11N60E

Power MOSFET

PRODUCT SUMMARY		
VDS (V)	650	
RDS(on) max. at 25 °C (Ω)	VGS = 10 V	0.17
Qg max. (nC)	109	
Qgs (nC)	15	
Qgd (nC)	31	
Configuration	Single	

FEATURES

- Low figure-of-merit (FOM) Ron x Qg
- Low input capacitance (Ciss)
- Reduced switching and conduction losses
- Ultra low gate charge (Qg)
- Avalanche energy rated (UIS)

RoHS* Available

TO-220 FULLPAK

G D S

N-Channel MOSFET

ABSOLUTE MAXIMUM RATINGS (TC = 25 °C, unless otherwise noted)				
PARAMETER		SYMBOL	LIMIT	UNIT
Drain-Source Voltage		VDS	650	V
Gate-Source Voltage		VGS	± 30	
Continuous Drain Current (TJ = 150 °C)	VGS at 10 V, TC = 25 °C	ID	20	A
	VGS at 10 V, TC = 100 °C		13	
Pulsed Drain Current a		IDM	56	
Linear Derating Factor			1.8	W/°C
Single Pulse Avalanche Energy b		EAS	691	mJ
Maximum Power Dissipation		PD	30	W
Operating Junction and Storage Temperature Range		TJ, Tstg	-55 to +150	°C
Drain-Source Voltage Slope	TJ = 125 °C	dV/dt	70	V/ns
Reverse Diode dV/dt d			26	
Soldering Recommendations (Peak Temperature) c	for 10 s		300	°C

Notes
a. Repetitive rating; pulse width limited by maximum junction temperature.
b. VDD = 50 V, starting TJ = 25 °C, L = 28 mH, Rg = 25 Ω, IAS = 5 A.
c. 1.6 mm from case.
d. ISD ≤ ID, di/dt = 100 A/µs, starting TJ = 25 °C.