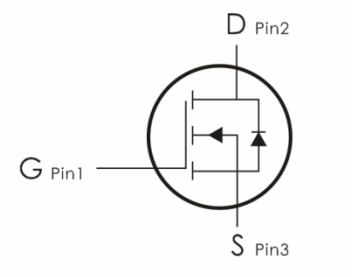
Description：

This N-Channel MOSFET uses advanced trench technology and design to provide excellent $R_{DS(on)}$ with low gate charge.

It can be used in a wide variety of applications.





Features：

1) V_{DS}=60V,I_D=50A,$R_{DS(ON)}$<22m Ω @V_{GS}=10V
2) Low gate charge.
3) Green device available.
4) Advanced high cell denity trench technology for ultra $R_{DS(ON)}$.
5) Excellent package for good heat dissipation.

Absolute Maximum Ratings： (T_C=25℃ unless otherwise noted)

Symbol	Parameter	Ratings	Units
V_{DS}	Drain-Source Voltage	60	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Continuous Drain Current-	50	A
	Continuous Drain Current-TC=100℃	35.4	
	Pulsed Drain Current	200	
E_{AS}	Single Pulse Avalanche Energy	490	mJ
P_D	Power Dissipation	120	W
T_J, T_{STG}	Operating and Storage Junction Temperature Range	-55 to +150	℃

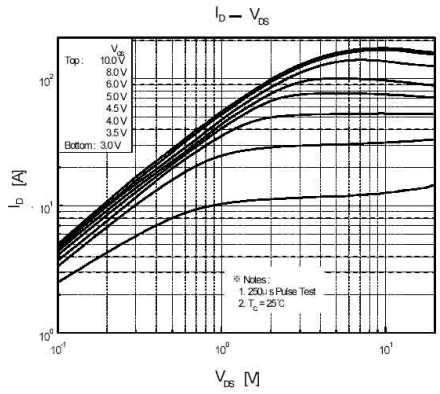
Download from alldatasheet.com

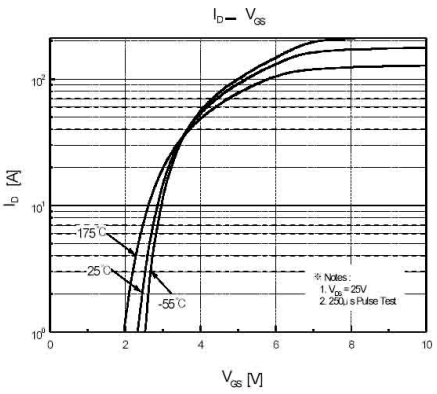
Electrical Characteristics: (T_C=25℃ unless otherwise noted)

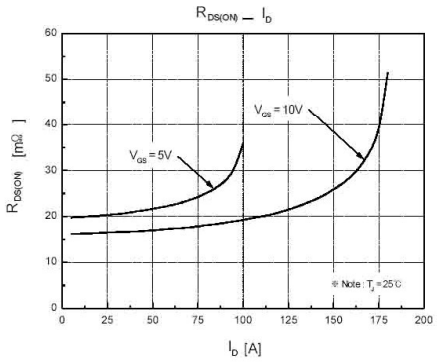
Symbol	Parameter	Conditions	Min	Typ	Max	Units
Off Characteristics						
BV_{DSS}	Drain-Sourtce Breakdown Voltage	V_{GS}=0V,I_D=250μA	60	---	---	V
I_{DSS}	Zero Gate Voltage Drain Current	V_{GS}=0V, V_{DS}=60V	---	---	1	μA
I_{GSS}	Gate-Source Leakage Current	V_{GS}=±20V, V_{DS}=0A	---	---	±100	nA
On Characteristics						
$V_{GS(th)}$	GATE-Source Threshold Voltage	V_{GS}=V_{DS}, I_D=250μA	2	---	4	V
$R_{DS(ON)}$	Drain-Source On Resistance	V_{GS}=10V,I_D=70A	---	18	22	mΩ
Dynamic Characteristics						
C_{iss}	Input Capacitance	V_{DS}=25V, V_{GS}=0V, f=1MHz	---	1050	1365	pF
C_{oss}	Output Capacitance		---	460	600	
C_{rss}	Reverse Transfer Capacitance		---	70	90	
Switching Characteristics						
$t_{d(on)}$	Turn-On Delay Time	V_{DD}=30V, I_D=25A, R_{GEN}=25Ω.	---	20	50	ns
t_r	Rise Time		---	100	210	ns
$t_{d(off)}$	Turn-Off Delay Time		---	80	170	ns
t_f	Fall Time		---	85	180	ns
Q_g	Total Gate Charge	V_{GS}=10V, V_{DS}=48V,I_D=50A	---	32	42	nC

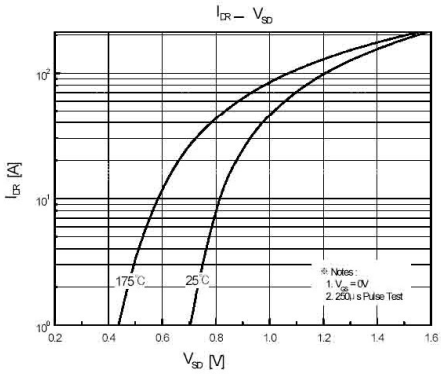
Download from alldatasheet.com

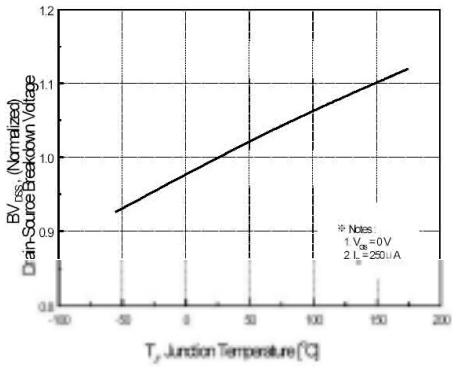
Typical Characteristics： (T_C=25℃ unless otherwise noted)

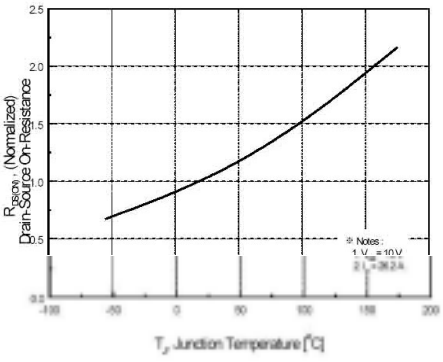


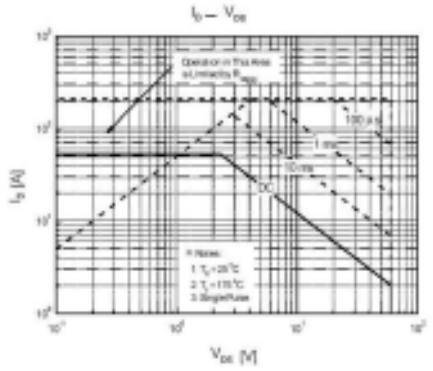


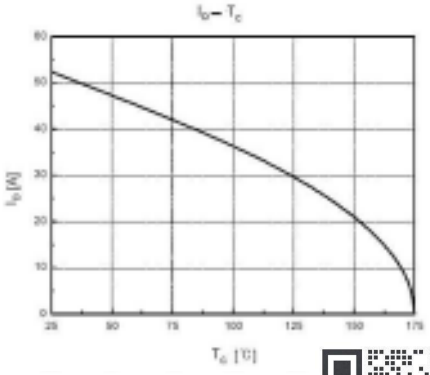












Download from alldatasheet.com