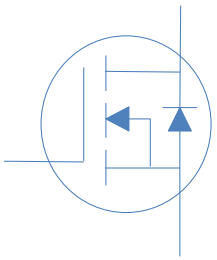
V		100	V
R	V =10V	32	mΩ
I		30	A



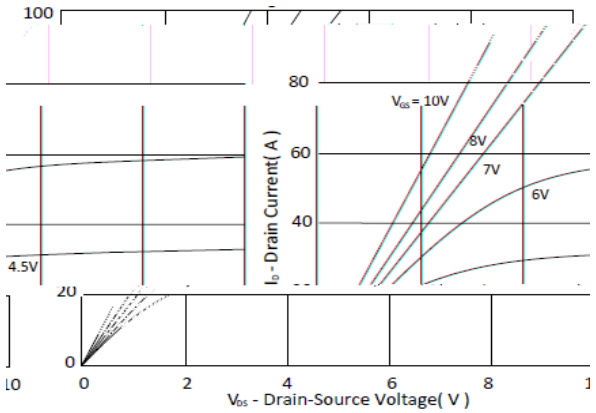
HTD360N10		TD360N10

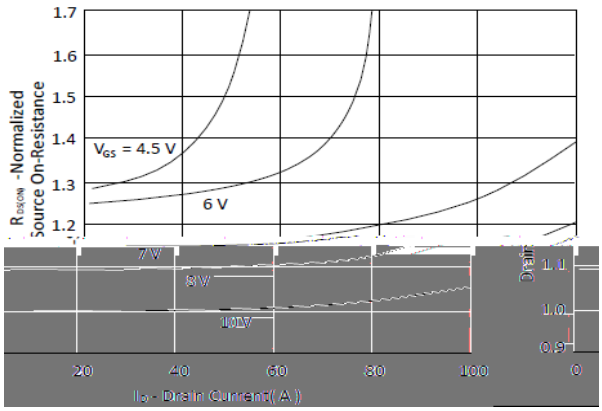
Absolute Maximum Ratings at T_j

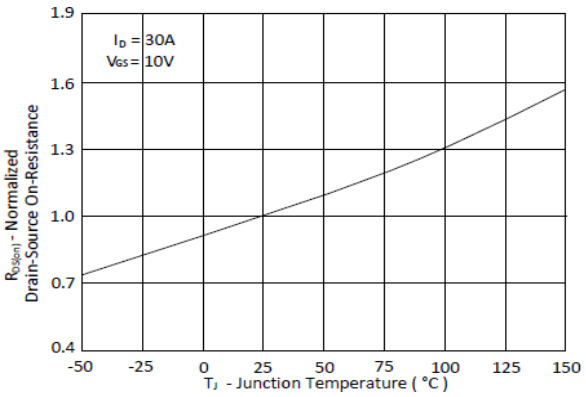
			Value	Unit
	I_D	T_C	30	A
		T_C	20	
	V	-	100	V
	V	-	±20	V
	I_{DM}	-	100	A
	E	C	45	
	P_D	T_C	83	
	T_{stg}	-	-55 to150	

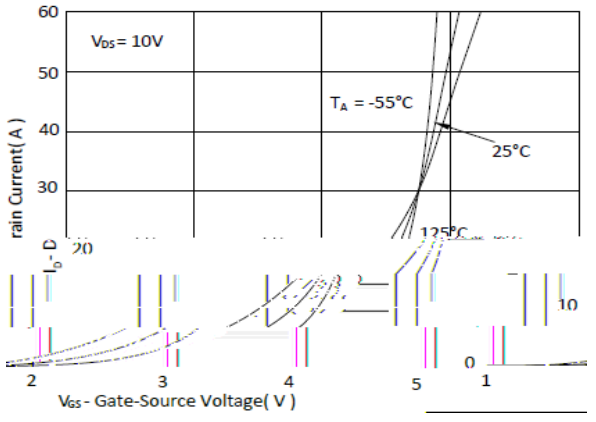
Absolute Maximum Ratings

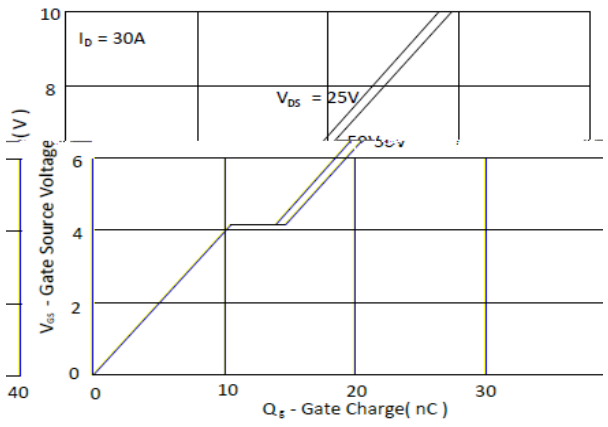
		Max	Unit
	R_θ	50	
	R_θ		

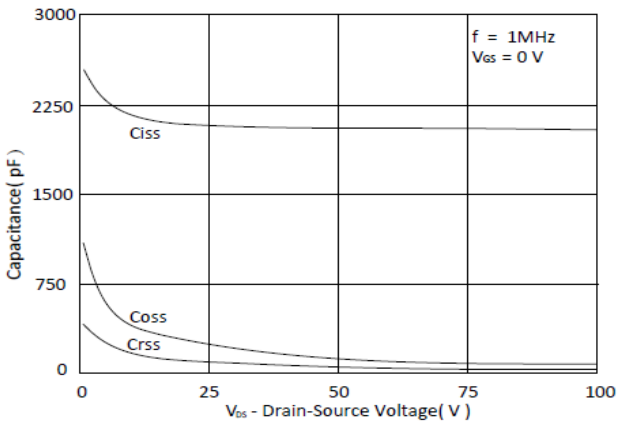

100
80
60
40
20
0
V_{GS} = 10V
8V
7V
6V
4.5V
I_D - Drain Current(A)
0
2
4
6
8
V_{DS} - Drain-Source Voltage(V)

