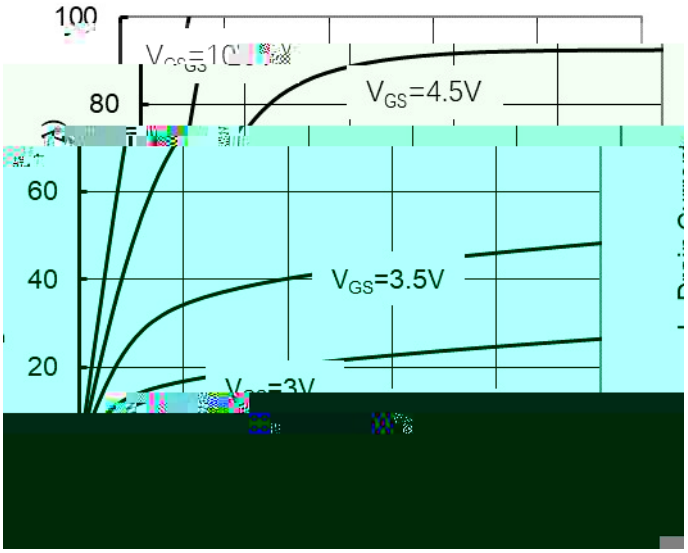
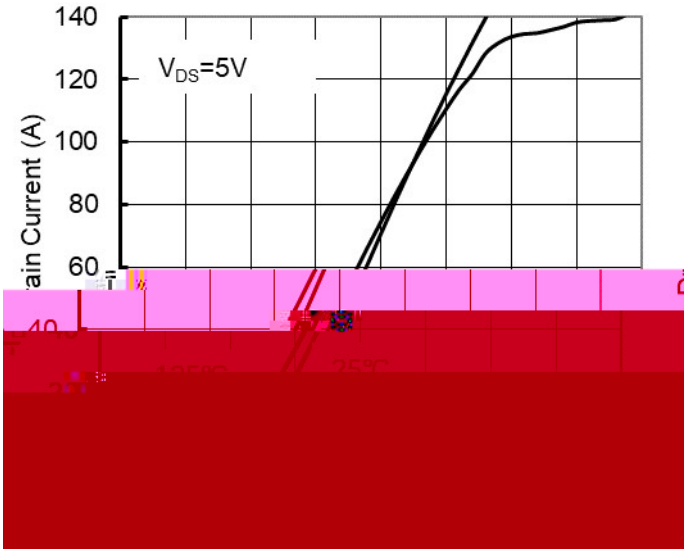
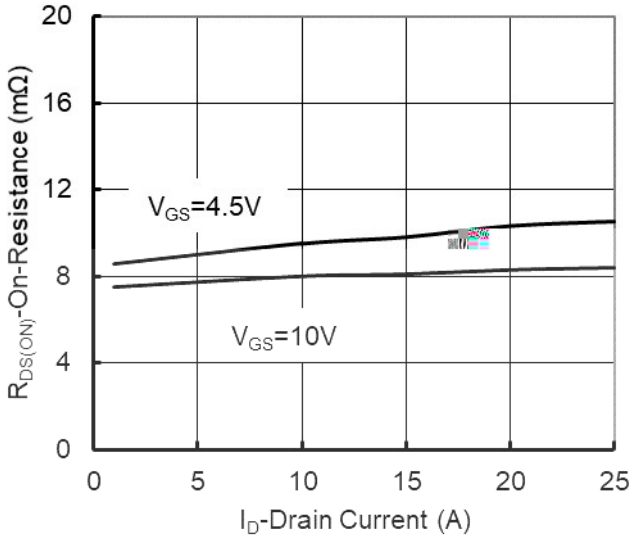
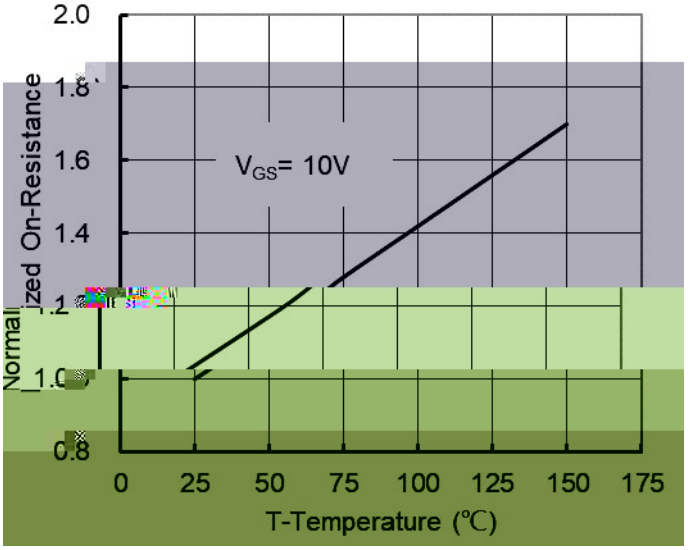
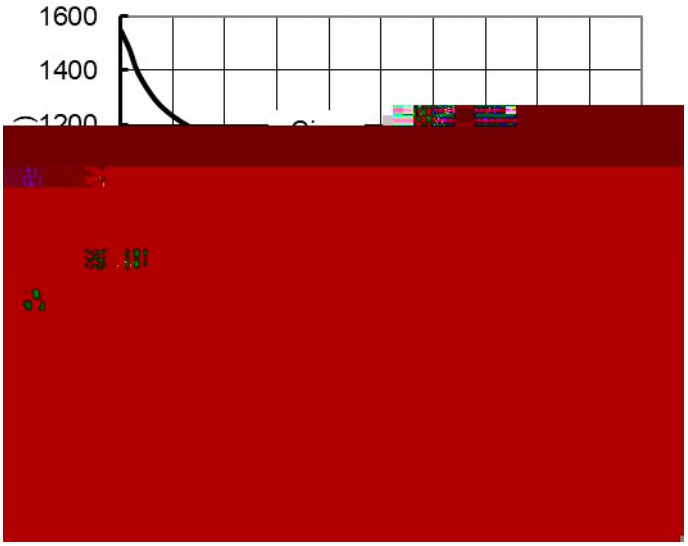
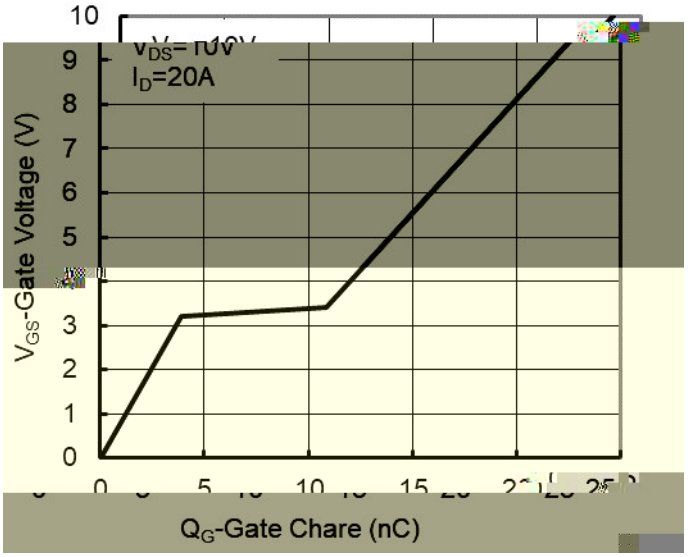

