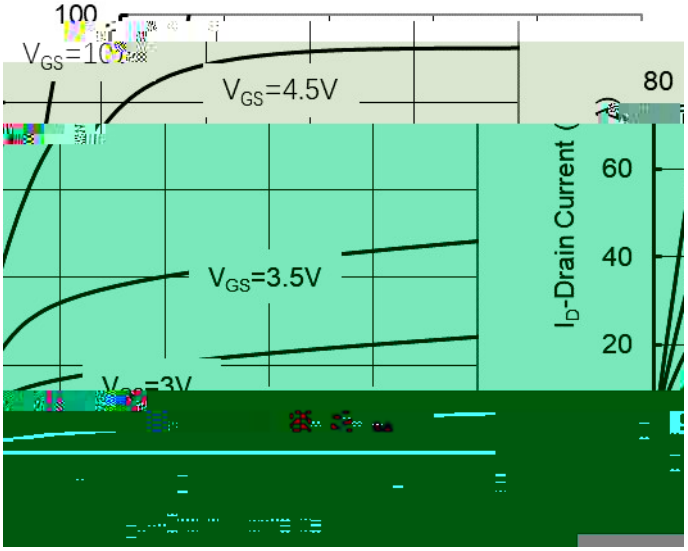
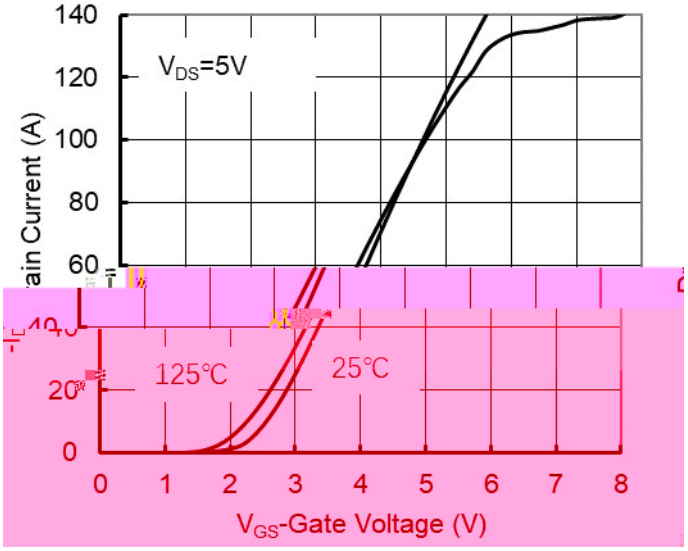
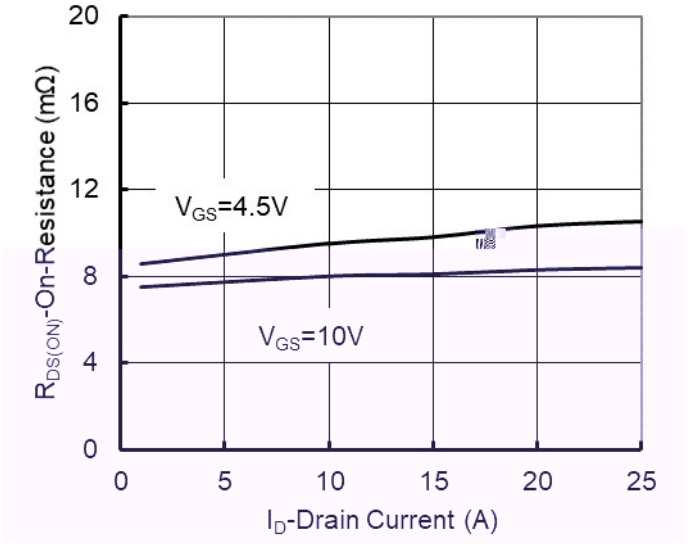
