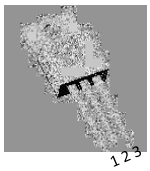
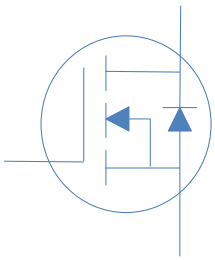
150V N-Ch Power MOSFET

V_{DS}		150	V
$R_{DS(on),typ}$	V_{GS}=10V	16.0	mΩ
$R_{DS(on),typ}$	V_{GS}=4.5V	19	mΩ
$I_{D\ (Sillicon\ Limited)}$		69	A





Part Number	Package	Marking
HGP190N15SL	TO-220	P190N15SL

Absolute Maximum Ratings at T_j=25 (unless otherwise specified)

Parameter	Symbol	Conditions	Value	Unit
Continuous Drain Current (Silicon Limited)	I_D	T_C=25	69	A
		T_C=100	49	
Drain to Source Voltage	V_{DS}	-	150	V
Gate to Source Voltage	V_{GS}	-	±20	V
Pulsed Drain Current	I_{DM}	-	150	A
Avalanche Energy, Single Pulse	E_{AS}	L=0.3mH, T_C=25	184	mJ
Power Dissipation	P_D	T_C=25	214	W
Operating and Storage Temperature	T_J, T_{stg}	-	-55 to175	

Absolute Maximum Ratings

Parameter	Symbol	Max	Unit
Thermal Resistance Junction-Case	$R_{\theta JC}$	0.7	/W
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	50	/W

Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage

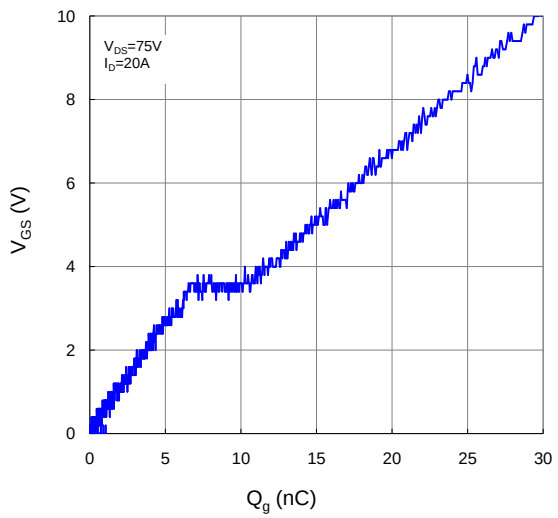


Figure 8. Typical Capacitance vs. Drain-to-Source Voltage

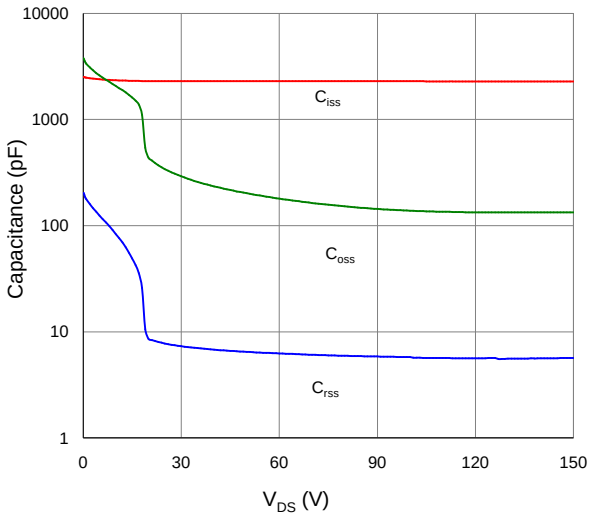


Figure 9. Maximum Safe Operating Area

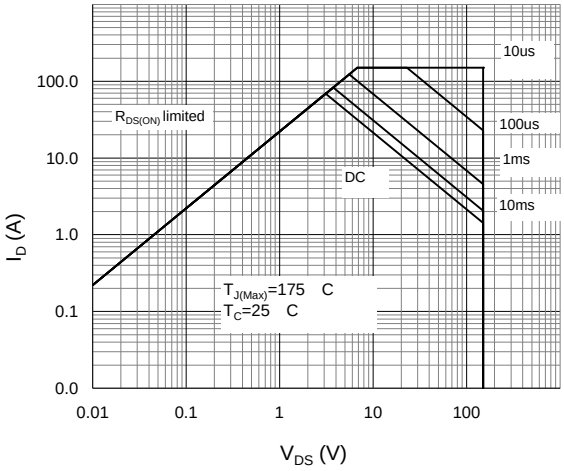


Figure 10. Maximun Drain Current vs. Case Temperature

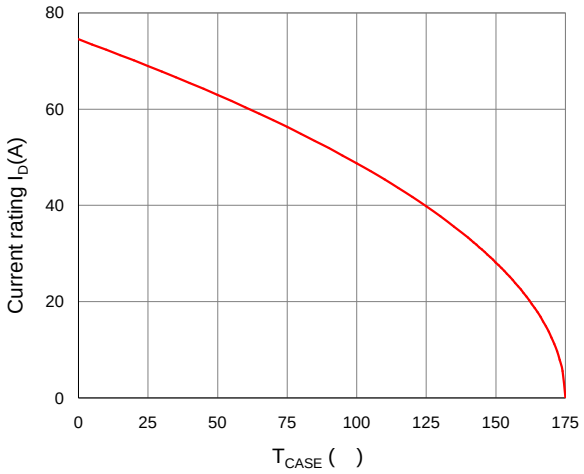
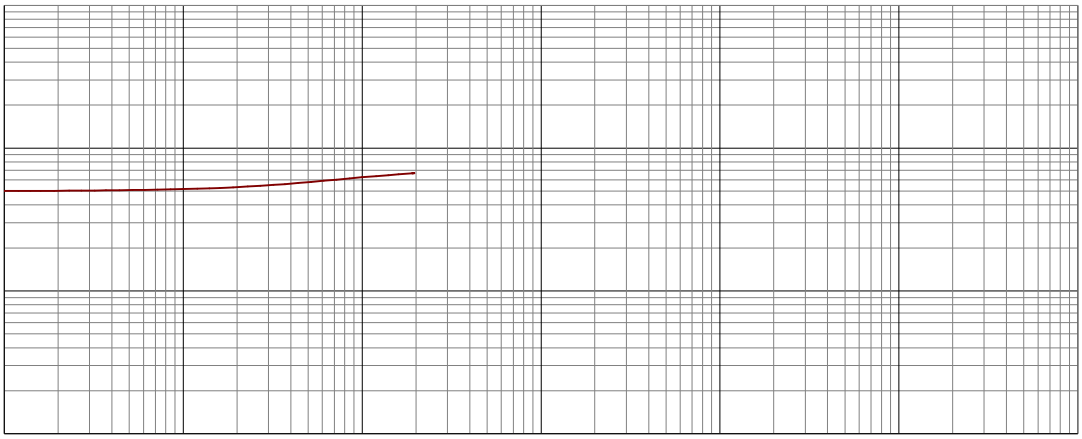
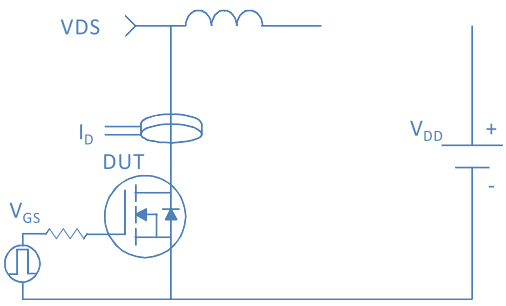


Figure 11. Normalized Maximum Transient Thermal Impedance, Junction-to-Case



Inductive switching Test	

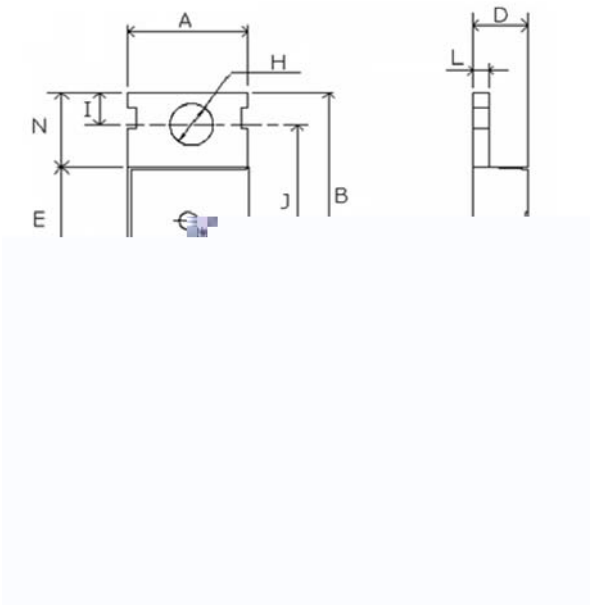
Gate Charge Test	

Uclamped Inductive Switching (UIS) Test	
	

Diode Recovery Test	

Package Outline

TO-220, 3 leads



Dimentions in mm unless otherwise specified

Symbol	Min	Nom	Max
A	9.66	9.97	10.28
A2	9.80	10.00	10.20
B	15.60	15.70	15.80
C	12.70	13.48	14.27
D	4.30	4.50	4.70
E	9.00	9.20	9.40
F		2.54	
G1	1.32	1.52	1.72
G2	0.70	0.82	0.95
G3	0.45	0.52	0.60
H	3.50	3.60	3.70
I	2.70	2.80	2.90
J	15.70	15.97	16.25
K	2.20	2.40	2.60
L	1.15	1.27	1.40
N	6.40	6.60	6.80