DML3011ALFDS	V-DFN2020-8 (Type N)	0.5-20	-0.3-24	3-5.5	11	10mΩ @ Vin = 1.8V, Vcc = 3.3V	Y	-	Y	N
DML3012LDC	V-DFN3030-12 (Type B)	0.5-20	3.0-5.5	-0.3V-24	15	6.1mΩ @ Vin = 1.8V, Vcc = 3.3V	Y	Y	Y	N
DML3017LDC	V-DFN3030-12 (Type B)	0.2-20	3.4-32	-0.3-24	15	6.1mΩ @ Vin = 1.8V, Vcc = 3.3V	Y	Y	Y	Y
DML3013LFDSW†	V-DFN2020-8 (Type N)	0.5-20	3-5.5	-0.3-24	10.5	10mΩ @ Vin = 1.8V, Vcc = 3.3V	-	Y	Y	Y

† In development

Diodes Automotive



Semiconductors form an integral part of modern automobiles.

A typical vehicle may have up to 100 Electronic Control Units (ECUs) embedded in systems including those governing engine, transmission, active safety, passenger comfort, and infotainment systems.

Diodes has a wide portfolio of automotive-compliant analog, discrete, and timing products.

These automotive parts are clearly identified by a 'Q' at the end of the part number.

Diodes' fully automotive-compliant 'Q' MOSFETs are all:

- Qualified to AEC-Q101
- Manufactured in facilities certified to the rigorous IATF 16949 standard.
- Manufactured in facilities capable of customer audit to VDA6.3
- Supported by Production Part Approval Process (PPAP) documentation

Thus meeting all the requirements of the automotive electronics industry.





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DIODES-CHINA

SHANGHAI OFFICE

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SHENZHEN OFFICE

16th Floor Skyworth Semiconductor
Design Building East Wing,
No.18 Gaoxin South 4th Road,
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Shenzhen 518057, China
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DIODES-JAPAN

1F T-Square Hamamatsu-cho Building
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Tel: (+81) 3-6459-0569

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Republic of Korea, 13556
Tel: (+82) 31-786-0434

DIODES-SINGAPORE

3 Fraser St
#06-27 DUO Tower
Singapore 189352
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July 2025