100
80
60
40
20
V_{GS}=4.5V
V_{GS}=3.5V

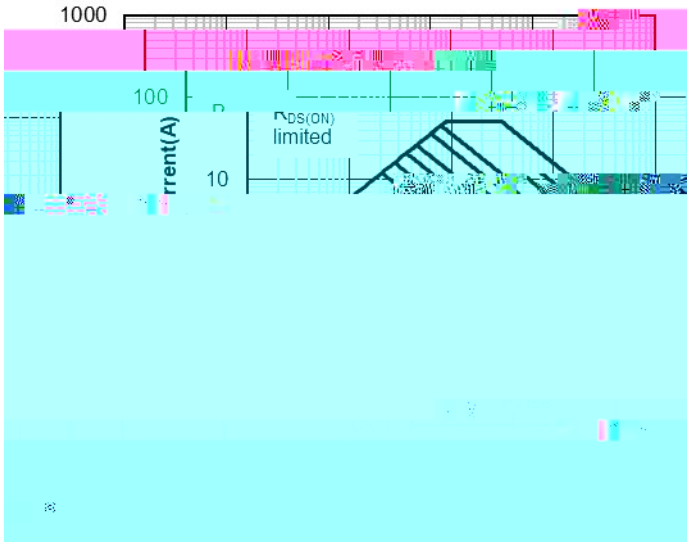

140
120
100
80
60
V_{DS}=5V
ain Current (A)

