

SiC Power Device

Features

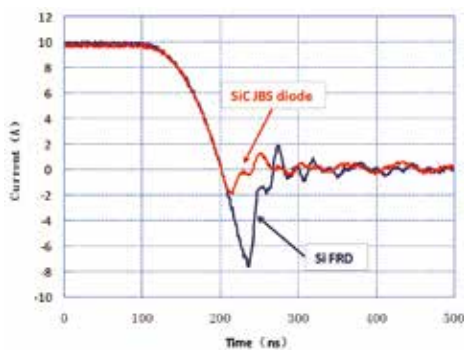
- ◆ No Reverse Recovery Charge
- ◆ High-Frequency Operation
- ◆ Temperature Independent Switching Behavior
- ◆ High Surge Capability
- ◆ Extremely Fast Switching

Applications

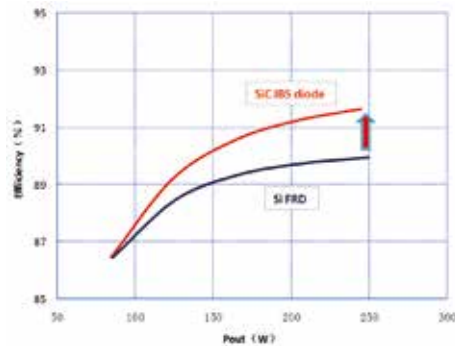
- ◆ Power Factor Correction
- ◆ Switch Mode Power Supplies
- ◆ Solar Applications
- ◆ Motor Drives



Turn-off Switching Waveform Comparison



Efficiency Comparison in a 220 kHz PFC System



SiC Schottky Diode

Part Number	DC Blocking Voltage VR(V)	Average Forward Current IF(A)	Forward Voltage VF(TJ =25°C) (V) (Typ.)	Forward Voltage VF(TJ =150°C) (V) (Typ.)	Maximum Junction Temperature TJ(MAX) (°C)	Package Type
NSD00606A	600	6	1.6	2.0	175	TO-220
NSD01006A	600	10	1.6	2.0	175	TO-220
NSD02006A	600	20	1.6	2.0	175	TO-220
NSD03006A	600	30	1.6	2.0	175	TO-220
NSD00212E	1200	2	1.5	2.0	175	TO-252
NSD01012A	1200	10	1.6	2.2	175	TO-220
NSD01512A	1200	15	1.6	2.2	175	TO-220
NSD02012A	1200	20	1.6	2.2	175	TO-220
NSD03012D	1200	30	1.6	2.2	175	TO-247
NSD04012D	1200	40	1.8	2.8	175	TO-247
NDS00517A	1700	5	1.7	2.5	175	TO-220
NSD01017D	1700	10	1.7	2.5	175	TO-247
NSD02017D	1700	20	1.7	2.5	175	TO-247
NSD02517D	1700	25	1.8	3.2	175	TO-247
NSD10220S	2000	2	1.7	2.3	175	SMB
NSD10225S	2500	2	1.8	2.5	175	SMB