

Featured Products



New energy-saving devices

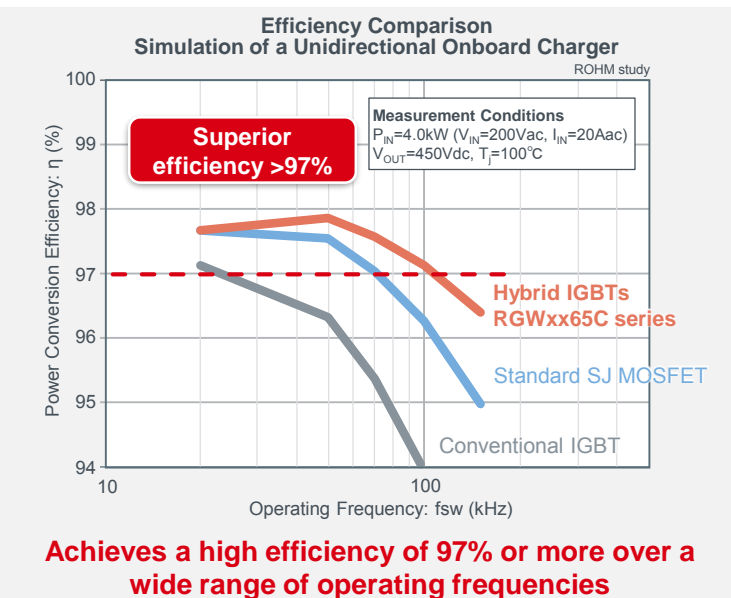
Hybrid IGBTs with Built-In SiC Schottky Barrier Diode

RGWxx65C series (AEC-Q101 Qualified)

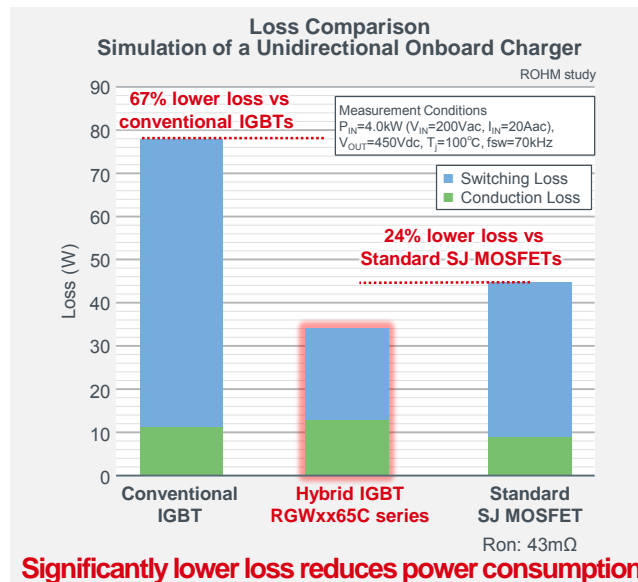
- Achieves significantly higher efficiency compared with conventional IGBTs
- High-speed IGBT + SiC Schottky barrier diodes (SiC SBD) dramatically reduce turn ON loss
- Low saturation voltage further improves efficiency $V_{CE(sat)} = 1.5V$



