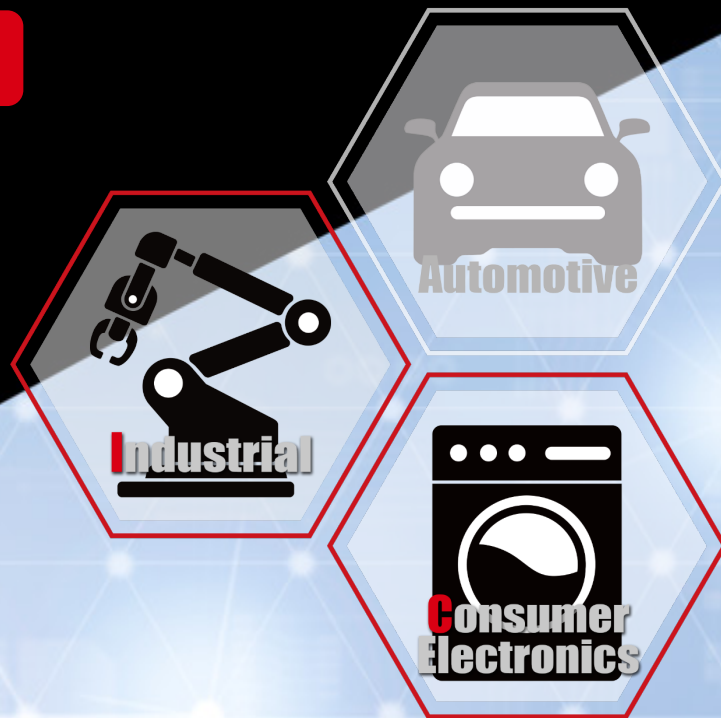


Ideal for fan motor drive in communication base stations and industrial equipment

100V Dual MOSFETs Featuring Class-Leading* Low ON Resistance

* ROHM August 2023 study

HP8KEEx/HT8KEEx series, HP8ME5



The **HP8KEx/HT8KEx series** - along with the **HP8ME5** - are compact dual MOSFETs that deliver high heat dissipation. ON Resistance is significantly reduced compared to conventional dual MOSFETs, improving energy savings while minimizing mounting area.

Features

- **Class-Leading* Low ON Resistance** contributes to greater energy savings
- **Integrates two devices in a single package (Dual MOSFETs)**, leading to a smaller mounting area with fewer design resources
- **Can be combined with ROHM motor driver ICs** to achieve optimum motor drive solutions

* ROHM August 2023 study

Compact High Heat Dissipation Packages

HSOP8 (Dual)