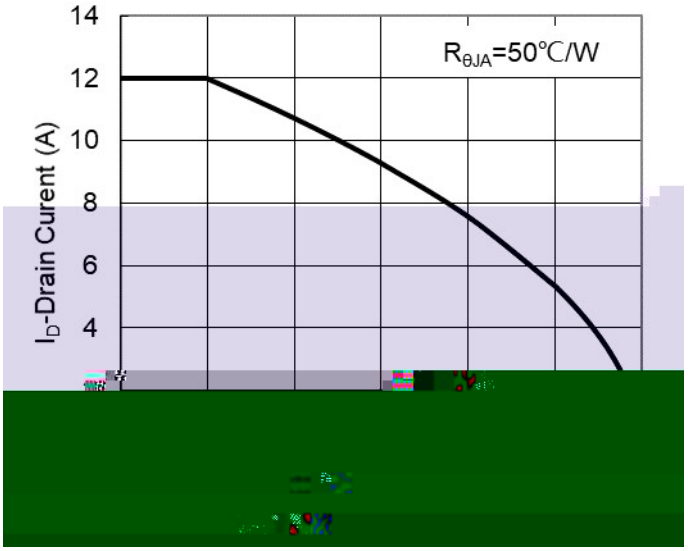

20
16
12
8
4
0
$R_{DS(ON)}$-On-Resistance (mΩ)
V_{GS}=4.5V
V_{GS}=10V
0
5
10
15
20
25
I_D-Drain Current (A)

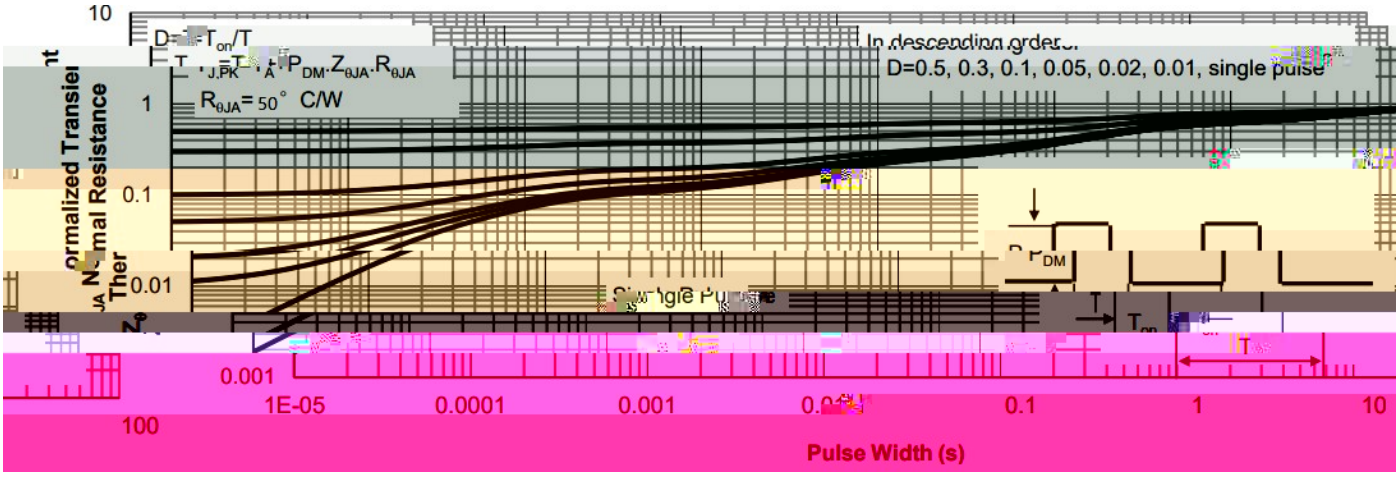

2.0
1.8
1.6
1.4
0.8
V_{GS}= 10V
0
25
50
75
100
125
150
175
T-Temperature (℃)

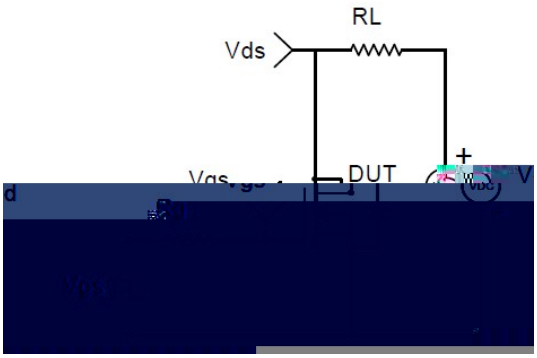

1600
1400

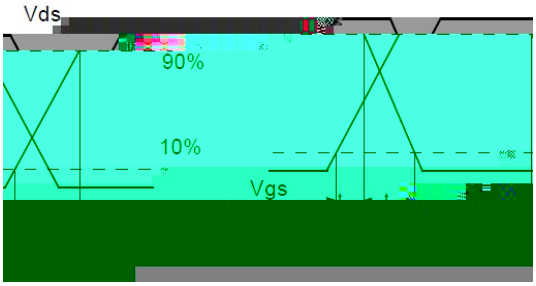

10
9
8
7
6
5
3
2
1
0
I_D=20A
V_{GS}-Gate Voltage (V)
Q_G-Gate Chare (nC)

