International
IOR Rectifier

PD- 93904A

SMPS MOSFET

IRFB23N20D
IRFS23N20D
IRFSL23N20D

HEXFET® Power MOSFET

Applications

- High frequency DC-DC converters

V_{DSS}	$R_{DS(on)}$ max	I_D
200V	0.10Ω	24A

Benefits

- Low Gate-to-Drain Charge to Reduce Switching Losses
- Fully Characterized Capacitance Including Effective C_{OSS} to Simplify Design, (See App. Note AN1001)
- Fully Characterized Avalanche Voltage and Current

TO-220AB IRFB23N20D | D^2Pak IRFS23N20D | TO-262 IRFSL23N20D

Absolute Maximum Ratings

	Parameter	Max.	Units
I_D @ T_C = 25°C	Continuous Drain Current, V_{GS} @ 10V	24	A
I_D @ T_C = 100°C	Continuous Drain Current, V_{GS} @ 10V	17	
I_{DM}	Pulsed Drain Current ①	96	
P_D @T_A = 25°C	Power Dissipation ⑦	3.8	W
P_D @T_C = 25°C	Power Dissipation	170	
	Linear Derating Factor	1.1	W/°C
V_{GS}	Gate-to-Source Voltage	± 30	V
dv/dt	Peak Diode Recovery dv/dt ③	3.3	V/ns
T_J	Operating Junction and	-55 to + 175	°C
T_{STG}	Storage Temperature Range		
	Soldering Temperature, for 10 seconds	300 (1.6mm from case)	
	Mounting torqe, 6-32 or M3 screw⑥	10 lbf•in (1.1N•m)	

Typical SMPS Topologies

- Telecom 48V input Forward Converter

Notes ① through ⑤ are on page 11