



## Product brief

# Small Signal/Small Power MOSFETs for the Industrial market

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 Small Signal/ Small Power P-channel and N-channel MOSFETs simplify the design complexity for various of applications in the consumer industry market. 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 new products are good alternatives or replacements to existing P-channel and N-channel products and enable designers to improve performance while reducing the overall bill of materials.

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

**Infineon's new Small Signal/Small Power P-channel and N-channel 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
- > Enhancement and Depletion Mode options
- > 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
- > Industrial Drives
- > Consumer
- > General purpose



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## Product portfolio

	Voltage class	Package	Part number	R <sub>DS(on)</sub> max. @ V <sub>GS</sub> = 10 V [mΩ]	Qualification
N-channel	60 V	SOT-23	2N7002	3000	Industrial
			BSS138I	3500	
			SN7002I	5000	
	100 V		BSS123I	6000	
	BSS169I*		6000		
	250 V		BSS139I*	14000	
	600 V		BSS127I	500000	
		SOT-223	BSP135I*	45000	
P-channel	-60 V	SOT-223	ISP650P06NM	65	
			ISP12DP06NM	125	
			ISP25DP06LM	250	
			ISP25DP06NM	250	
			ISP75DP06LM	750	
		SOT-23	ISS17EP06LM	1700	
			ISS55EP06LM	5500	

\*Depletion mode

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