120V N-Ch Power MOSFET

V_{DS}		120	V
$R_{DS(on),typ}$	V_{GS}=10V	7.8	mΩ
$R_{DS(on),typ}$	V_{GS}=4.5V	8.6	mΩ
$I_{D\ (Sillicon\ Limited)}$		49	A

Part Number	Package	Marking
HGA100N12SL	TO-220F	GA100N12SL

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 T_C=100	49 35	A
Drain to Source Voltage	V_{DS}	-	120	V
Gate to Source Voltage	V_{GS}	-	±20	V
Pulsed Drain Current	I_{DM}	-	300	A
Avalanche Energy, Single Pulse	E_{AS}	L=0.4mH, T_C=25	320	mJ
Power Dissipation	P_D	T_C=25	50	W
Operating and Storage Temperature	T_J, T_{stg}	-	-55 to 175	

Parameter	Max	
	3.5	/W

Fig 1. Typical Output Characteristics

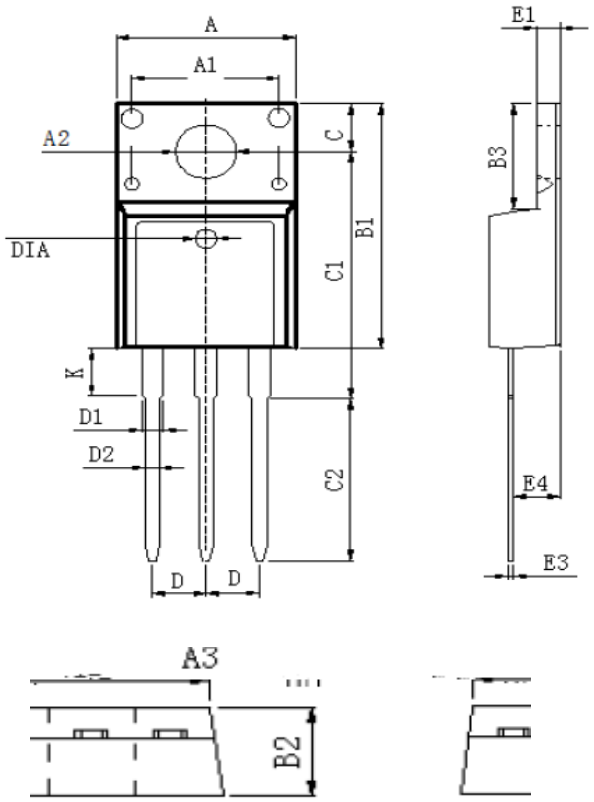
Figure 3. On-Resistance vs. Drain Current and Gate Voltage

Figure 4. Normalized On-Resistance vs. Junction Temperature

[redacted]

Package Outline

TO-220F, 3 leads



DIM	MILLIMETERS
A	10.16±0.3
A1	7.00±0.1
A2	3.3±0.2
A3	9.5±0.2
B1	15.87±0.3
B2	4.7±0.2
B3	6.68±0.4
C	3.3±0.2
C1	12.57±0.3
C2	10.02±0.5
D	2.54±0.05
D1	1.28±0.2
D2	0.8±0.1
K	3.1±0.3
E1	9.4±0.2
E3	0.
E4	0.
5(deep 0.2)	DIA ⊙1.
Unit :mm	