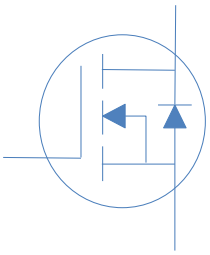
,

V_{DS}			60	V
$R_{DS(on),typ}$	TO-263	V_{GS}=10V	7.0	m
$R_{DS(on),typ}$		V_{GS}=4.5V	9.7	m
$R_{DS(on),typ}$	TO-220	V_{GS}=10V	7.3	m
$R_{DS(on),typ}$		V_{GS}=4.5V	10.0	m
I_{D} (Sillicon Limited)			63	A



HGP090N06SL	TO-220	GP090N06SL

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

		Conditions	Value	
Continuous Drain Current (Silicon Limited)	I_D	T_C=25	63	A
		T_C=100		
Drain to Source Voltage			60	V
Gate to Source Voltage	V_{GS}	-	±20	V
	P_D	T_C=25	79	W

Absolute Maximum Ratings

V_{GS}=4.5V, I_D=10A	TO-263	-	9.7	12.7
V_{GS}=4.5V, I_D=10A	TO-220			

Fig 1. Typical Output Characteristics

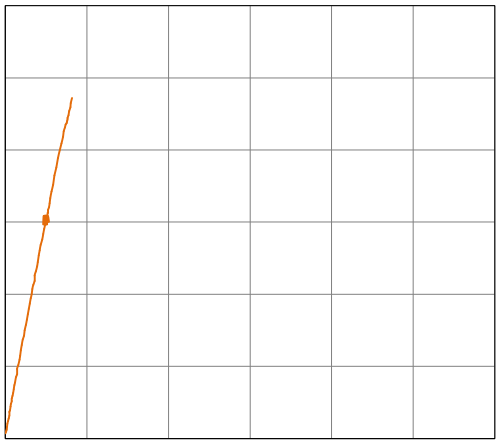


Figure 2. On-Resistance vs. Gate-Source Voltage

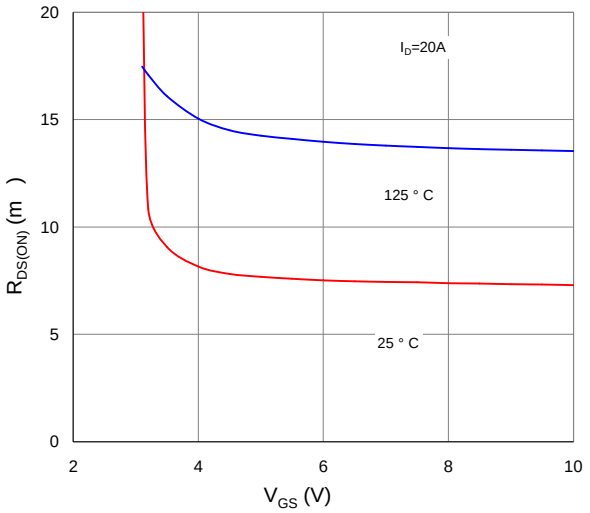


Figure 3. On-Resistance vs. Drain Current and Gate Voltage

