

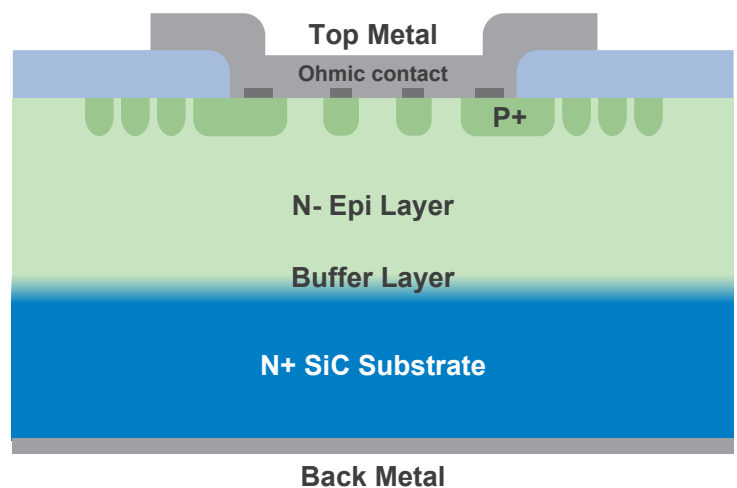
SiC Schottky Barrier Diode

For the Excellence in System Design



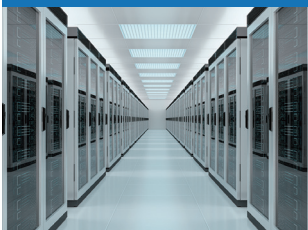
► Features

- Low conduction loss
- Zero reverse recovery
- Temperature independent switching
- High surge current capability
- High ruggedness
- High junction temperature 175°C



► Target Application

Power System



- Server Power
- Telecom Power
- PC Power

Green Energy



- PV Inverter
- ESS / BMS

Industrial



- EV Charging Pile
- UPS
- Industrial Motor

Consumer

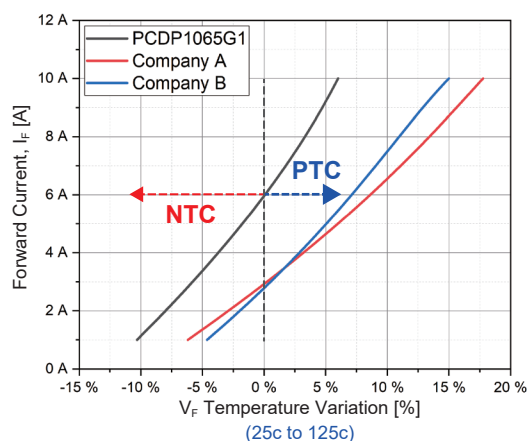
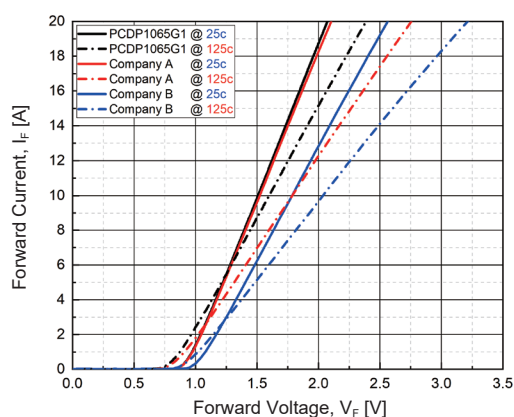


- Home Appliance
- Digital TV

► Performance

Temperature coefficient

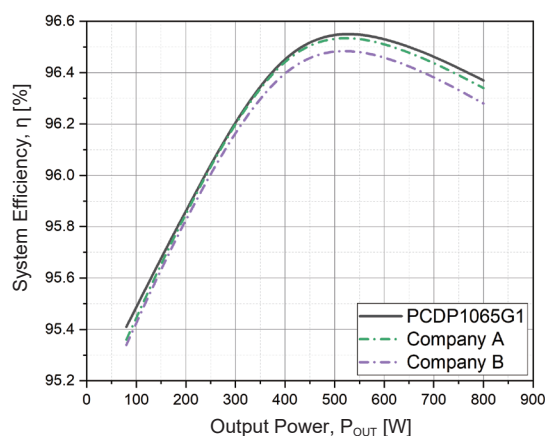
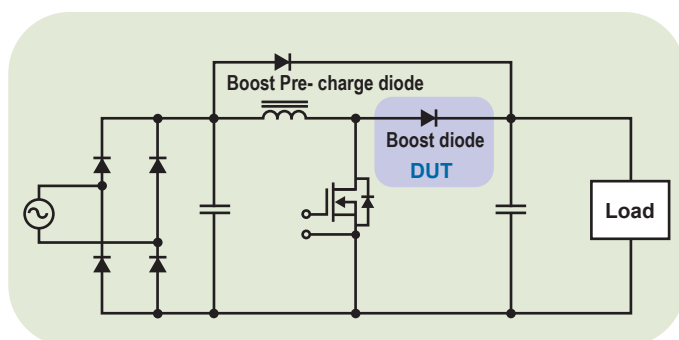
SiC Diode 650V / 10A



System Evaluation:

800W CCM Boost PFC, $V_{in} = 110V_{ac}/60Hz$, $V_{out} = 400V$, $F_{sw} = 65kHz$

SiC Diode 650V / 10A



► SiC SBD Line-Up

Series	BV (V)	I_f (A)	V_f Typ. (V)	 TO-220AC	 TO-263	 TO-252AA
SiC Diode 650V	650	4	1.5	PCDP0465G1	PCDB0465G1 PCDE0465G1*	PCDD0465G1
		6	1.5	PCDP0665G1	PCDB0665G1 PCDE0665G1*	PCDD0665G1
		8	1.5	PCDP0865G1	PCDB0865G1 PCDE0865G1*	PCDD0865G1
		10	1.5	PCDP1065G1	PCDB1065G1 PCDE1065G1*	PCDD1065G1
		12	1.5	PCDP1265G1		
		16	1.5	PCDP1665G1		
		20	1.5	PCDP2065G1		
SiC Diode 1200V	1200	5	1.5	PCDP05120G1		PCDD05120G1
		8	1.5	PCDP08120G1		PCDD08120G1
		10	1.5	PCDP10120G1	PCDB10120G1 PCDE10120G1*	PCDD10120G1
		15	1.5	PCDP15120G1		
		20	1.5	PCDP20120G1	PCDB20120G1 PCDE20120G1*	

* PCDE- : NC 1 pin