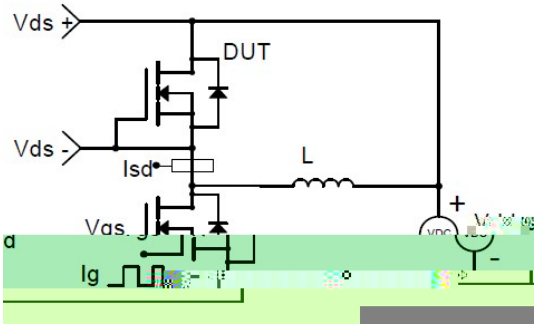

1000
100
10
rrent(A)
RDS(ON)
limited

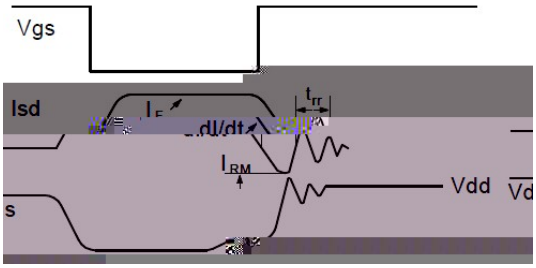

14
12
10
8
6
4
ID-Drain Curent (A)
RθJA=50℃/W

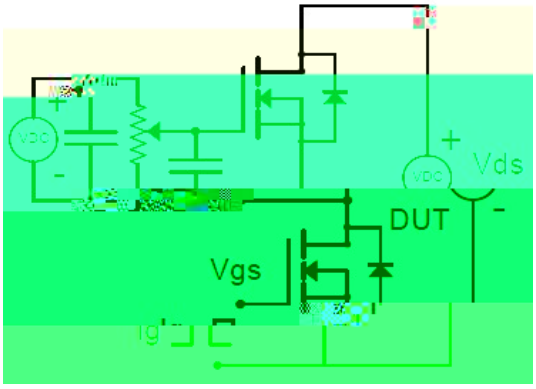

10
1
0.1
0.01
0.001
ormalized Transient
Normal Resistance
Ther
D=Ton/T
TJ,PK=TA+PDM·ZθJA·RθJA
RθJA=50° C/W
In descending order:
D=0.5, 0.3, 0.1, 0.05, 0.02, 0.01, single pulse
Single Pulse
PDM
T
Ton
1E-05
0.0001
0.001
0.01
0.1
1
10
100
Pulse Width (s)

