Featured Products





consumption









Expanded lineup

New 600V Super Junction MOSFET series

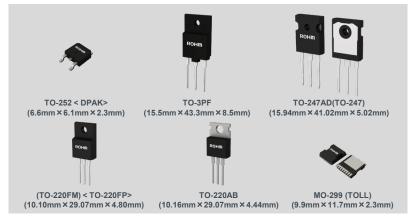
R60xxVN series with built-in high-speed diode (PrestoMOSTM) /R60xxYNx low ON resistance series

PrestoMOS™ is a trademark or registered trademark of ROHM Co., Ltd.

- New processes provide even higher performance 20% lower ON resistance per unit area over equivalent products What's more, simultaneously achieves both low ON resistance and gate charge (Qq).
- · Combines high-speed switching and recovery with low ON resistance (PrestoMOSTM R60xxVNx series)

In addition to features provided by PrestoMOSTM such as high-speed switching and the industry's fastest* reverse recovery time, class-leading low ON resistance contributes to greater energy savings and miniaturization. For example, using in PFC and synchronous rectification circuits in power supplies can reduce wasteful power consumption. * ROHM March 2022 study

 High-speed switching + low ON resistance (R60xxYNx series) Achieves class-leading low ON resistance. Low Qg translates to lower switching loss, contributing to energy savings and miniaturization in switching power supply circuits.



Package indicates JEDEC code. (): ROHM Package, (): GENERAL Code *MO-299 and TO-3PF available only for the R60xxYNx series

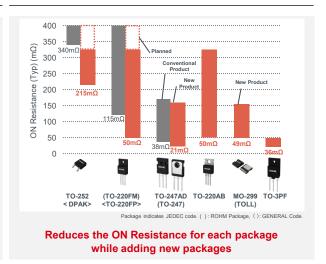
■ New PrestoMOSTM (R60xxVNx series) Performance

* ROHM March 2022 study

Comparison of ON Resistance and Reverse Recovery Time: **Efficiency Comparison Using a Synchronous** Switching Loss Comparison: Conventional vs New Rectification Boost Circuit Conventional vs New ROHM March 2022 study 140 1,600 98.4 Standard Product 98.2 ROHM's New 130 1.400 98.0 High 120 97.8 Performance ROHM's 97.0 110 R60xxVNx 盂 97. 1,000 100 R60xxVNx series ent conditions: 60mΩ class ON resistance products, 25°0 temperature 220V input voltage 400V output voltage L=500uH 70kHz Comparison with the equivalent TO-220FM package @ In=30A $I_{D} = 15A$ 800 970 100 150 200 250 3.500 1.500 2.500 100 110 120 130 diF/dt (A/µs) Output Power (W) Reverse Recovery Time (ns) Reduces switching loss by 17% Increased efficiency in totem pole circuits Achieves the industry's fastest reverse vs equivalent general-purpose contributes to lower application power recovery time with low ON resistance

products

■ Expanded R60xxYNx series Lineup



■ 600V Super Junction MOSFETs

High-speed Switching and Recovery + Low ON Resistance PrestoMOS™ R60xxVNx series

			Package					
			TO-252 <dpak></dpak>	(TO-220FM) <to-220fp></to-220fp>	TO-220AB	TO-247AD (TO-247)		
V _{DS} (V)	$R_{DS(on)}$ Typ $(m\Omega)$ $V_{GS}=15V$	trr Typ (ns)	A	som.	ROWIN	поми		
	250	65	☆ R6013VND3	☆ R6013VNX		,		
600	180	68		New R6018VNX				
	130	80		New R6024VNX	New R6024VNX3			
	95	92		New R6035VNX	New R6035VNX3			
	59	112		☆ R6055VNX	☆ R6055VNX3	New R6055VNZ4		
	42	125				New R6077VNZ4		
	22	167				☆ R60A4VNZ4		

☆ Under Development

Package indicates JEDEC code. (): ROHM Package, (): GENERAL Code.

Applications

- EV charging stations, servers, base stations, solar power inverters (power conditioners), uninterruptible power supplies (UPS), and more
- White goods such as AC
- Motor drives, power supply circuits and the like







High-speed Switching + Low ON Resistance R60xxYNx series

		Package							
		TO-252 <dpak></dpak>	(TO-220FM) <to-220fp></to-220fp>	TO-220AB	TO-3PF	TO-247AD (TO-247)	MO-299 (TOLL)		
V _{RM} (V)	$R_{DS(on)} \\ Typ \\ (m\Omega) \\ V_{GS} = 12V$	P	France	ODEN.	ROHM	ВОНП			
600	324	☆ R6010YND3	☆ R6010YNX	☆ R6010YNX3					
	215	☆ R6014YND3	New R6014YNX	☆ R6014YNX3					
	154		New R6020YNX	☆ R6020YNX3		☆ R6020YNZ4	☆ R6020YNJ2		
	137		☆ R6022YNX	☆ R6022YNX3		☆ R6022YNZ4	☆ R6022YNJ2		
	112		☆ R6027YNX	☆ R6027YNX3		☆ R6027YNZ4	☆ R6027YNJ2		
	80		☆ R6038YNX	☆ R6038YNX3		☆ R6038YNZ4	☆ R6038YNJ2		
	68		☆ R6049YNX	☆ R6049YNX3		☆ R6049YNZ4	☆ R6049YNJ2		
	50		☆ R6061YNX	☆ R6061YNX3		☆ R6061YNZ4			
	49						☆ R6063YNJ2		
	36				☆ R6086YNZ	☆ R6086YNZ4			
	21					☆ R60A4YNZ4			

☆ Under Development

Package indicates JEDEC code. (): ROHM Package, (): GENERAL Code.

Related Products (ROHM's Website)

- PrestoMOS™ R60xxVNx series
- ·SJ MOSFET R60xxYNx series



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