V_{DSS} 60V

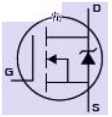
$R_{DS}(on)$ 11.5mΩ

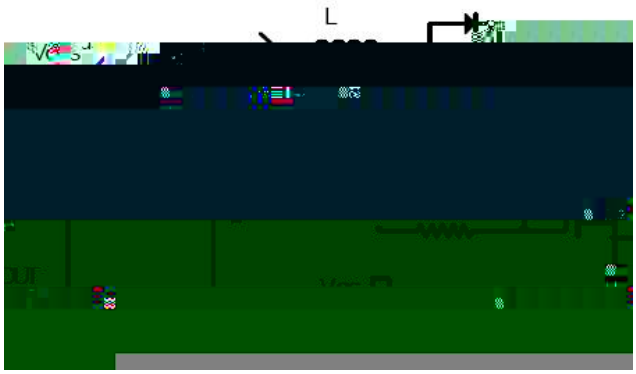
I_D @ T_C = 25°C	Continuous Drain Current, V_{GS} @ 10V	50	A
I_D @ T_C = 100°C	Continuous Drain Current, V_{GS} @ 10V	30	
I_{DM}	Pulsed Drain Current	200	
P_D @T_C = 25°C	Power Dissipation	65	W
V_{DS}	Drain-Source Voltage	60	V
V_{GS}	Gate-to-Source Voltage	± 20	V
T_J T_{STG}	Operating Junction and Storage Temperature Range	-55 to +150	°C

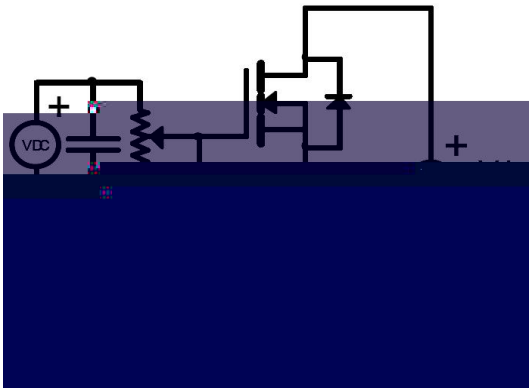
$R_{\theta JC}$	Junction-to-case	—	1.9	/W