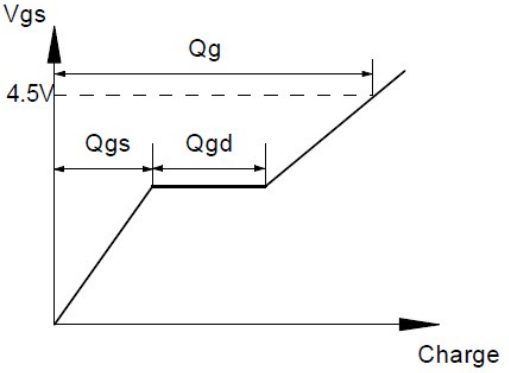

RL
Vds
DUT
+

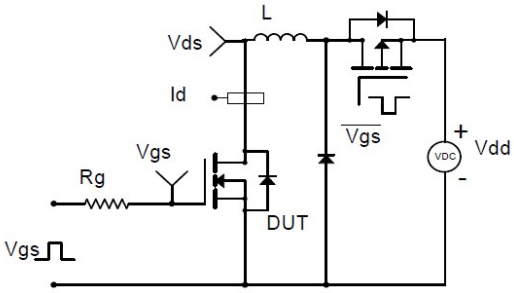

Vds
90%
10%
Vgs

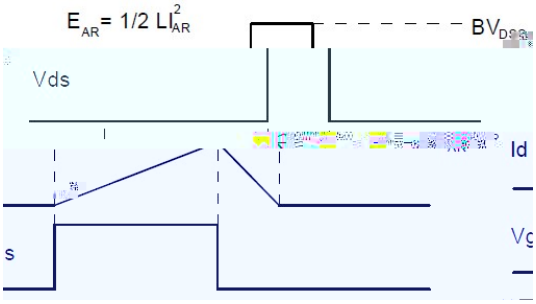

Vds +
DUT
Vds -
Isd
L
Vgs
Ig
+
-

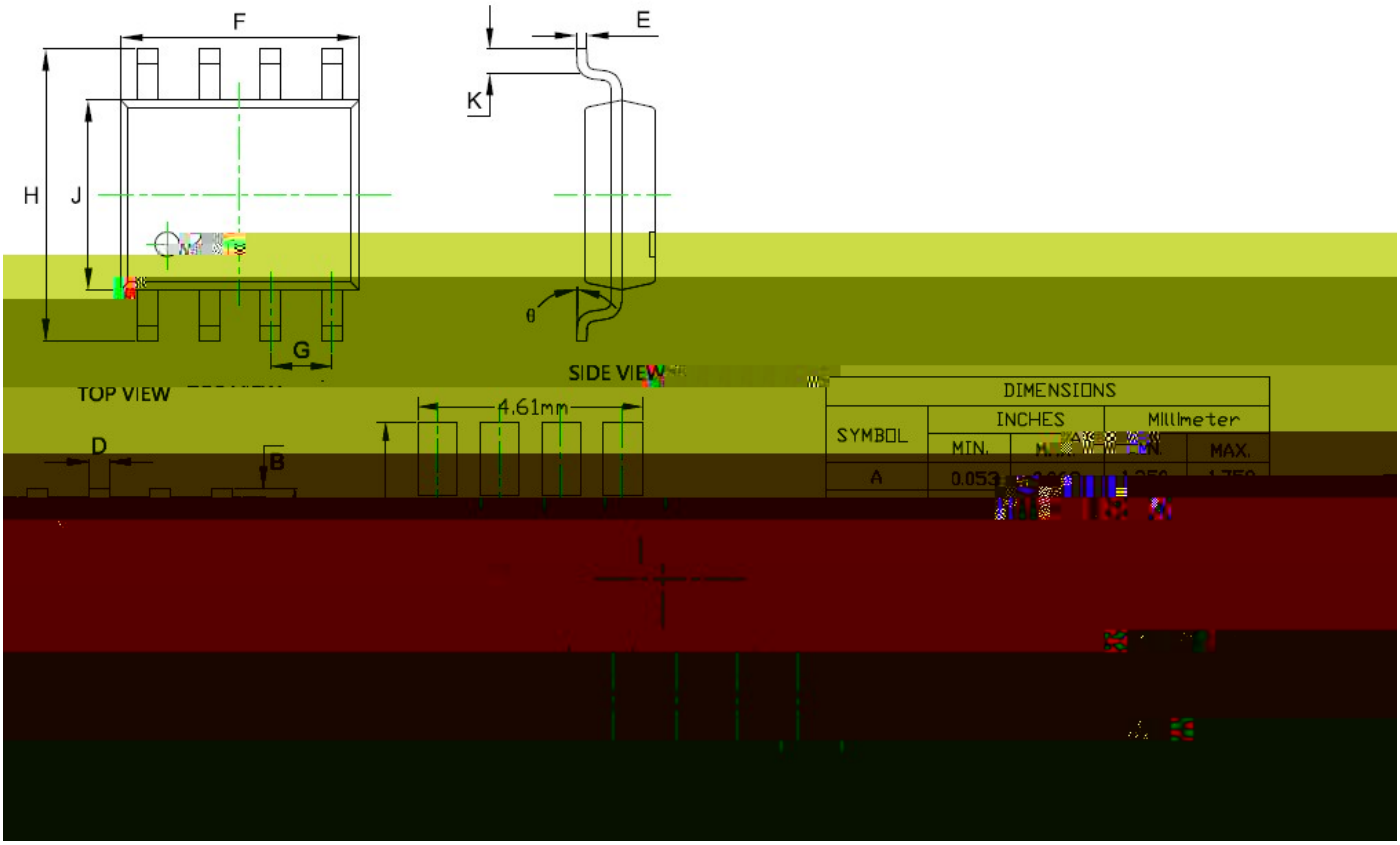

Vgs
Isd
Vdd


VDC
+
Vds
-
DUT
Vgs


Vgs
Qg
4.5V
Qgs
Qgd
Charge


L
Vds
Id
Vgs
Rg
DUT
Vgs
+
Vdd
-


Vds
Id


F
E
K
H
J
θ
G
TOP VIEW
SIDE VIEW
4.61mm
D
B
DIMENSIONS
SYMBOL
INCHES
Millmeter
MIN.
MAX.
MIN.
MAX.
A
0.053