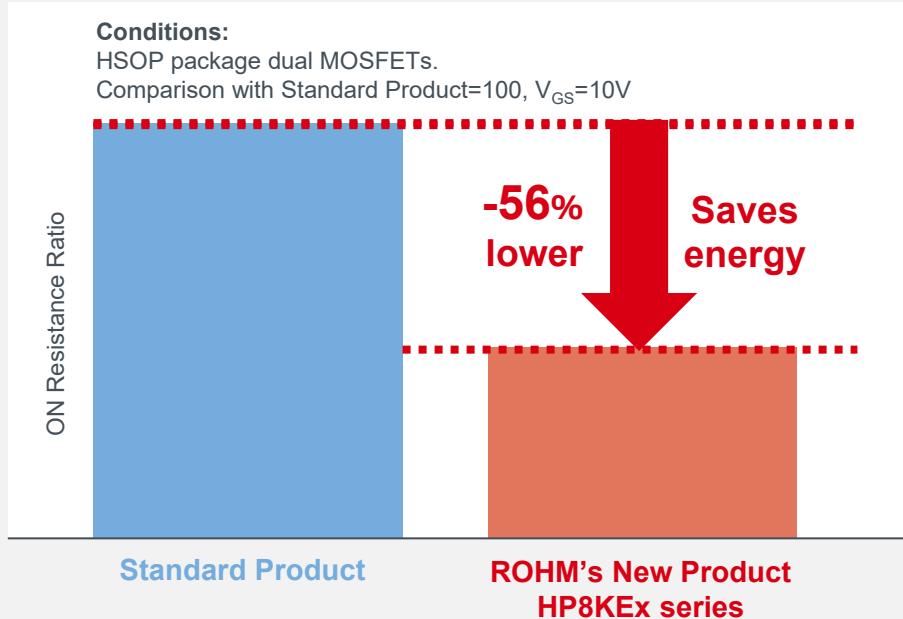
5.0×6.0×1.0mm

HSMT8 (Dual)



3.3×3.3×0.8mm

Achieves Class-Leading* Low ON Resistance



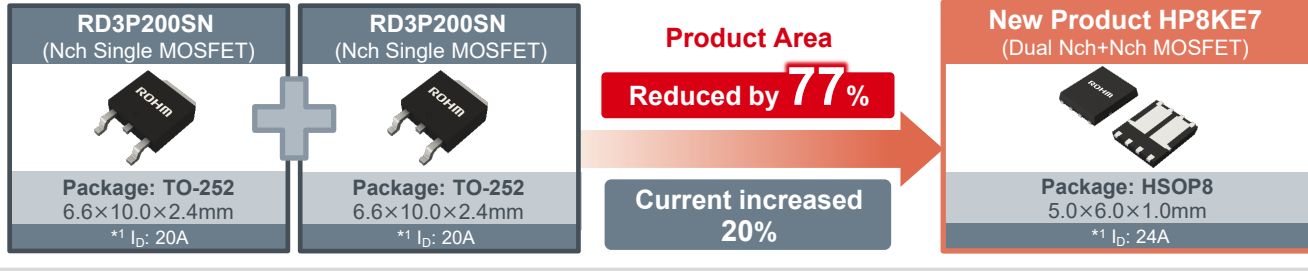
ROHM combines the latest precision processes with high heat dissipation packages to reduce ON Resistance by 56% vs standard products

* ROHM August 2023 study

Replacing conventional products significantly reduces mounting area

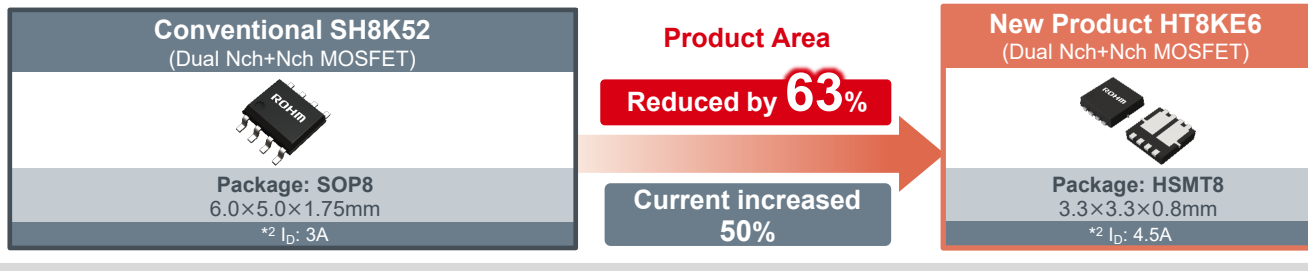
Example 1

When replacing two single MOSFETs



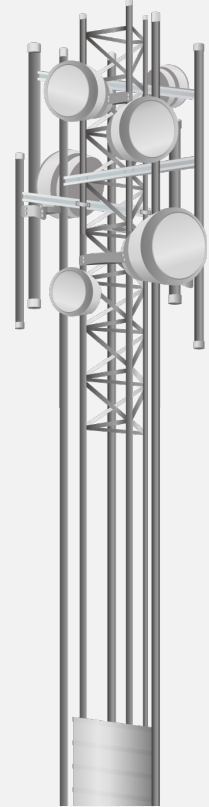
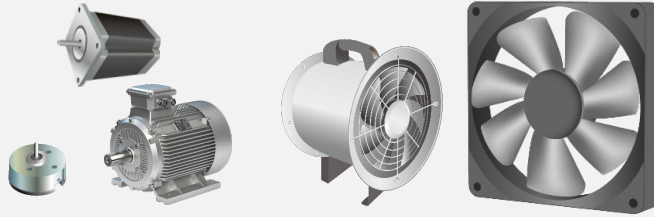
Example 2