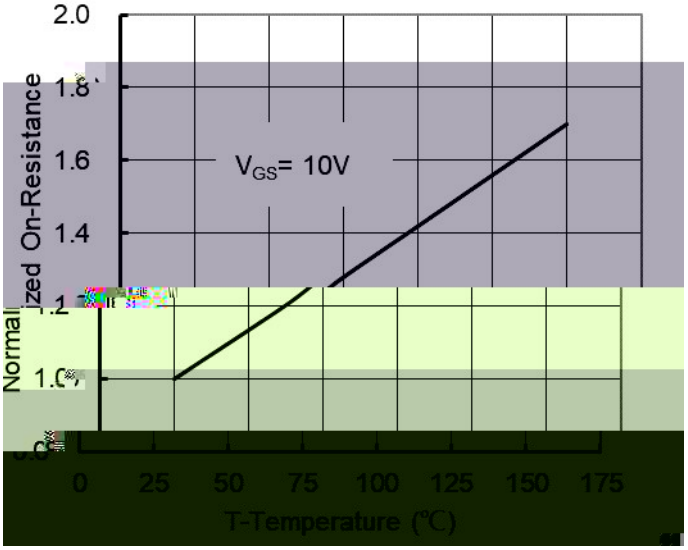
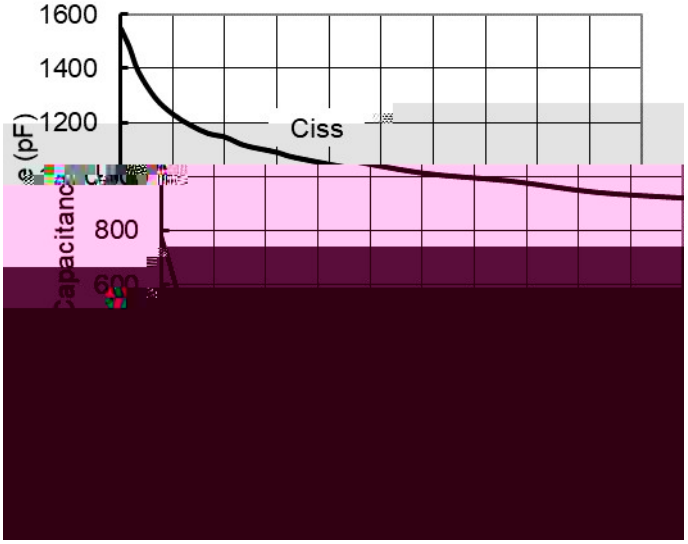
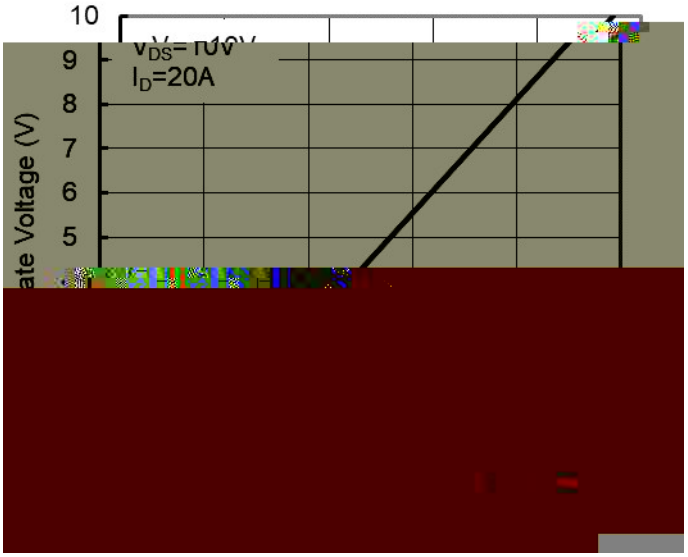

