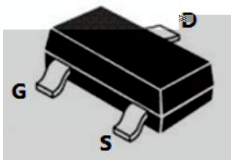
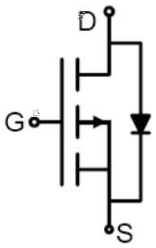
V_{DSS}	-12V
R_{DS}(on)	13.3mΩ (typ.)
I_D	-9A

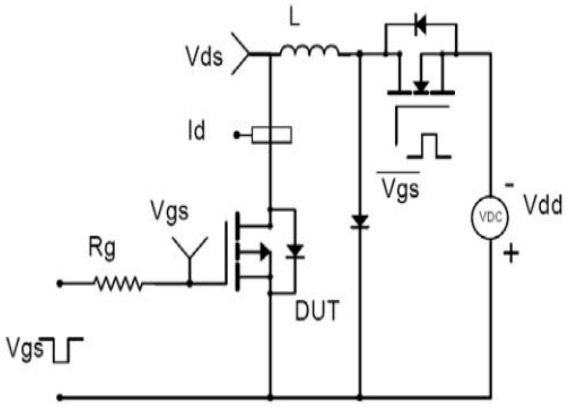


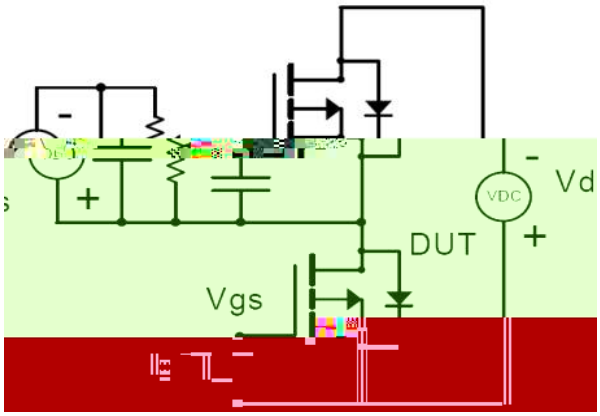


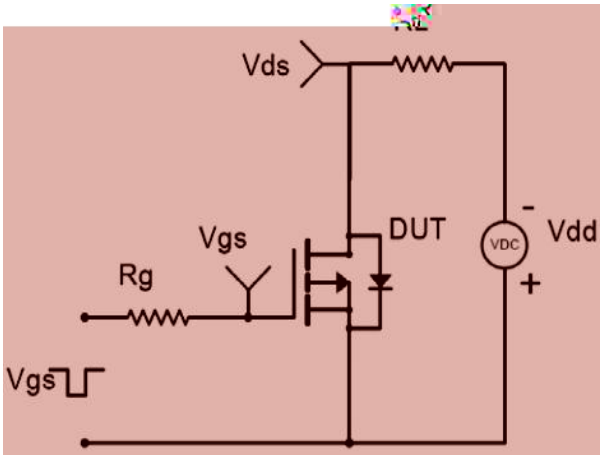
Advanced MOSFET process technology
Special designed for PWM, load switching and general purpose applications
Ultra low on-resistance with low gate charge
Fast switching and reverse body recovery
150 operating temperature

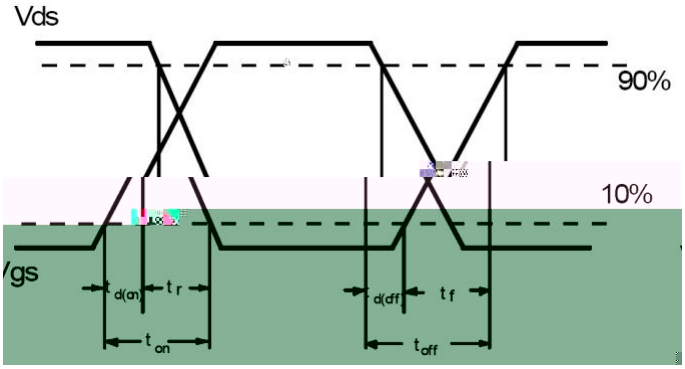
It utilizes the latest processing techniques to achieve the high cell density and reduces the on-resistance with high repetitive avalanche rating. These features combine to make this design an extremely efficient and reliable device for use in power switching application and a wide variety of other applications.