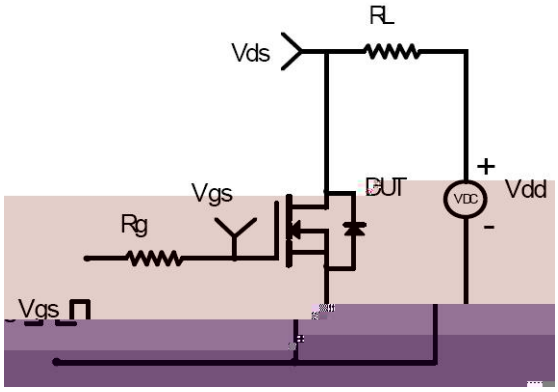
@T_A=25 unless otherwise specified

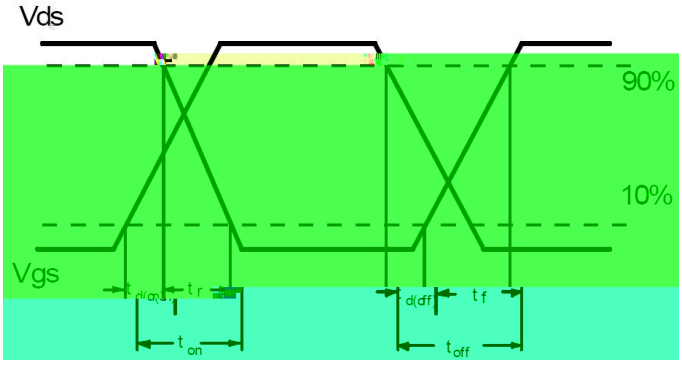
$V_{(BR)DSS}$	Drain-to-Source breakdown voltage	60	—	—	V	V_{GS} = 0V, I_D = 250μA
$R_{DS(on)}$	Static Drain-to-Source on-resistance	—	11.5	15	mΩ	V_{GS}=10V,I_D = 20A
$V_{GS(th)}$	Gate threshold voltage	2	—	4	V	V_{DS} = V_{GS}, I_D = 250μA
I_{DSS}	Drain-to-Source leakage current	—	—	1	μA	V_{DS} = 60V,V_{GS} = 0V
I_{GSS}	Gate-to-Source forward leakage	—	—	100	nA	V_{GS} =20V
		—	—	-100		V_{GS} = -20V
C_{iss}	Input capacitance	—	1722	—	pF	V_{GS} = 0V
C_{oss}	Output capacitance	—	125	—		V_{DS} = 25V
C_{rss}	Reverse transfer capacitance	—	108	—		*f* = 1MHz
Q_g	Total gate charge	—	37	—	nC	I_D = 30A,
Q_{gs}	Gate-to-Source charge	—	6	—		V_{DS}=30V,
Q_{gd}	Gate-to-Drain("Miller") charge	—	10	—		V_{GS} = 10V
$t_{d(on)}$	Turn-on delay time	—	15	—	ns	V_{GS}=10V, V_{DS} =30V, R_{GEN}=1.8Ω, I_D = 30A
t_r	Rise time	—	10	—		
$t_{d(off)}$	Turn-Off delay time	—	36	—		
t_f	Fall time	—	29	—		

I_S	Continuous Source Current (Body Diode)	—	—	50	A	MOSFET symbol showing the integral reverse p-n junction diode. 
I_{SM}	Pulsed Source Current (Body Diode)	—	—	200	A	
V_{SD}	Diode Forward Voltage	—	—	1.2	V	I_S=30A, V_{GS}=0V
t_{rr}	Reverse Recovery Time	—	38	—	ns	T_J = 25°C, I_F =30A, di/dt = 100A/μs
Q_{rr}	Reverse Recovery Charge	—	50	—	nC	

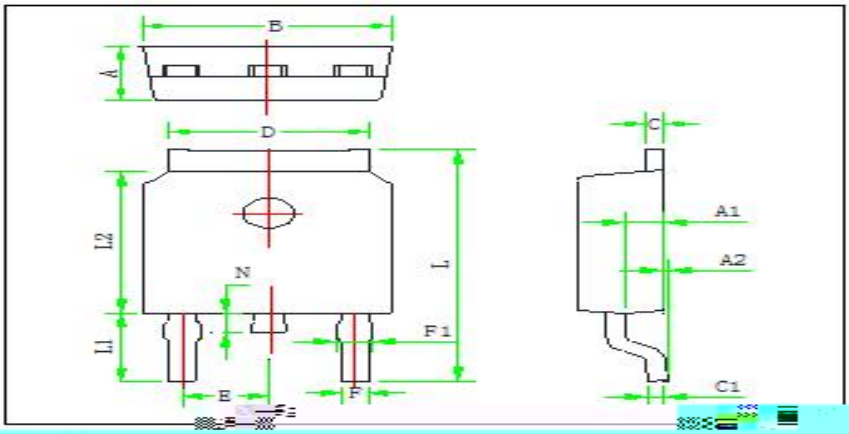








Calculated continuous current based on maximum allowable junction temperature.
Repetitive rating; pulse width limited by max. junction temperature.
The power dissipation P_D is based on max. junction temperature, using junction-to-case thermal resistance.



C1	0.45	0.50	0.58
D	5.12	5.32	5.52
E	2.286 TYP		
F	0.66	0.76	0.86
F1	0.66	0.86	1.06
L	9.60	9.90	10.20
L1	2.6	2.8	3.0
L2	5.95	6.10	6.25
N	0.60	0.80	1.00

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