

Contributes to greater miniaturization and efficiency

The World's First* AC/DC Converter Control ICs for SiC Drive

BD768xFJ-LB Series

*ROHM March 2016 Survey



Improves efficiency and contributes to smaller AC/DC converters in industrial equipment

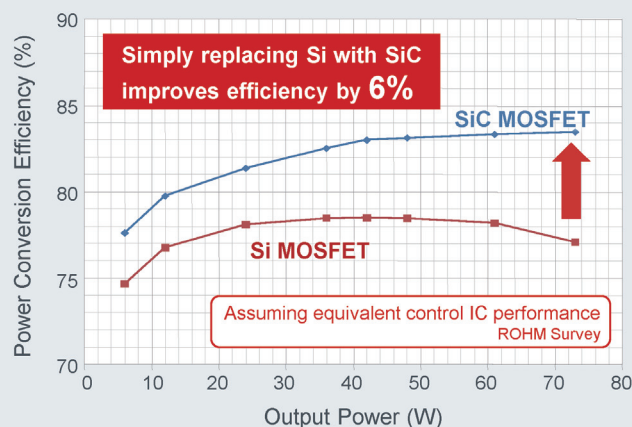
Reduces power consumption

Supports up to 690VAC for universal compatibility

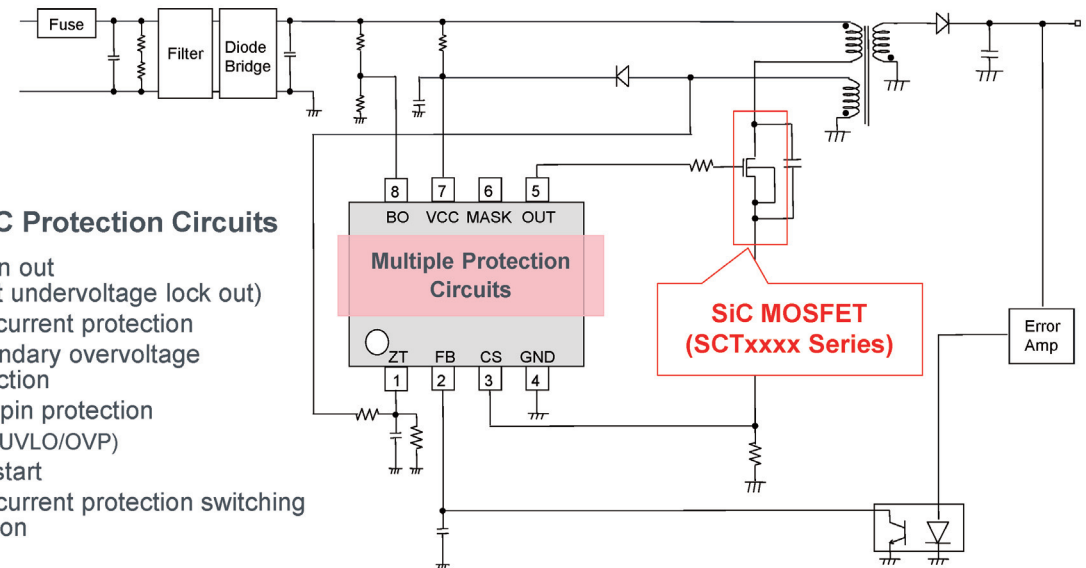
Improved power savings and miniaturization

- World's first* gate driver circuit for driving SiC MOSFETs
- Lower power consumption vs. conventional solutions
- SiC MOSFET drive reduces the number of external parts, providing greater space savings

AC/DC Converter Efficiency Comparison: Si vs SiC



Multiple protection circuits enable operation up to 690VAC



Lineup

AC/DC Converter ICs (For SiC MOSFET Drive)