I_D @ T_C = 25°C	Continuous Drain Current, V_{GS} @ 10V	-9	A
I_D @ T_C = 100°C	Continuous Drain Current, V_{GS} @ 10V	-5.8	
I_{DM}	Pulsed Drain Current	-36	
P_D @T_C = 25°C	Power Dissipation	2	W
V_{DS}	Drain-Source Voltage	-12	V
V_{GS}	Gate-to-Source Voltage	± 12	V
E_{AS}	Single Pulse Avalanche Energy @ L=0.5mH	20	mJ
T_J T_{STG}	Operating Junction and Storage Temperature Range	-55 to +150	°C

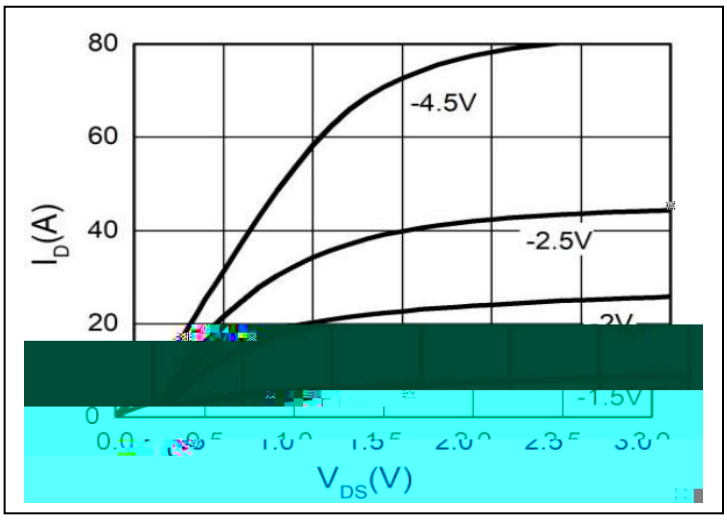


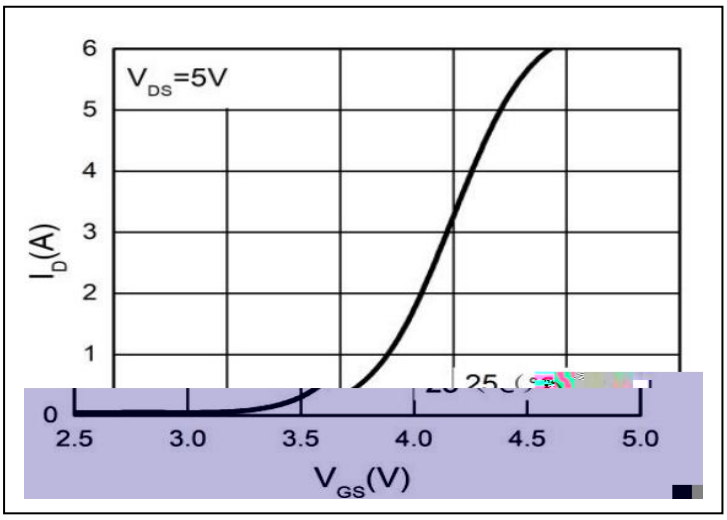


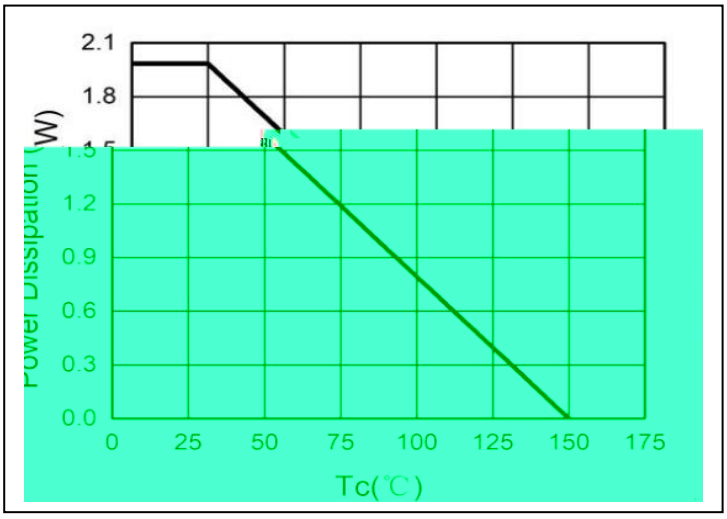


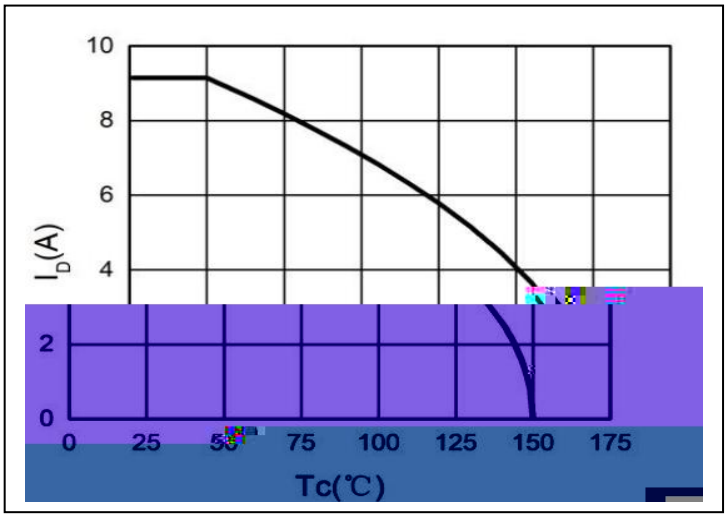


