



General purpose power MOSFETs (up to 100 V)

Low power MOSFETs offering broad product availability, convenience, and ease of design

www.infineon.com/right-fit_MOSFETs





General purpose power MOSFETs (≤ 100 V)

Easy to use, widely available, and price-competitive solutions

At Infineon, we strive to serve all customers by offering products that can meet all design, pricing, and logistical requirements. Renowned for its established MOSFET technology expertise and high-quality standards, Infineon offers proven solutions that you can trust. Fulfill your individual design and system requirements with our product offering and you will benefit from:

Availability



Very competitive lead time

Competitive pricing



Expertise in manufacturing quality leveraged with value-based pricing

Ease of design



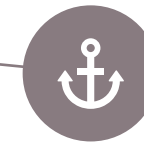
Available:
[Online design tools](#)
[Simulation models](#)
 › Product support material

Convenient selection and purchasing



Component comparison tools:
[Cross-reference tool](#)
[MOSFET finder](#)
 Product availability via [distribution network](#)





Quality and supply stability







Highest manufacturing capability standards with a stable long-term product supply

Infinion MOSFETs – designed with you in mind

Space-saving and high performance packages

	PQFN 2x2	SOT23	TSOP6L	PQFN 3.3x3.3
				
	Enables significant space saving	Compact package for low-power applications	Space-saving package for low-power applications	For highest efficiency and power management
Height [mm]	0.9	1.0	1.1	1.0
Outline [mm]	2.0 x 2.0	2.9 x 2.4	2.9 x 2.5	3.3 x 3.3
Thermal resistance R_{thJC} [K/W]	11.1	100 ¹⁾	62.5 ¹⁾	3.2

	PQFN 3.3x3.3 fused leads	SuperSO8	PAK	TO220
				
	For highest efficiency, thermal and power management	For highest efficiency and power management	Ideal for medium-power applications	Optimized for high-power applications and high current capability
Height [mm]	1.0	1.0	2.2	4.4
Outline [mm]	3.3 x 3.3	5.15 x 6.15	6.5 x 10	29.5 x 10.0
Thermal resistance R_{thJC} [K/W]	1.8	0.8	0.9	0.5

Established quality, long term supply

The selected portfolio of low power MOSFETs offers simple and price-competitive solutions that have wide availability and established quality.

The portfolio covers voltage classes up to 100 V. It includes a range of single and dual N-channel Power MOSFETs for 12 or 24 V_{DC} bus voltages. Products for smaller power handling (single and dual N- and P-channel MOSFETs) are also offered.

Infinion is the market leader in the power discrete and module market, holding the number one position with 20% of market share²⁾. This enables large-scale manufacturing capabilities providing customers with stable and long-term product supply.

The selected parts come in a wide range of packages including SOT23, PQFN (2x2, 3.3x3.3), PAK, SO8, SuperSO8 5x6 and TO220.

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1) R_{thJA}

2) Source: Based on or includes content supplied by Informa Tech (former IHS Markit Technology), „Power Semiconductor Market Share Database – 2018“, September 2019

Products that fit your design

System-optimized products addressing a broad range of needs from low to high-switching applications



Flexible use


Struggling to find low-power MOSFETs with the flexibility to be used on various applications? Maximize the value of your end-products by choosing Infineon - a reliable partner with system understanding and technological expertise.

Fulfillment of your individual design and system requirements is our top priority. Power MOSFETs from the selected portfolio (≤ 100 V) can help increase system performance and efficiency. Reduced power losses can be achieved thanks to the low $R_{DS(on)}$ values as well as low gate and output charges.


By adhering to the highest quality standards, Infineon safeguards to ensure that these MOSFETs perform reliably under various application conditions. Additionally, the variety of available packages including SuperSO8, DPAK, PQFN (3.3x3.3) and TO220 supports design and application flexibility.

Product portfolio


PQFN 2x2

Package	Product	V_{DS} max.	I_D @25°C max.	$R_{DS(on)}$ @10 V max.	$R_{DS(on)}$ @4.5V max.	$R_{DS(on)}$ @2.5 V max.	Q_G typ.@4.5 V	V_{GS} max	Polarity
	IRLHS6242TRPBF	20 V	22 A	-	11.7 mΩ	15.5 mΩ	14 nC	12 V	N
	IRLHS6276TRPBF	20 V	9.6 A	-	45 mΩ	62 mΩ	3.1 nC	12 V	N+N
	IRFHS8242TRPBF	25 V	21 A	13 mΩ	21 mΩ	-	4.3 nC	20 V	N
	IRFHS8342TRPBF	30 V	19 A	16 mΩ	25 mΩ	-	4.2 nC	20 V	N
	IRLHS6342TRPBF	30 V	19 A	-	15.5 mΩ	19.5 mΩ	11 nC	12 V	N
	IRLHS6376TRPBF	30 V	7.6 A	-	63 mΩ	82 mΩ	2.8 nC	12 V	N+N
	IRLHS2242TRPBF	-20 V	-15 A	-	31 mΩ	53 mΩ	9.6 nC	12 V	P
	IRFHS9301TRPBF	-30 V	-13 A	37 mΩ	65 mΩ	-	6.9 nC	20 V	P
IRFHS9351TRPBF	-30 V	-5.1 A	170 mΩ	290 mΩ	-	1.9 nC	20 V	P+P	

