

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 (Qg). 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. @ $V_{GS} = 10\text{ V}$ [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	
		ISP16DP10LM	0.16	
	-100 V	ISP98DP10LM	0.98	
		ISP20EP10LM	2	
		ISP14EP15LM	1.38	
	-150 V			

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