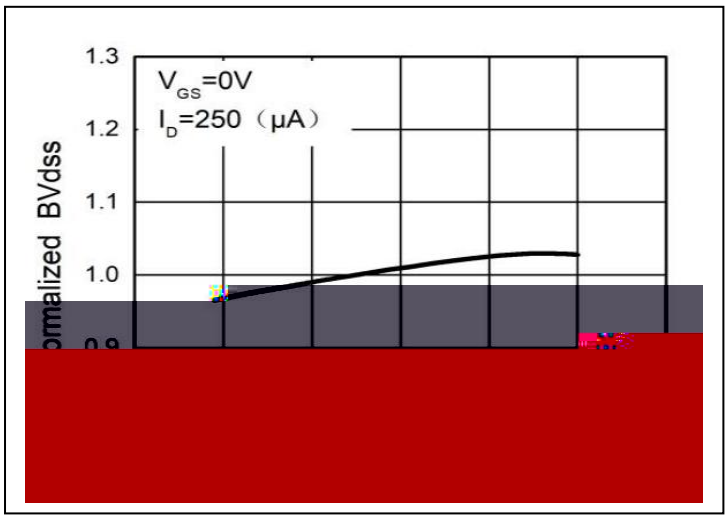
Calculated continuous current based on maximum allowable junction temperature.
Repetitive rating; pulse width limited by max. junction temperature.
The power dissipation PD is based on max. junction temperature, using junction-to-case thermal resistance.
The value of $R_{\theta JA}$ is measured with the device mounted on 1 in 2 FR-4 board with 2oz. Copper, in a still air environment with TA =25°C

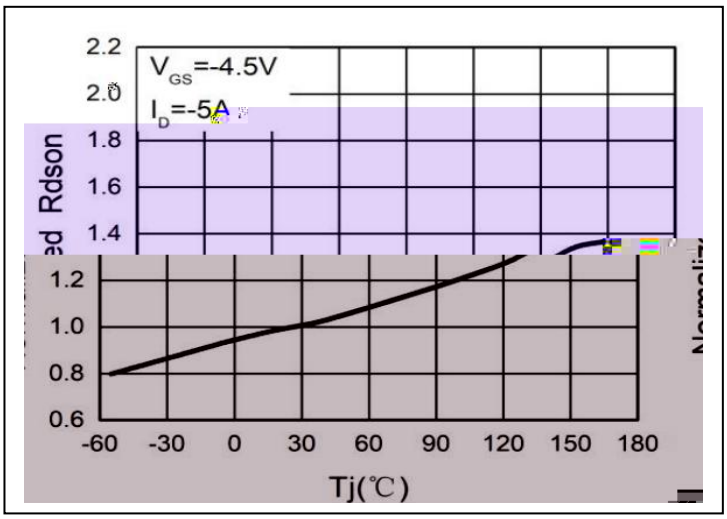

80
60
40
20
0
I_D(A)
-4.5V
-2.5V
-1.5V
V_{DS}(V)

