

Product brief

OptiMOS™ P-Channel small signal power MOSFETs 60-150 V family

Infineon's next generation of products in SOT-23 and SOT-223 package

Infineon offers high-performance products with the best price/performance ratio in the industry by using cost-effective packages combined with leading, reliable and proven silicon technology.

The OptiMOS™ P-Channel small signal MOSFETs simplify the design complexity of applications in the industrial and consumer market, while improving efficiency at low loads due to low gate charge (Q_g). The products are available in logic and normal level gate drive capability and feature a wide range of on-resistance ($R_{DS(on)}$) options.

The products are good alternatives or replacements to existing P-Channel products and enable designers to improve performance while reducing the overall bill of material.

Infineon's small signal/small power MOSFET packages are optimized for a variety of applications and circuits, such as low voltage drives, linear battery charger, battery protection, load switches, DC-DC converters, reverse polarity protection and many more.

Infineon's new OptiMOS™ P-Channel small signal MOSFETs for the Industrial market are available in 2 small outline packages:

- › SOT-23 (body dimensions: 2.9 mm x 1.3 mm x 1 mm)
- › SOT-223 (body dimensions: 6.5 mm x 3.5 mm x 1.6 mm)

Key features

- › Small outline packages
- › Normal level and logic level gate drive availability
- › RoHS compliant and halogen free
- › Fast switching
- › Avalanche rated
- › Qualified according to JEDEC for industrial applications

Key benefits

- › PCB space and cost savings
- › Gate drive flexibility
- › Reduced design complexity
- › Environmentally friendly
- › High overall efficiency
- › Enables robust design
- › Industry standard qualification level

Target applications

- › Battery management
- › Load switches
- › Reverse polarity protection
- › DC-DC converters

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Product portfolio

Package	V_{BRDSS}	Part number	$R_{DS(on)}$ max. @ $V_{GS} = 10$ V [Ω]	Qualification
Best fit for industrial applications				
SOT-23	- 60 V	ISS17EP06LM	1.7	Industrial
		ISS55EP06LM	5.5	
SOT-223	- 60 V	ISP650P06NM	0.065	
		ISP12DP06NM	0.125	
		ISP25DP06LM	0.25	
		ISP25DP06NM	0.25	
		ISP75DP06LM	0.75	
	-100 V	ISP16DP10LM	0.16	
		ISP98DP10LM	0.98	
		ISP20EP10LM	2	
	-150 V	ISP14EP15LM	1.38	

Published by
Infineon Technologies Austria AG
9500 Villach, Austria

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