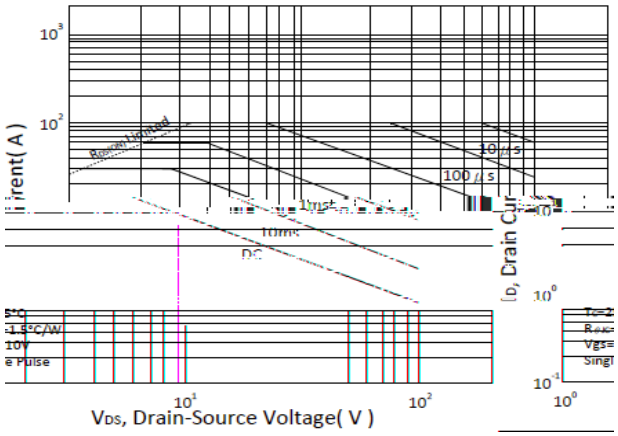

1.7
1.6
1.5
1.4
1.3
1.2
$R_{DS(ON)}$ -Normalized Source On-Resistance
V_{GS} = 4.5 V
6 V
7V
8V
10V
1.1
1.0
0.9
20
40
60
80
100
I_D - Drain Current(A)

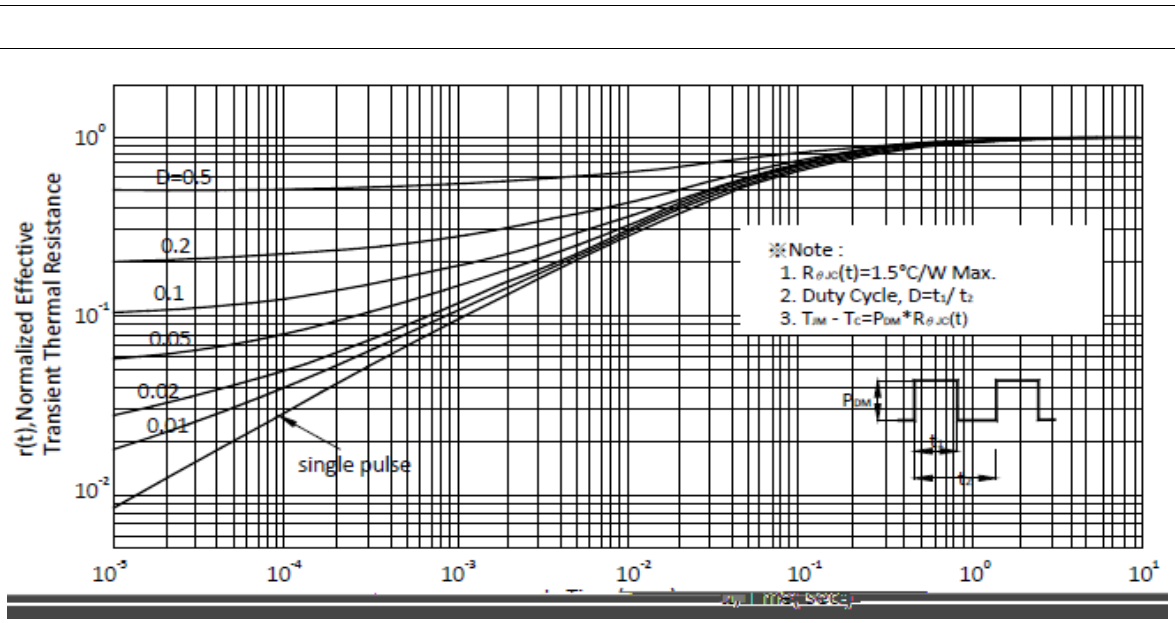

1.9
1.6
1.3
1.0
0.7
0.4
I_D = 30A
V_{GS} = 10V
$R_{DS(on)}$ - Normalized Drain-Source On-Resistance
-50
-25
0
25
50
75
100
125
150
T_J - Junction Temperature (°C)


60
50
40
30
20
10
0
V_{DS} = 10V
T_A = -55°C
25°C
125°C
rain Current(A)
2
3
4
5
1
V_{GS} - Gate-Source Voltage(V)


I_D = 30A
V_{DS} = 25V
V_{GS} - Gate Source Voltage (V)
Q_g - Gate Charge(nC)


f = 1MHz
V_{GS} = 0 V
Ciss
Coss
Crss
Capacitance(pF)
V_{DS} - Drain-Source Voltage(V)


100 μs
DC
V_{DS}, Drain-Source Voltage(V)


D=0.5
0.2
0.1
0.05
0.02
0.01
single pulse
※Note :
1. $R_{\theta JC}$(t)=1.5°C/W Max.
2. Duty Cycle, D=t_1/ t_2
3. T_{JM} - T_C=P_{DM}*$R_{\theta JC}$(t)
P_{DM}
t_1
t_2
r(t),Normalized Effective Transient Thermal Resistance