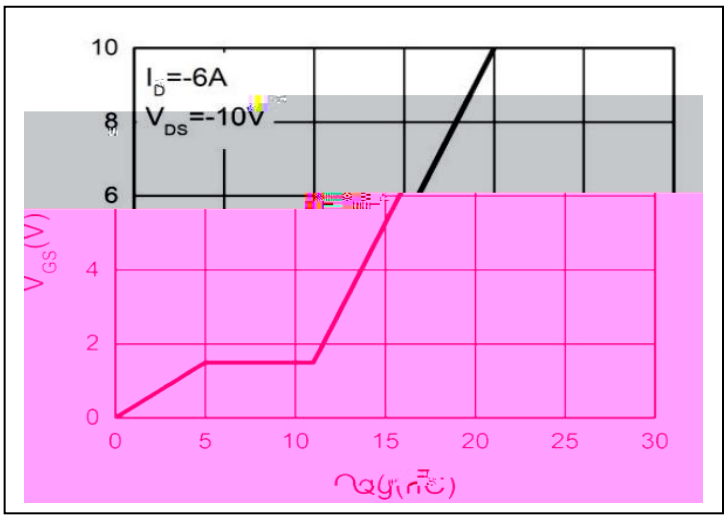

V_{DS}=5V
6
5
4
3
2
1
0
I_D(A)
2.5
3.0
3.5
4.0
4.5
5.0
V_{GS}(V)

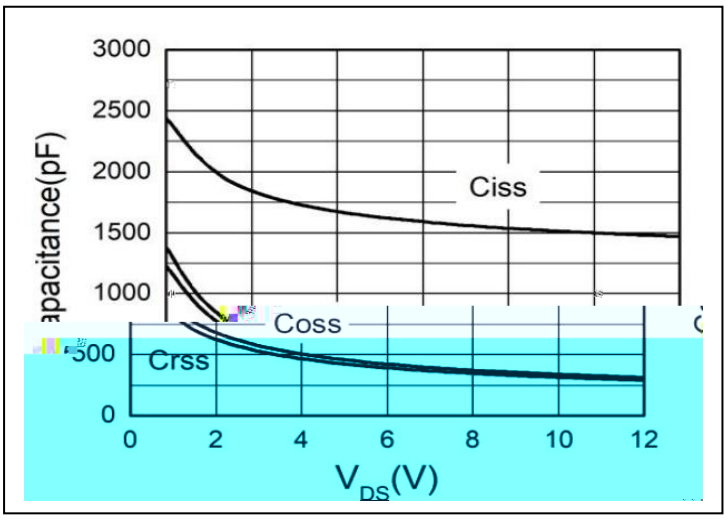

2.1
1.8
1.2
0.9
0.6
0.3
0.0
0
25
50
75
100
125
150
175
Tc(℃)

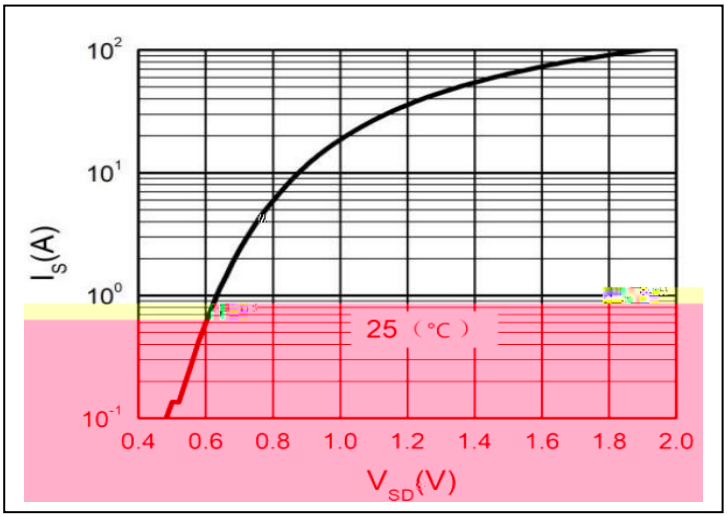

10
8
6
4
2
0
I_D(A)
0
25
50
75
100
125
150
175
Tc(℃)