100
80
60
40
20
V_{GS}=4.5V
V_{GS}=3.5V
I_D-Drain Current (

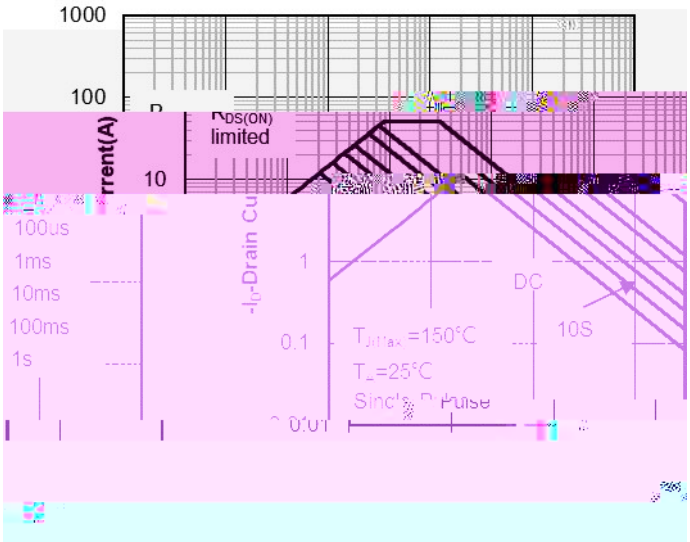

140
120
100
80
60
20
0
V_{DS}=5V
125℃
25℃
0 1 2 3 4 5 6 7 8
V_{GS}-Gate Voltage (V)

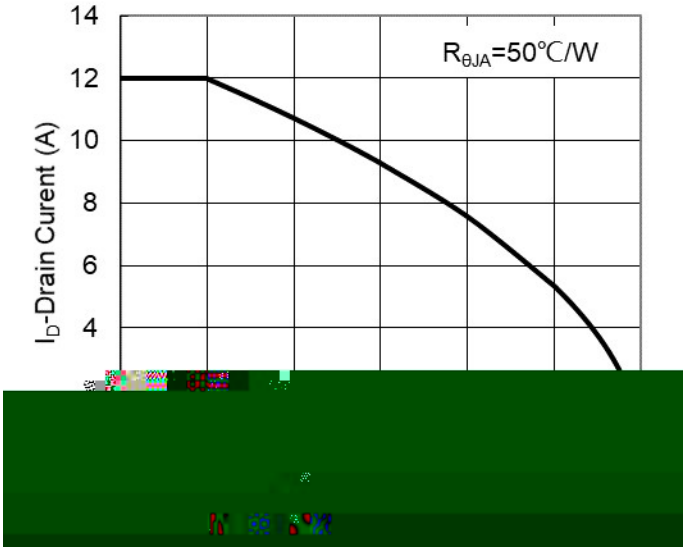

20
16
12
8
4
0
$R_{DS(ON)}$-On-Resistance (mΩ)
V_{GS}=4.5V
V_{GS}=10V
0 5 10 15 20 25
I_D-Drain Current (A)

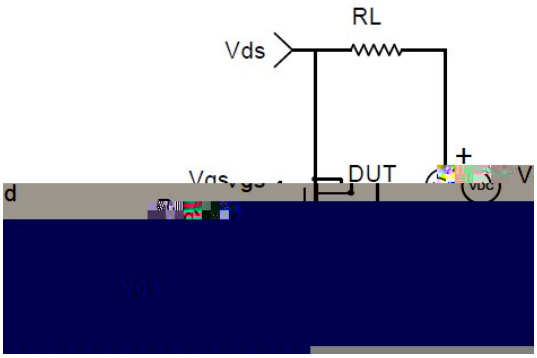

2.0
1.6
1.4
V_{GS}= 10V
0 25 50 75 100 125 150 175
T-Temperature (℃)

