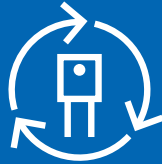
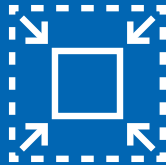


SiC devices contribute to

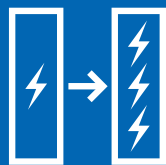
High efficiency



Miniaturization



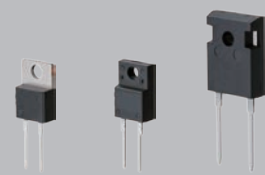
High power density



Power supplies

By optimizing surface structure and applying thin wafer process technologies, the 2nd Generation products achieve low conduction loss (low V_F), high surge current capability (high I_{FSM}), and high heat dissipation compared to conventional products (1st Generation SiC Schottky barrier diodes). These features contribute to high efficiency, miniaturization, and high power density of power supplies.

- **Increase power efficiency**
Approximately 18% lower conduction loss than conventional products
- **Decrease device temperature**
Lower conduction loss than conventional products in whole temperature range
- **Enhanced reliability**
Approximately 64% higher surge current capability



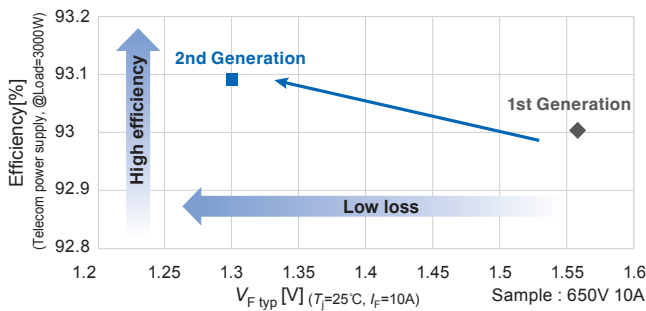
Packages : TO-220-2, TO-220F-2, TO-247-2
Applications: Servers, communication equipments, UPSs, power conditioning systems, general-purpose power supplies, quick chargers for EVs, etc.



1. Increase power efficiency

Lower V_F contribute to approximately 18% lower conduction loss than conventional products. Contribute to higher efficiency, miniaturization, and higher power density of power supplies.

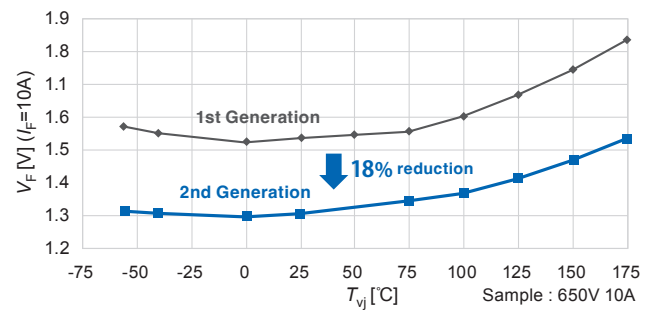
V_F - Efficiency



2. Decrease device temperature

Lower V_F (approximately 18%) than conventional products in whole temperature range. Decrease device temperature and contribute to the miniaturization of heat sinks.

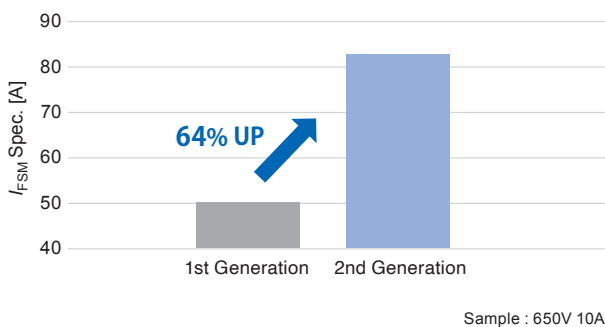
$V_F - T_J$



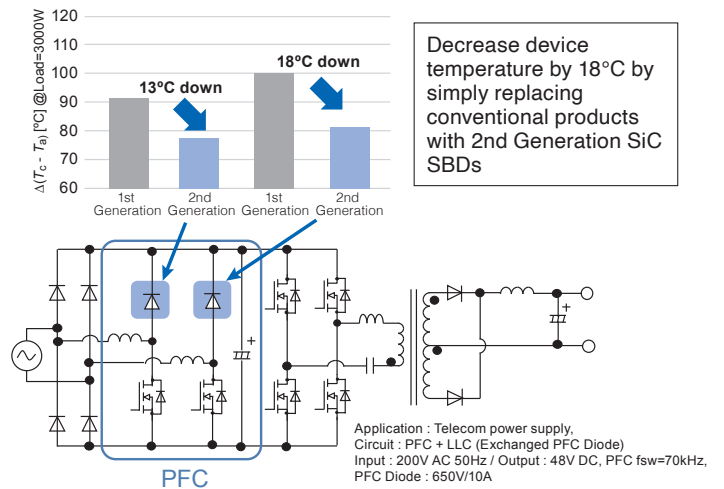
3. Enhanced reliability

Achieve both low V_F and high surge capability (I_{FSM}). Increase I_{FSM} rated value from 50A to 82A (64% increase)

I_{FSM}



Temperature rise



Product Lineup

Rated Voltage	I_F [A]	6	8	10	20	40
650V	TO-220-2	FDC2PT06S65	FDC2PT08S65	FDC2PT10S65		
	TO-220F-2	FDC2AT06S65	FDC2AT08S65	FDC2AT10S65		
1200V	TO-247-2				FDC2WT20S120	FDC2WT40S120

⚠ Safety Precautions

- * Before using this product, read the "Instruction Manual" and "Specifications" carefully, and consult with the retailer from which you purchased this product as necessary to use this product correctly.
- * The product must be handled by a technician with the appropriate skills.

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