SOT23


Package	Product	V_{DS} max.	I_D @25°C max.	$R_{DS(on)}$ @10 V max.	$R_{DS(on)}$ @4.5 V max.	$R_{DS(on)}$ @2.5 V max.	Q_G typ.@4.5 V	V_{GS} max	Polarity
	IRLML6244TRPBF	20 V	6.3 A	-	21 mΩ	27 mΩ	8.9 nC	12 V	N
	IRLML6246TRPBF	20 V	4.1 A	-	46 mΩ	66 mΩ	3.5 nC	12 V	N
	IRFML8244TRPBF	25 V	5.8 A	24 mΩ	41 mΩ	-	5.4 nC	20 V	N
	IRLML6344TRPBF	30 V	5.0 A	-	29 mΩ	37 mΩ	6.8 nC	12 V	N
	IRLML0030TRPBF	30 V	5.3 A	27 mΩ	40 mΩ	-	2.6 nC	20 V	N
	IRLML6346TRPBF	30 V	-	-	63 mΩ	80 mΩ	2.9 nC	12 V	N
	IRLML2030TRPBF	30 V	2.7 A	100 mΩ	154 mΩ	-	1 nC	20 V	N
	IRLML0040TRPBF	40 V	3.6 A	56 mΩ	78 mΩ	-	2.6 nC	16 V	N
	IRLML2244TRPBF	-20 V	-4.3 A	-	54 mΩ	95 mΩ	6.9 nC	12 V	P
	IRLML2246TRPBF	-20 V	-2.6 A	-	135 mΩ	236 mΩ	2.9 nC	12 V	P
	IRLML9301TRPBF	-30 V	-3.6 A	64 mΩ	103 mΩ	-	4.8 nC	20 V	P
	IRLML9303TRPBF	-30 V	-2.3 A	165 mΩ	270 mΩ	-	2 nC	20 V	P

TSOP6L


Package	Product	V_{DS} max.	I_D @25°C max.	$R_{DS(on)}$ @10 V max.	$R_{DS(on)}$ @4.5V max.	$R_{DS(on)}$ @2.5 V max.	Q_G typ.@4.5 V	V_{GS} max	Polarity
	IRLTS6342TRPBF	30 V	8.3 A	-	17.5 mΩ	22 mΩ	11 nC	12 V	N
	IRFTS8342TRPBF	30 V	8.2 A	19 mΩ	29 mΩ	-	4.8 nC	20 V	N
	IRLTS2242TRPBF	-20 V	-6.9 A	-	32 mΩ	55 mΩ	12 nC	12 V	P
	IRFTS9342TRPBF	-30 V	-5.8 A	40 mΩ	66 mΩ	-	12 nC	20 V	P

Product portfolio


PQFN 3.3x3.3

Package	Product	V_{DS} max.	I_D @25°C max.	$R_{DS(on)}$ @10 V max.	$R_{DS(on)}$ @4.5V max.	Q_G typ.@4.5 V	V_{GS} max	Polarity
	IRFHM830TRPBF	30 V	40 A	3.8 mΩ	6 mΩ	15 nC	20 V	N

PQFN 3.3x3.3 fused leads


Package	Product	V_{DS} max.	I_D @25°C max.	$R_{DS(on)}$ @10 V max.	$R_{DS(on)}$ @4.5V max.	Q_G typ.@4.5 V	V_{GS} max	Polarity
	ISZ019N03L5S	30 V	40 A	1.9 mΩ	2.5 mΩ	22 nC	20 V	N
	ISZ040N03L5IS	30 V	40 A	4 mΩ	5.7 mΩ	8.5 nC	20 V	N
	ISZ065N03L5S	30 V	40 A	6.5 mΩ	8.6 mΩ	5.2 nC	20 V	N

SuperSO8

Package	Product	V_{DS} max.	I_D @25°C max.	$R_{DS(on)}$ @10 V max.	$R_{DS(on)}$ @4.5V max.	Q_G typ.@4.5 V	V_{GS} max	Polarity
	IRFH8303TRPBF	30 V	280 A	1.1 mΩ	1.7 mΩ	58 nC	20 V	N
	IRFH8307TRPBF	30 V	100 A	1.3 mΩ	2.1 mΩ	50 nC	20 V	N
	IRFH8311TRPBF	30 V	169 A	2.1 mΩ	3.2 mΩ	30 nC	20 V	N
	IRFH8318TRPBF	30 V	120 A	3.1 mΩ	4.6 mΩ	19 nC	20 V	N
	IRFH8324TRPBF	30 V	90 A	4.1 mΩ	6.3 mΩ	14 nC	20 V	N
	IRFH8325TRPBF	30 V	82 A	5 mΩ	7.2 mΩ	15 nC	20 V	N
	IRFH8330TRPBF	30 V	56 A	6.6 mΩ	9.9 mΩ	9.3 nC	20 V	N
	IRFH8334TRPBF	30 V	44 A	9 mΩ	13.5 mΩ	7.1 nC	20 V	N
	ISC011N03L5S	30 V	100 A	1.1 mΩ	1.4 mΩ	36 nC	20 V	N
	ISC019N03L5S	30 V	100 A	1.9 mΩ	2.4 mΩ	22 nC	20 V	N
	ISC026N03L5S	30 V	100 A	2.6 mΩ	3.5 mΩ	13 nC	20 V	N
	ISC037N03L5IS	30 V	78 A	3.7 mΩ	5.2 mΩ	8.5 nC	20 V	N
	ISC045N03L5S	30 V	63 A	4.5 mΩ	6.4 mΩ	6.7 nC	20 V	N