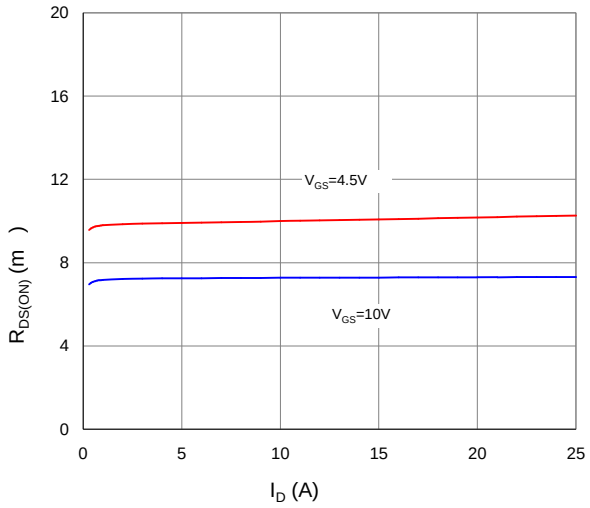


Figure 4. Normalized On-Resistance vs. Junction Temperature

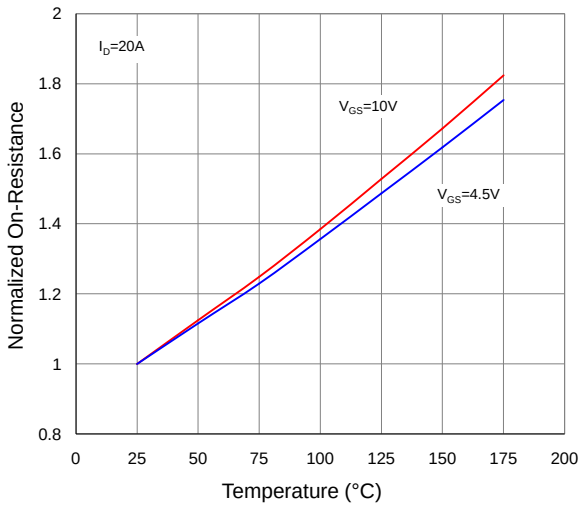


Figure 5. Typical Transfer Characteristics

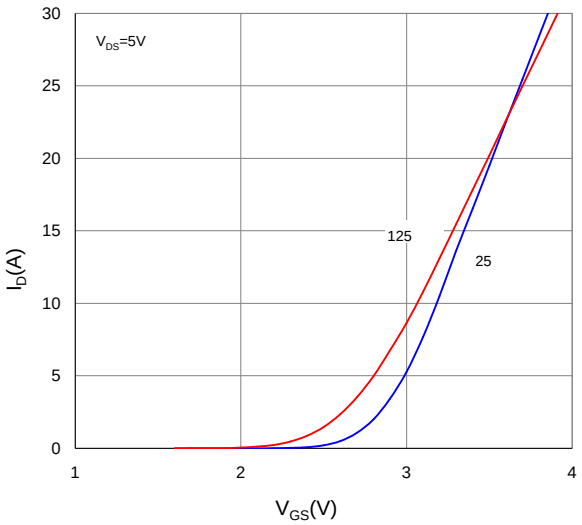


Figure 6. Typical Source-Drain Diode Forward Voltage

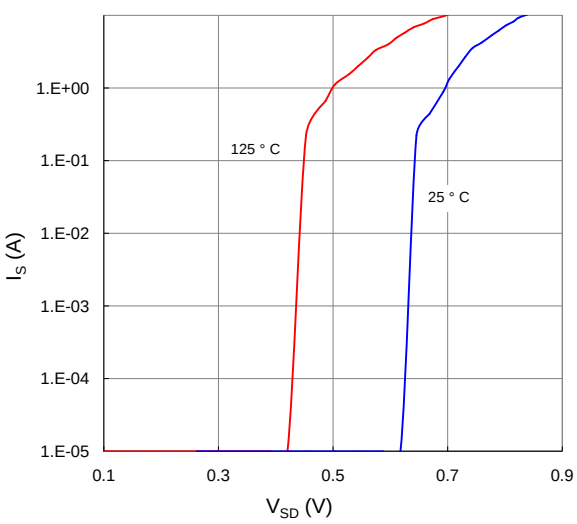
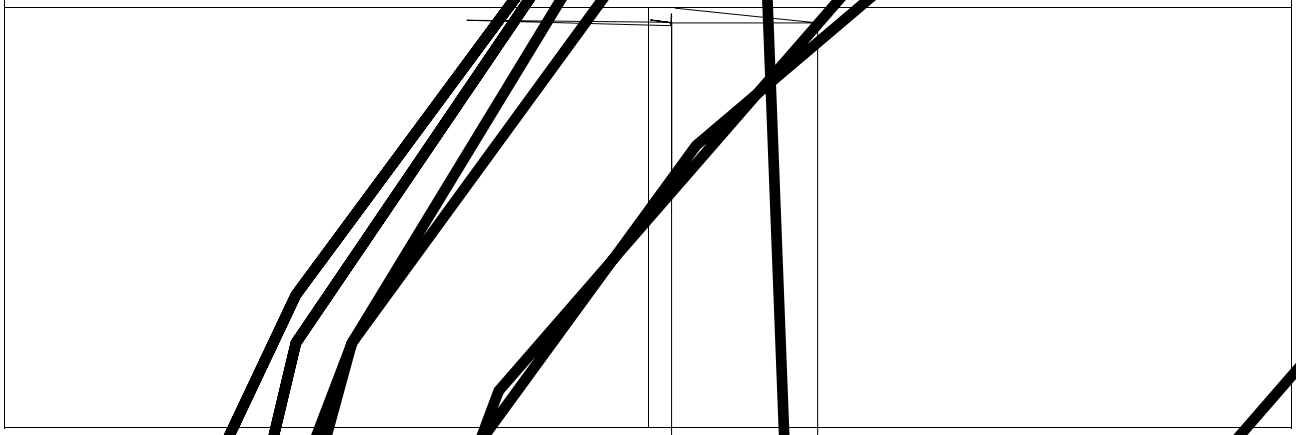
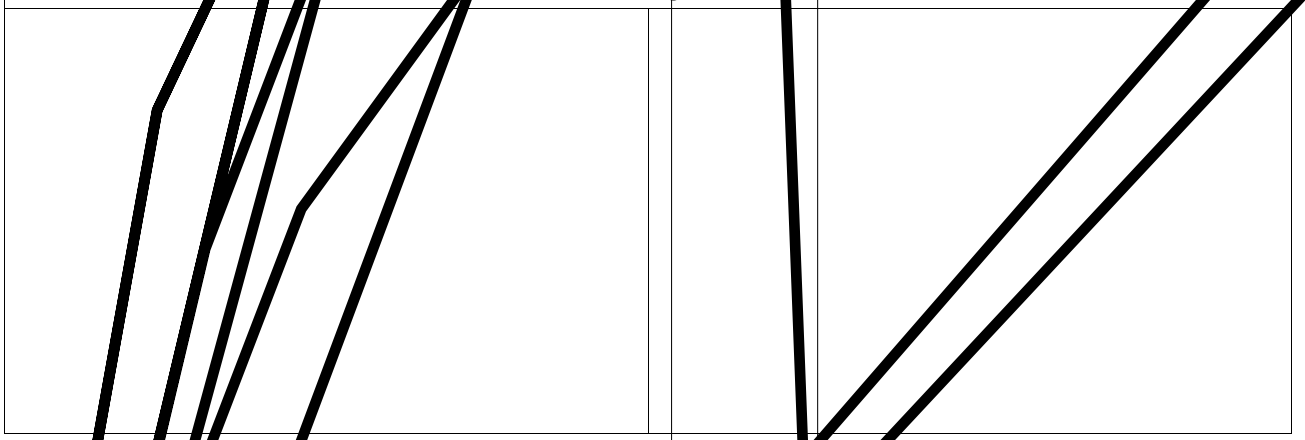


Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage	Figure 8. Typical Capacitance vs. Drain-to-Source Voltage

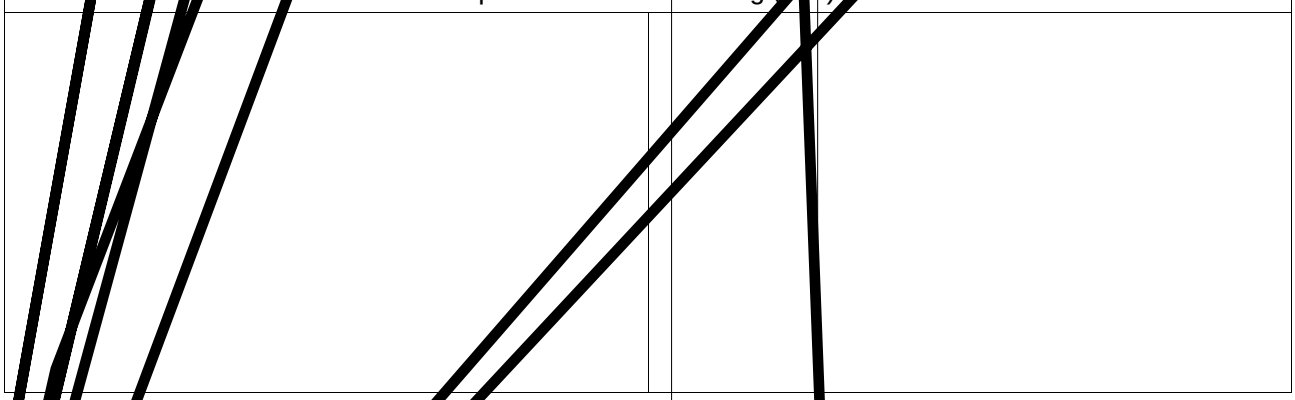
Inductive switching Test



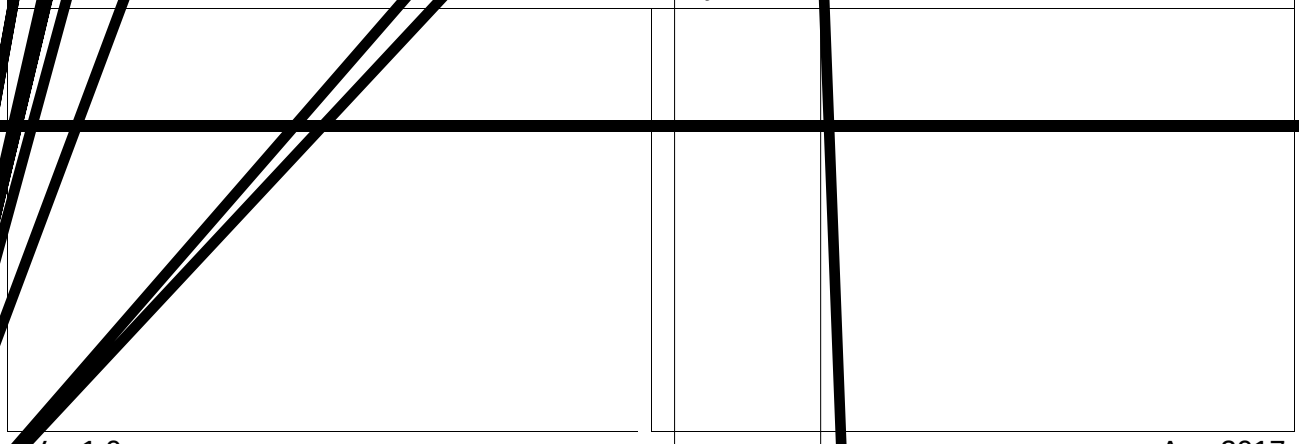
Gate Charge Test



Uclamped Inductive Switching (UIS) Test

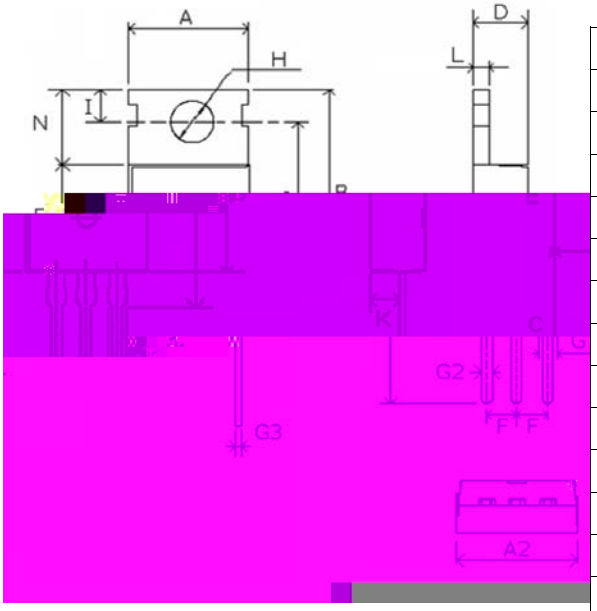


Diode Recovery Test



Package Outline

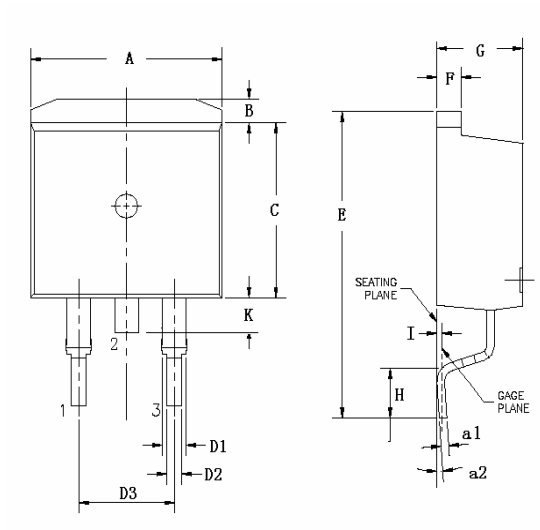
TO-220, 3 leads



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

TO-263, 2 leads



Dimentions in mm unless otherwise specified

Symbol	Min	Nom	Max
A	9.66	9.97	10.28
B	1.02	1.17	1.32
C	8.59	9.00	9.40
D1	1.14	1.27	1.40
D2	0.70	0.83	0.95
D3		5.08	
E	15.09	15.24	15.39
F	1.15	1.28	1.40
G	4.30	4.50	4.70
H	2.29	2.54	2.79
I		0.25	
K	1.30	1.45	1.60
a1	0.45	0.55	0.65
a2(degree)	0°		8°