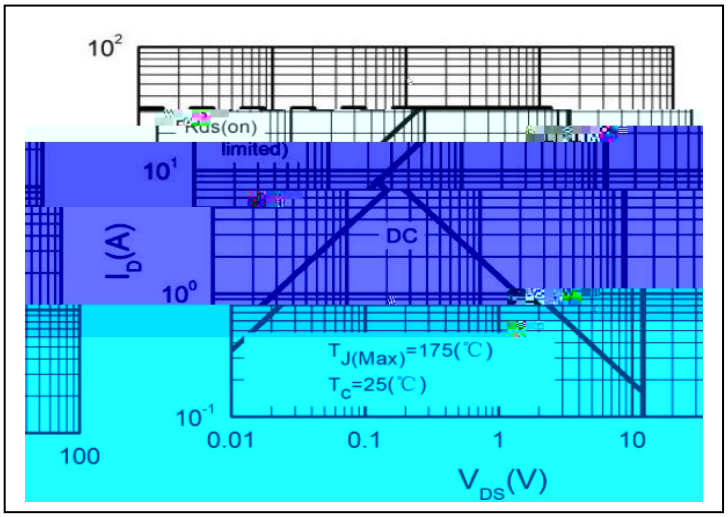

1.3
1.2
1.1
1.0
V_{GS}=0V
I_D=250（μA）

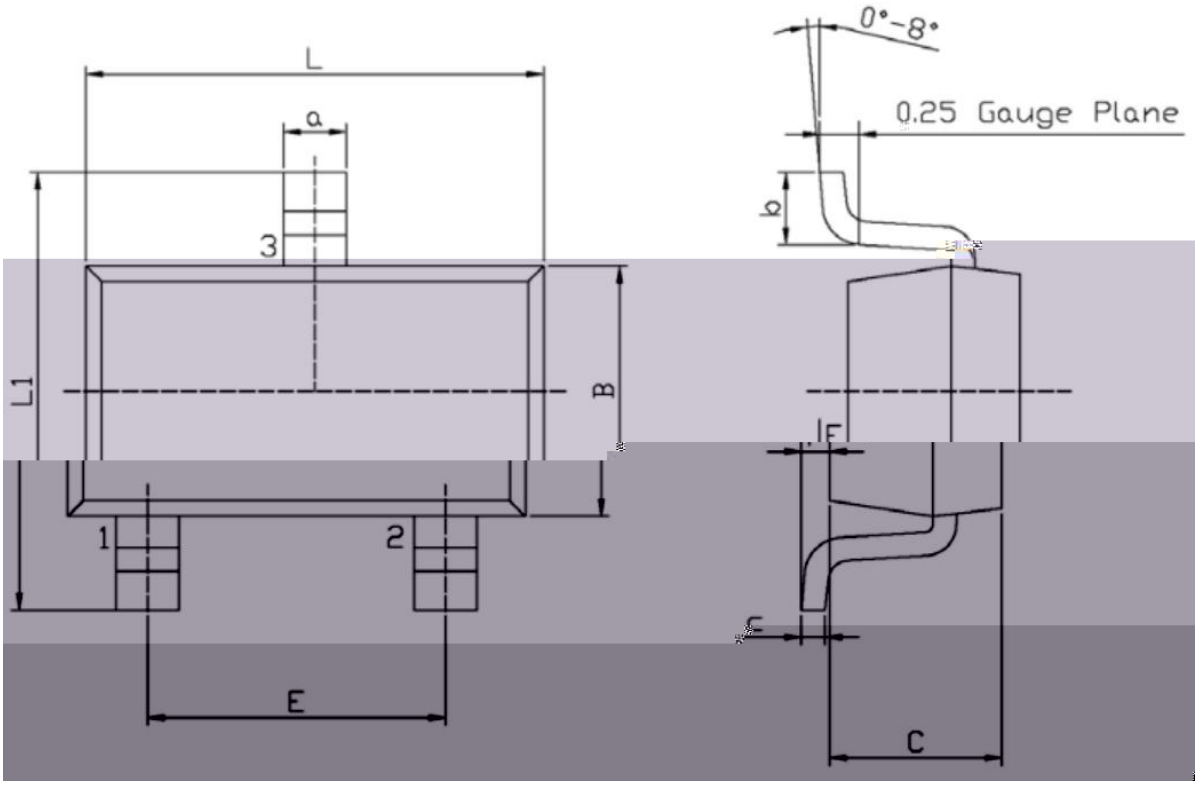

2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
V_{GS}=-4.5V
I_D=-5A
-60
-30
0
30
60
90
120
150
180
Tj(℃)


10
8
6
4
2
0
I_D=-6A
V_{DS}=-10V
V_{GS}(V)
0
5
10
15
20
25
30


3000
2500
2000
1500
1000
500
0
Ciss
Coss
Crss
0
2
4
6
8
10
12
V_{DS}(V)


10^2
10^1
10^0
10^{-1}
I_S(A)
25（℃）
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
V_{SD}(V)


10^2
10^1
10^0
10^{-1}
I_D(A)
Rds(on)
limited)
DC
$T_{J(Max)}$=175(℃)
T_C=25(℃)
0.01
0.1
1
10
100
V_{DS}(V)



Unit: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.82	3.02	a	0.35	0.50
B	1.50	1.70	C	0.10	0.20
C	0.90	1.30	b	0.35	0.55
L1	2.60	3.00	F	0	0.10
E	1.90	2.00			

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