Product portfolio

DPAK



Package	Product	V_{DS} max.	I_D @25°C max.	$R_{DS(on)}$ @10 V max.	$R_{DS(on)}$ @4.5V max.	Q_g typ.@4.5 V	V_{GS} max	Polarity
	IRFR8314TRPBF	30 V	179 A	2.2 mΩ	3.1 mΩ	36 nC	20 V	N
	IRLR8743TRPBF	30 V	160 A	3.1 mΩ	3.9 mΩ	39 nC	20 V	N
	IRLR8726TRPBF	30 V	86 A	5.8 mΩ	8 mΩ	15 nC	20 V	N
	IRLR8729TRPBF	30 V	58 A	8.9 mΩ	11.9 mΩ	10 nC	20 V	N

TO220



Package	Product	V_{DS} max.	I_D @25°C max.	$R_{DS(on)}$ @10 V max.	$R_{DS(on)}$ @4.5V max.	Q_g typ.@4.5 V	V_{GS} max	Polarity
	IRLB3813PBF	30 V	260 A	1.95 mΩ	2.6 mΩ	57 nC	20 V	N
	IRLB8314PBF	30 V	171 A	2.4 mΩ	3.2 mΩ	40 nC	20 V	N
	IRLB8743PBF	30 V	150 A	3.2 mΩ	4.2 mΩ	36 nC	20 V	N
	IRLB8748PBF	30 V	92 A	4.8 mΩ	6.8 mΩ	15 nC	20 V	N
	IRLB8721PBF	30 V	62 A	8.7 mΩ	16 mΩ	7.6 nC	20 V	N
	IPP016N08NF2S	80 V	196 A	1.6 mΩ	-	170 nC	20 V	N
	IPP019N08NF2S	80 V	191 A	1.9 mΩ	-	124 nC	20 V	N
	IPP024N08NF2S	80 V	182 A	2.4 mΩ	-	89 nC	20 V	N
	IPP040N08NF2S	80 V	115 A	4.0 mΩ	-	54 nC	20 V	N
	IPP055N08NF2S	80 V	99 A	5.5 mΩ	-	36 nC	20 V	N
	IPP026N10NF2S	100 V	184 A	2.6 mΩ	-	103 nC	20 V	N
	IPP050N10NF2S	100 V	110 A	5.0 mΩ	-	51 nC	20 V	N
	IPP082N10NF2S	100 V	77 A	8.2 mΩ	-	28 nC	20 V	N



Selection, simulation, and design

Tools and resources



Simulation

One of our simulation models may facilitate your search for the best-matching Infineon MOSFETs.

[Access here](#)



App note

Simulation models describe the characteristics of typical devices. Although they cannot model exact device performance under all conditions, nor are they intended to replace breadboarding for final verification, they can be a useful tool in evaluating device performance. Get to know more about different types of models for MOSFET devices.

[Download application note](#)



Tools

Find exactly what you looking for your design with our design tools and product and solution finder.

[Access here](#)



Support

Our technical support is available for you 24/7 for any question you might have.

[Contact here](#)



Gate driver ICs

Every switch needs a driver

Gate driver ICs are the complementary solutions to Infineon's MOSFET portfolio. Leveraging the application expertise and advanced technologies of Infineon, the industrial and general purpose gate driver ICs are well suited for many applications such as industrial motor drives, solar inverters, UPS and switch mode power supplies. Infineon offers a comprehensive portfolio with a variety of configurations, voltage classes, isolation levels and package options.

More detailed information on our gate driver IC portfolio can be found here:

www.infineon.com/gatedriver

www.infineon.com/eicedriver



Where to buy

Infineon distribution partners and sales offices:
www.infineon.com/wheretobuy



Mobile product catalog
Mobile app for iOS and Android.

Service hotline

Infineon offers its toll-free 0800/4001 service hotline as one central number, available 24/7 in English, Mandarin and German.

- > Germany 0800 951 951 951 (German/English)
- > China, mainland 4001 200 951 (Mandarin/English)
- > India 000 800 4402 951 (English)
- > USA 1-866 951 9519 (English/German)
- > Other countries 00* 800 951 951 951 (English/German)
- > Direct access +49 89 234-0 (interconnection fee, German/English)

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