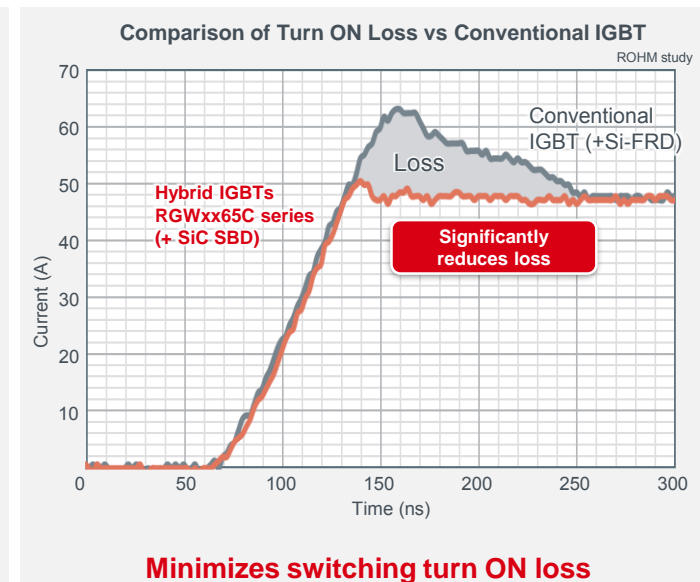
Increased Efficiency



Lower Loss

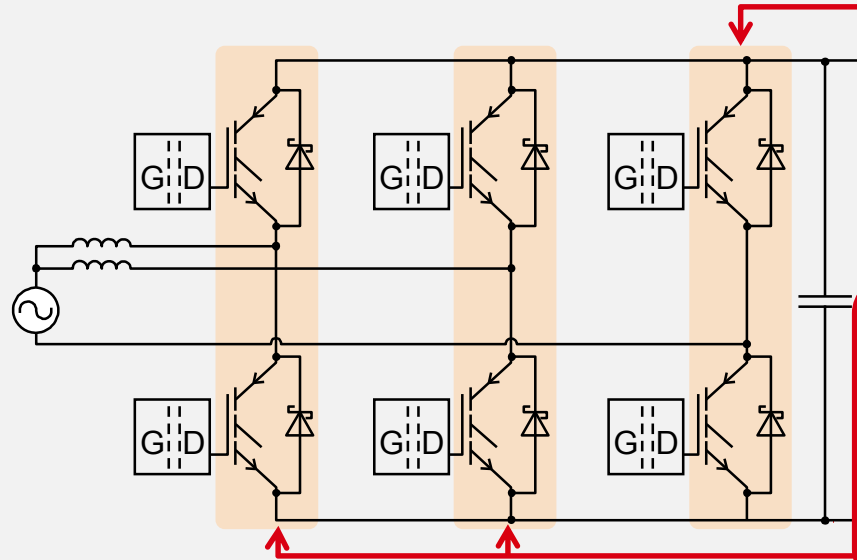


Improved Recovery Characteristics with Built-In SBD



Power Devices for Interleaved Totem Pole PFC (Bidirectional Onboard Chargers)

Applications



Rectifier-Side Devices 650V Class~

Cost-Oriented/IGBTs: **RGWxxxx65E series**

Switching characteristics are not required for rectifier applications

SW-Side Devices 650V Class~

Efficiency-Oriented/SiC MOSFET: **SCT3xxxAL series**

Efficiency- & Cost-Oriented/Hybrid IGBTs: **RGWxxxx65C series**

Characteristics required to increase efficiency in SW-side power devices

- Diode recovery characteristics during SW operation
- Low conduction loss (R_{on})

Fast recovery with SiC SBDs improves the efficiency of PFC circuits

- Vehicle chargers (Onboard chargers)
- Automotive DC/DC converters
- PV inverters (Power conditioners)
- Uninterruptible Power Supplies (UPS)

Lineup

Insertion Type

Part No.	Withstand Voltage V_{CES} (V)	Collector Current I_C (A) $T_C=100^\circ\text{C}$	Conduction Loss $V_{CE(sat)}$ Typ (V)	Built-In Flyback Diode	AEC-Q101 Qualified		Package	
					I_F (A) $T_C=100^\circ\text{C}$	V_F (V)		
New RGW60TS65CHR Data Sheet	650	30	1.5	SiC SBDs	20	1.35	YES	TO-247N
New RGW80TS65CHR Data Sheet		40	1.5					
New RGW00TS65CHR Data Sheet		50	1.5					

Package indicates JEDEC code.

Surface Mount Type

Part No.	Withstand Voltage V_{CES} (V)	Collector Current I_C (A) $T_C=100^\circ\text{C}$	Conduction Loss $V_{CE(sat)}$ Typ (V)	Built-In Flyback Diode	AEC-Q101 Qualified		Package	
					I_F (A) $T_C=100^\circ\text{C}$	V_F (V)		
☆ RGW40NL65CHRB	650	20	1.5	SiC SBDs	12	1.35	YES	TO-263L (LPDL)
☆ RGW50NL65CHRB		25	1.5					
☆ RGW60NL65CHRB		30	1.5					

Package indicates JEDEC code. () denotes ROHM package type. ☆Under Development



ROHM Co., Ltd.

21 Saiin Mizosaki-cho, Ukyo-ku,
Kyoto 615-8585 Japan

www.rohm.com

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