When replacing conventional Dual MOSFETs
















Contributes to a smaller mounting area with fewer design resources

- Power supplies for data servers, communication base station repeaters, Factory Automation, and other industrial equipment
- Fan motors for large-scale consumer devices

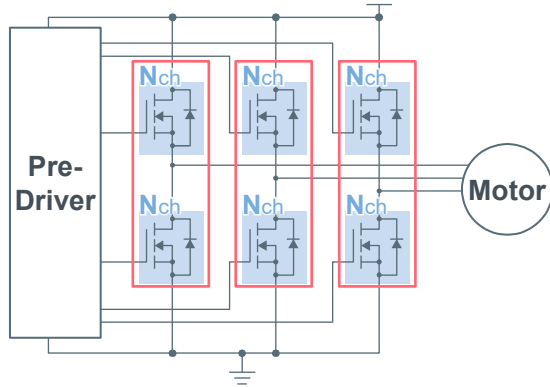


ROHM's 100V Low ON Resistance Nch+Nch/Nch+Pch Dual MOSFETs Lineup

Part No.	Polarity [ch]	V _{DSS} [V]	I _D [A] T _C =25°C	P _D [W] T _C =25°C	R _{DS(ON)} [mΩ]				Package [mm]
					V _{GS} =10V		V _{GS} =4.5V		
					Typ	Max	Typ	Max	
New HP8KE6  	N + N	100	17	21	41	54	53	73	HSOP8 5.0×6.0×1.0 
New HP8KE7  			24	26	15.1	19.6	18.6	27.8	
New HT8KE5  	N + N	100	7	13	148	193	200	300	HSMT8 3.3×3.3×0.8 
New HT8KE6  			13	14	44	57	56	83	
New HP8ME5  	N + P	100	8.5	20	148	193	200	300	HSOP8 5.0×6.0×1.0 
		-100	-8.0		210	273	233	303	

Click on the  icon to access the product page and the  icon to view the datasheet on ROHM's website.

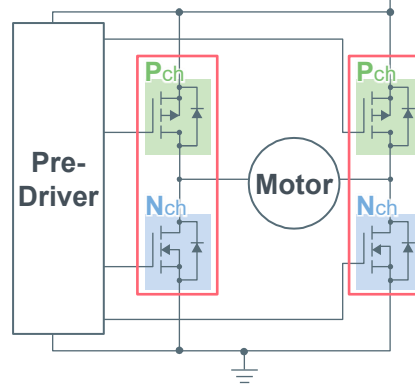
3-Phase Brushless Motor Circuit



Uses six (2×3) Nch MOSFETs

⇒ Possible with just three dual MOSFETs (Nch + Nch)
(Nch + Nch MOSFET Drive)

Single-Phase Brushless Motor Circuit



Uses multiple Nch/Pch MOSFETs

⇒ Dual MOSFETs (Nch + Pch) cuts the
number of parts required by half
(Nch + Pch MOSFET Drive)

Detailed Motor Driver Information

(ROHM's Website)

3-Phase Brushless Predriver ICs

[3-Phase Brushless DC Motor Drivers - Product Search Results | ROHM Co., Ltd. - ROHM Semiconductor](#)

Predriver ICs for Single-Phase Brushless Motor Drive

[Single-Phase Brushless DC Motor Drivers - Product Search Results | ROHM Co., Ltd. - ROHM Semiconductor](#)

Combining with ROHM's pre-driver IC for motor drive makes it possible to easily achieve a smaller motor board size, lower power consumption, and quieter operation

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