	Part No.	Supply Voltage (V)	MOSFET	MOSFET Performance	Control Method	Max. Frequency (kHz)	FBOLP Protection	Brown Out	VCC OVP	Package
New	BD7682FJ-LB	15.0 to 27.5	External	-	QR	120	Auto Recovery	Yes	Latch	SOP-J8S
New	BD7683FJ-LB	15.0 to 27.5	External	-	QR	120	Latch	Yes	Latch	SOP-J8S
New	BD7684FJ-LB	15.0 to 27.5	External	-	QR	120	Auto Recovery	Yes	Auto Recovery	SOP-J8S
New	BD7685FJ-LB	15.0 to 27.5	External	-	QR	120	Latch	Yes	Auto Recovery	SOP-J8S

AC/DC Converter ICs (Quasi-Resonant Control, External MOSFET)

	Part No.	Supply Voltage (V)	Control Method	Startup Circuit	Max. Frequency (kHz)	AC Voltage Correction	FBOLP Protection	Brown Out	VCC OVP/ZTOVP Protection	Package
	BM1Q001FJ	8.9 to 26.0	QR	Yes	120	Yes	Auto Recovery	No	Auto Recovery	SOP-J8
	BM1Q002FJ	8.9 to 26.0	QR	Yes	120	Yes	Auto Recovery	No	Latch	SOP-J8
	BD7681FJ	8.5 to 25.5	QR	No	120	Yes	Auto Recovery	Yes	Latch	SOP-J8

AC/DC Converter ICs (PFC + Quasi-Resonant Control, External MOSFET)

	Part No.	Supply Voltage (V)	Control Method	Startup Circuit	X-Cap Discharge	QR Max. Frequency (kHz)	PFC Output Level Switching	PFC ON/OFF Switching	VCC OVP/ZTOVP Protection	Package
	BM1050AF	8.9 to 26.0	PFC+QR	Yes	No	120	No	Yes	Externally selectable	SOP-24
	BM1051F	8.9 to 26.0	PFC+QR	Yes	No	120	No	Yes	Externally selectable	SOP-24

AC/DC Converter ICs (PWM Control, External MOSFET)

	Part No.	Supply Voltage (V)	Control Method	Startup Circuit	Oscillation Frequency (kHz)	AC Voltage Correction	VCC Recharge Function	Brown Out	VCC OVP Protection	Package
	BM1P061FJ	8.9 to 26.0	PWM	Yes	65	Yes	Yes	Yes	Auto Recovery	SOP-J8
	BM1P062FJ	8.9 to 26.0	PWM	Yes	65	Yes	Yes	Yes	Latch	SOP-J8
	BM1P065FJ	8.9 to 26.0	PWM	Yes	65	Yes	No	Yes	Auto Recovery	SOP-J8
	BM1P066FJ	8.9 to 26.0	PWM	Yes	65	Yes	No	Yes	Latch	SOP-J8
	BM1P067FJ	8.9 to 26.0	PWM	Yes	65	Yes	No	No	Auto Recovery	SOP-J8
	BM1P068FJ	8.9 to 26.0	PWM	Yes	65	Yes	Yes	No	Latch	SOP-J8
	BM1P101FJ	8.9 to 26.0	PWM	Yes	100	Yes	Yes	Yes	Auto Recovery	SOP-J8
	BM1P102FJ	8.9 to 26.0	PWM	Yes	100	Yes	No	Yes	Latch	SOP-J8
	BM1P105FJ	8.9 to 26.0	PWM	Yes	100	Yes	No	Yes	Auto Recovery	SOP-J8
	BM1P107FJ	8.9 to 26.0	PWM	Yes	100	Yes	No	No	Auto Recovery	SOP-J8
	BD7671FVM	9.5 to 22.0	PWM	No	65	No	No	No	Auto Recovery	MSOP8
	BD7671FJ									SOP-J8
	BD7672BG	8.5 to 25.0	PWM	No	65	No	No	No	Latch	SSOP6
	BD7673AG	8.5 to 25.0	PWM	No	65	No	No	No	Latch	SSOP6
New	BD7679G	8.5 to 25.0	PWM	No	65	No	No	No	Auto Recovery	SSOP6
	BD7677FJ	8.5 to 25.5	PWM	No	65	Yes	No	Yes	Latch	SOP-J8
	BD7678FJ	8.5 to 25.5	PWM	No	65	Yes	No	Yes	Latch	SOP-J8

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ROHM Co., Ltd.

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

www.rohm.com