

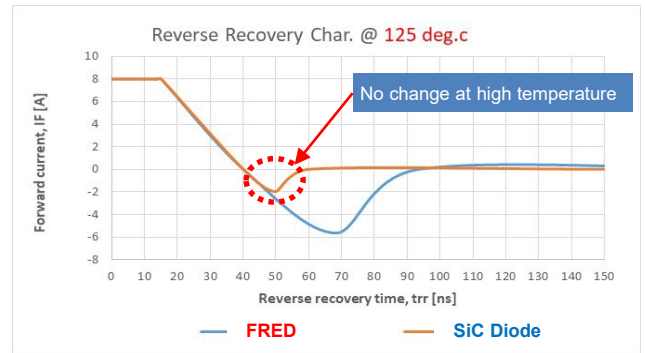
SiC Schottky Barrier Diode

For the Excellence in System Design



► Features

- Temperature independent switching
- Low conduction losses
- High surge current capability
- High ruggedness
- High junction temperature 175°C



Circuit	SiC Diode Device Rating	Package
Boost PFC	<ul style="list-style-type: none"> • 650V / 4A -40A • 1200V / 5A -40A 	<ul style="list-style-type: none"> • TO-252AA • TO-263 • TO-220AC • TO-247AD-2LD • TO-247AD-3LD
Boost Converter		
Bridgeless PFC		
Vienna PFC		

► Target Application

Power System



- Server Power
- Telecom Power
- PC Power

Green Energy



- PV Inverter
- ESS / BMS

Industrial



- EV Charging Pile
- UPS
- Industrial Motor

Consumer

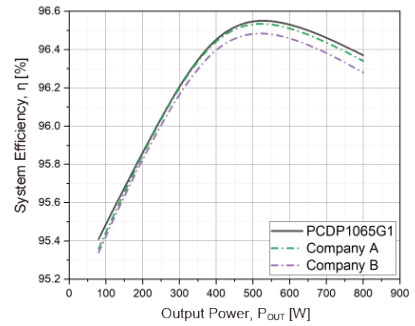
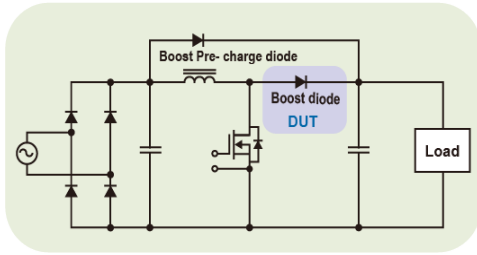


- Home Appliance
- Digital TV

► Performance

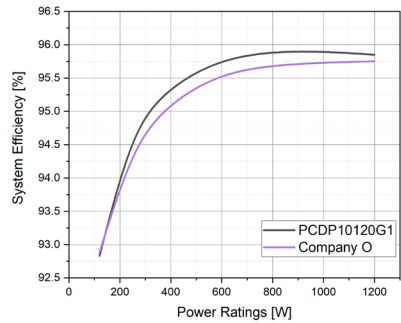
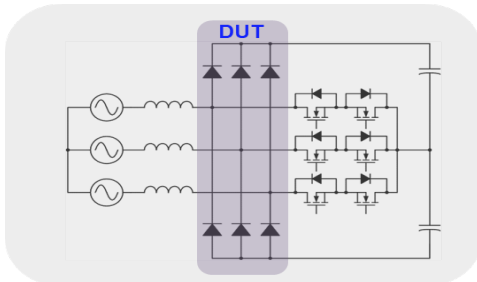
System Evaluation: SiC Diode 650V / 10A

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








System Evaluation: SiC Diode 1200V / 10A

1.2 kW Vienna PFC, $V_{in} = 120V_{ac}/60Hz$, $V_{out} = 600V$, $F_{sw} = 50kHz$



► Product List

Series	BV (V)	I _f (A)	V _f Typ. (V)					
				TO-252AA	TO-263	TO-220AC	TO-247AD-2LD	TO-247AD-3LD
SiC Diode 650V	650	4	1.5	PCDD0465G1 PCDC0465G1*	PCDB0465G1 PCDE0465G1*	PCDP0465G1		
		6	1.5	PCDD0665G1 PCDC0665G1*	PCDB0665G1 PCDE0665G1*	PCDP0665G1		
		8	1.5	PCDD0865G1 PCDC0865G1*	PCDB0865G1 PCDE0865G1*	PCDP0865G1		
		10	1.5	PCDD1065G1 PCDC1065G1*	PCDB1065G1 PCDE1065G1*	PCDP1065G1		
		12	1.5			PCDP1265G1		
		16	1.5			PCDP1665G1		
		20	1.5			PCDP2065G1		PCDH2065CCG1 PCDH2065CCG1-AU
		40	1.5					PCDH3065CCG1 PCDH3065CCG1-AU PCDH4065CCG1 PCDH4065CCG1-AU
SiC Diode 1200V	1200	5	1.5	PCDD05120G1 PCDC05120G1*		PCDP05120G1		
		8	1.5	PCDD08120G1 PCDC08120G1*		PCDP08120G1		
		10	1.5	PCDD10120G1 PCDC10120G1*	PCDB10120G1 PCDE10120G1*	PCDP10120G1		
		15	1.5			PCDP15120G1		
		20	1.5		PCDB20120G1 PCDE20120G1*	PCDP20120G1	PCDH20120G1	PCDH20120CCG1 PCDH20120CCG1-AU
		30	1.5					PCDH30120CCG1 PCDH30120CCG1-AU
		40	1.5					PCDH40120CCG1 PCDH40120CCG1-AU

* NC 1 Pin