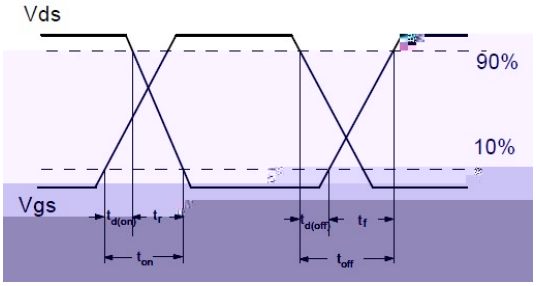

1600
1400
1200
800
Ciss

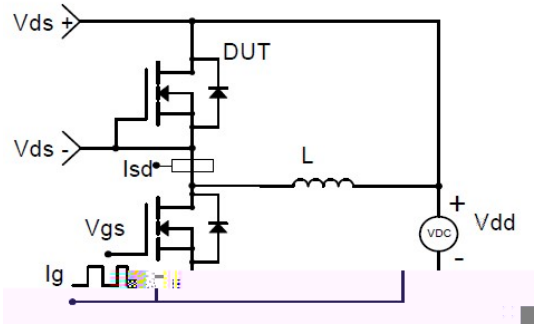

10
9
8
7
6
5
I_D=20A

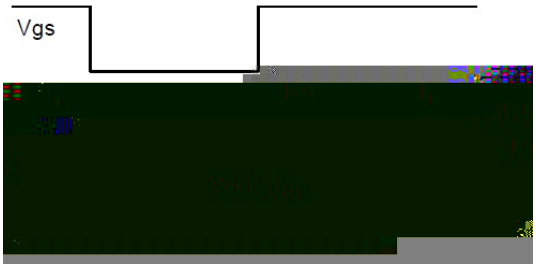

1000
100
10
1
0.1
0.01
limited
100us
1ms
10ms
100ms
1s
DC
10S
=150°C
=25°C

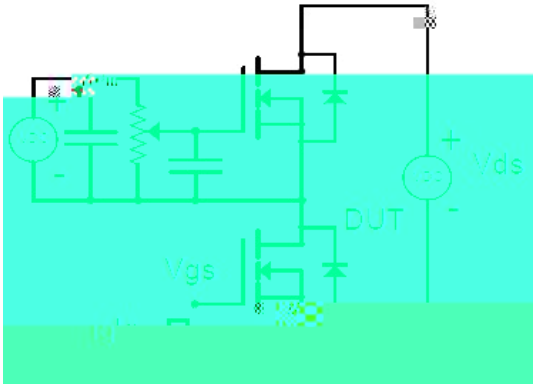

14
12
10
8
6
4
$R_{\theta JA}$=50℃/W
I_D-Drain Curent (A)

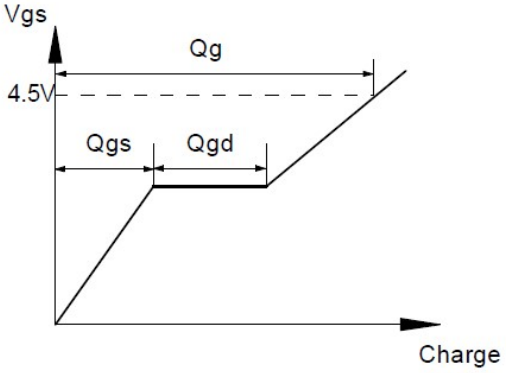

RL
Vds
DUT
+
VDC

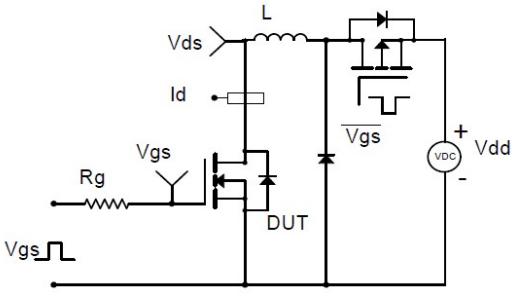

Vds
90%
10%
Vgs
td(on)
tr
td(off)
tf
ton
toff

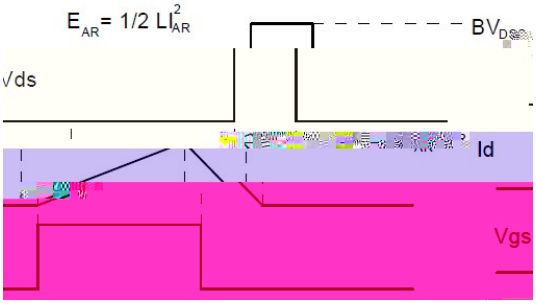

Vds +
DUT
Vds -
Isd
L
Vgs
+
Vdd
VDC
-
Ig


Vgs


+
Vds
-
DUT
Vgs


Vgs
Qg
4.5V
Qgs
Qgd
Charge


L
Vds
Id
Vgs
Rg
DUT
Vgs
+
Vdd
VDC
-
Vgs


EAR= 1/2 LIAR2
BVDSS
Vds
Id
Vgs