PRODUCT BRIEF

Small signal MOSFETs

In home appliances

Infineon's small signal MOSFETs are the perfect choice for home appliances, offering exceptional characteristics such as low on-resistance, rapid switching speed, and minimal gate-to-source capacitance. These attributes make them ideal for a wide range of applications within home appliances market, ensuring efficient and reliable operation.

Key applications:

- Motor control: Enabling precise speed and direction control for motors in washing machines, refrigerators, and air conditioners.
- Power management: Facilitating efficient power distribution and regulation within appliances.
- Switching circuits: Crucial for various functions such as LED lighting control and user interface panels.

In the realm of home appliances, small signal MOSFETs play a crucial role in protection circuitry, power management, and switching applications. Infineon offers a diverse range of small signal MOSFETs engineered to deliver high efficiency and reliability. These MOSFETs are available in a variety of packages and voltage ratings, catering to a wide spectrum of application requirements, enhancing overall flexibility and compatibility.

The low on-resistance, swift switching time, and minimal gate charge make small signal MOSFETs an exemplary choice for integrating into home appliances, elevating their performance and longevity.

For a comprehensive insight into Infineon's small signal portfolio, we invite you to explore our official website at Infineon or our selection guide.

Here, you will gain access to detailed product information, datasheets, and an array of technical resources, empowering you to make an informed selection tailored to your specific application needs.

Key features

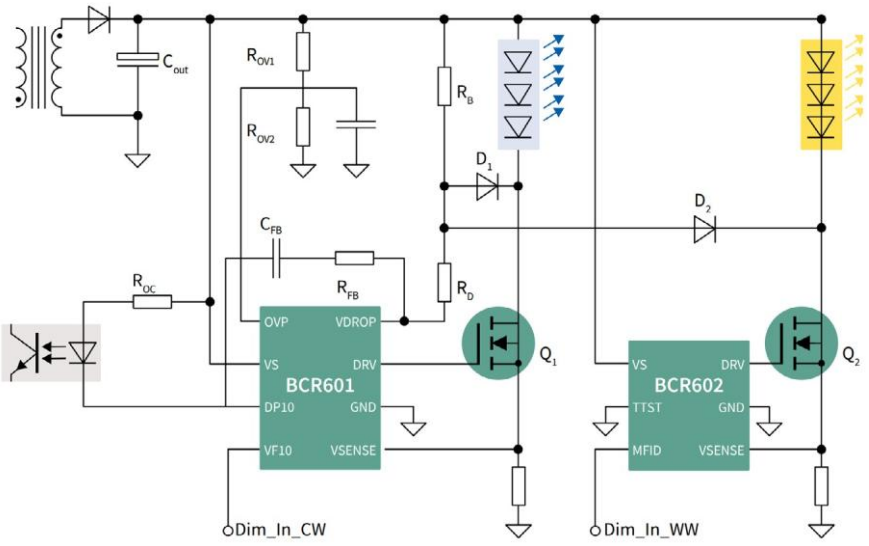
- Low on-resistance for minimal power losses and improved energy efficiency.
- Rapid switching speed for precise motor control and power management.
- Minimal gate-to-source capacitance for efficient and precise switching.
- High efficiency and reliability for consistent performance.
- Support for protection circuitry and versatile applications across various home appliances.



PRODUCT BRIEF

Block diagram/schematics

LED controller for tunable white plus active headroom control and flexible dimming



Key features

- Efficient balancing circuitry: Ideal for high-current battery packs that necessitate efficient balancing circuitry, ensuring optimal performance.
- Protection circuitry: Widely used in protection circuitry and charge/discharge circuitry to enhance the safety and longevity of home appliances.
- Enhanced flexibility: Available in a variety of packages and voltage ratings to cater to diverse applications requirements, enhancing overall flexibility and compatibility.

Product portfolio

	Part number	Package	Voltage [V]	$R_{DS(on)}$ max, mΩ	OPN
LED	IRFL4310	SOT-223	100 V	200m Ω @10 V	IRFL4310TRPBF
	BSS314PE w/ESD	SOT-23	-30 V	230m Ω @4.5 V	BSS314PEH6327XTSA1
	IRLML2803	SOT-23	30 V	400m Ω @4.5 V	IRLML2803TRPBF
BMS	BSS315P	SOT-23	-30 V	270m Ω @4.5 V	BSS315PH6327XTSA1
	BSS806NE	SOT-23	20 V w/ESD	82m Ω @1.8 V	BSS806NEH6327XTSA1
	BSS308PE	SOT-23	-30 V w/ESD	130m Ω @4.5 V	BSS308PEH6327XTSA1
CF*	IRLML0040	SOT-23	40 V	78m Ω @4.5 V	IRLML0040TRPBF

*Ceiling fan

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