

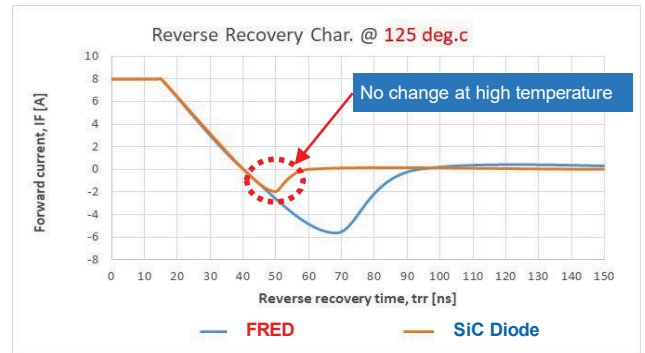
# 1200V & 650V SiC Diode

Gen. 2 SiC Diode for the Excellence in Power System Design



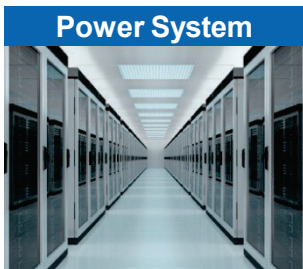
## ► Features

- Zero reverse recovery
- Temperature independent switching
- Enhanced surge current capability
- High junction temperature 175°C



Circuit	SiC Diode Device Power Rating	Package
Boost PFC	<ul style="list-style-type: none"> <li>• 650V / 4A -40A</li> <li>• 1200V / 5A -40A</li> </ul>	<ul style="list-style-type: none"> <li>• TO-252AA</li> <li>• TO-263</li> <li>• TO-220AC</li> <li>• TO-247AD-2LD</li> <li>• TO-247AD-3LD</li> <li>• DFN8080-8L</li> </ul>
Boost Converter		
Bridgeless PFC		
Vienna PFC		

## ► Target Applications



- Server Power
- Telecom Power
- PC Power



- PV Inverter
- ESS / BMS



- EV Charging Pile
- UPS
- Industrial Motor









- Home Appliance
- Digital TV



## ► Performance

	650V SiC Diode (10A rated)				1200V SiC Diode (10A rated)			
	PANJIT Gen2	PANJIT Gen1	Company A Gen6	Company B Gen2	PANJIT Gen2	PANJIT Gen1	Company A Gen4	Company B Gen1
Technology	JBS	MPS	JBS	JBS	JBS	MPS	JBS	JBS
$V_f$ (V)	1.4	1.50	1.27	1.38	1.4	1.50	1.5	1.45
$Q_c$ (nC/A)	2.7	2.0	3.4	2.5	5	4.2	5.2	6.2
$I_{FSM\_10us}$ (A) @10A rated	700	600	1250	650	900	900	750	850
$I_{FSM\_10ms}$ (A) @10A rated	50	50	86	45	75	80	71	90
Eas (mJ) @10uH, 10A rated	70	60	103	81	190	190	200	191

## ► Products

BV (V)	$I_f$ (A)	$V_f$ (V)						
			TO-252AA	TO-263	TO-220AC	TO-247AD-2LD	TO-247AD-3LD	DFN8080-8L
650	4	1.4	PCDG0465G2	PCDB0465G2	PCDP0465G2			PCDQD0465G2
	6		PCDG0665G2*	PCDB0665G2*	PCDP0665G2*			PCDQD0665G2*
	8		PCDG0865G2*	PCDB0865G2*	PCDP0865G2*			PCDQD0865G2*
	10		PCDG1065G2	PCDB1065G2	PCDP1065G2			PCDQD1065G2
	12			PCDB1265G2*	PCDP1265G2*			PCDQD1265G2*
	16			PCDB1665G2*	PCDP1665G2*			
	20			PCDB2065G2	PCDP2065G2	PCDH2065G2	PCDH2065CCG2	
	30							PCDH3065CCG2*
	40							PCDH4065CCG2*
1200	5	1.4	PCDG05120G2		PCDP05120G2			
	8		PCDG08120G2*		PCDP08120G2*			
	10		PCDG10120G2	PCDB10120G2	PCDP10120G2	PCDH10120G2	PCDH10120CCG2	
	15				PCDP15120G2*	PCDH15120G2*	PCDH15120CCG2*	
	20			PCDB20120G2*	PCDP20120G2*	PCDH20120G2*	PCDH20120CCG2*	
	30					PCDH30120G2	PCDH30120CCG2	
	40					PCDH40120G2*	PCDH40120CCG2*	

\* Under Development