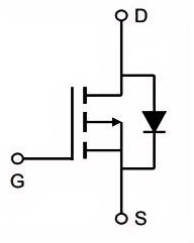
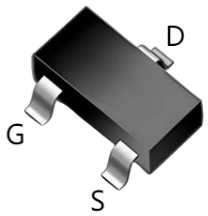
P-Channel Enhancement Mode MOSFET

Parameter	Value	Unit
V_{DS}	- 150	V
$R_{DS(on)}$ = -10V	1.7	Ω
I_D	- 0.7	A





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Features

- High density cell design for ultra low $R_{DS(ON)}$
- Fully characterized avalanche voltage and current
- Optimised for Low Qg

Applications

- PWM applications
- Load Switch
- Power Management

Absolute Maximum Ratings(T_A=25℃,unless otherwise noted)

Symbol	Parameter		Rating	Unit
Common Ratings (T_C=25℃ Unless Otherwise Noted)				
V_{DS}	Drain-Source Breakdown Voltage		-150	V
V_{GS}	Gate-Source Voltage		±20	V
T_J	Maximum Junction Temperature		150	℃
T_{STG}	Storage Temperature Range		-50 to 155	℃
I_S	Diode Continuous Forward Current	Tc=25℃	-0.7	A
Mounted on Large Heat Sink				
I_{DM}	Pulse Drain Current Tested	Tc=25℃	-2.8	A
I_D	Continuous Drain Current	Tc=25℃	-0.7	A
P_D	Maximum Power Dissipation	Tc=25℃	1.5	W
$R_{\theta JA}$	Thermal Resistance Junction-Ambient		70	℃/W

Electrical Characteristics(TJ=25℃,unless otherwise noted)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
Static Electrical Characteristics @ T_J=25℃ (unless otherwise stated)						
$BV_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}=0V, I_D=-250μA	-150	--	--	V
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=-150V, V_{GS}=0V	--	--	-1.0	uA
I_{GSS}	Gate-Body Leakage Current	V_{GS}=±20V, V_{DS}=0V	--	--	±100	nA
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}, I_D=-250μA	-4.0	-4.8	-5.5	V
$R_{DS(on)}$	Drain-Source On-State Resistance	V_{GS}=-10V, I_D=-0.5A	--	1.7	2.5	Ω
Dynamic Electrical Characteristics @ T_J=25℃ (unless otherwise stated)						
C_{ISS}	Input Capacitance	V_{DS}=-75V, V_{GS}=0V f=1MHz	--	235	--	pF
C_{OSS}	Output Capacitance		--	17	--	pF
C_{RSS}	Reverse Transfer Capacitance		--	7	--	pF
Switching Characteristics						
Q_g	Total Gate Charge	V_{DS}=-75V, I_D=-0.4A, V_{GS}=-10V	--	3.75	--	nC
Q_{gs}	Gate Source Charge		--	1.5	--	nC
Q_{gd}	Gate Drain Charge		--	1.04	--	nC
$t_{d(on)}$	Turn-on Delay Time	V_{DS}=-75V, I_D=-0.42A V_{GS}=-10V, R_G=1Ω	--	8.5	--	nS
t_r	Turn-on Rise Time		--	10.3	--	nS
$t_{d(off)}$	Turn-Off Delay Time		--	15	--	nS
t_f	Turn-Off Fall Time		--	19	--	nS
Source-Drain Diode Characteristics						
V_{SD}	Forward on voltage	T_j=25℃, I_S=-1A	--	-0.8	-1.2	V

Typical Characteristics

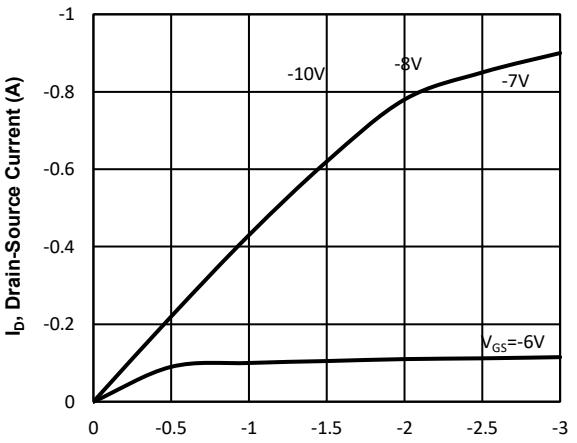


Fig1. Typical Output Characteristics

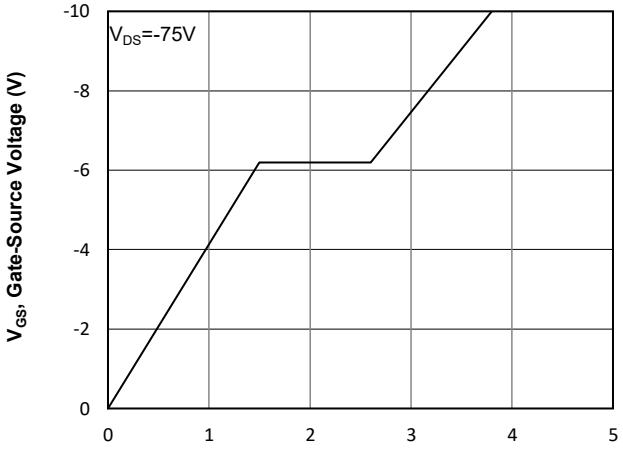


Fig2. Typical Gate Charge Vs.Gate-Source Voltage

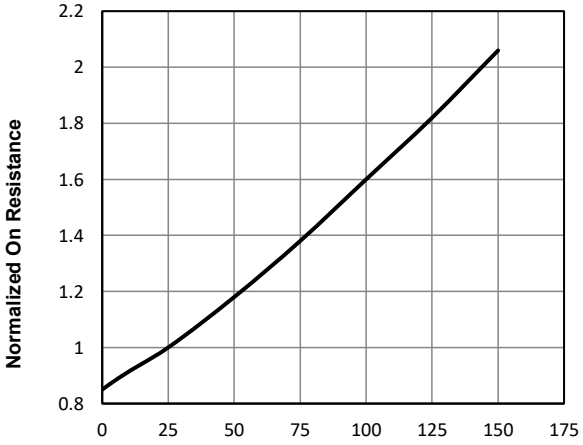


Fig3. Normalized On-Resistance Vs. Temperature

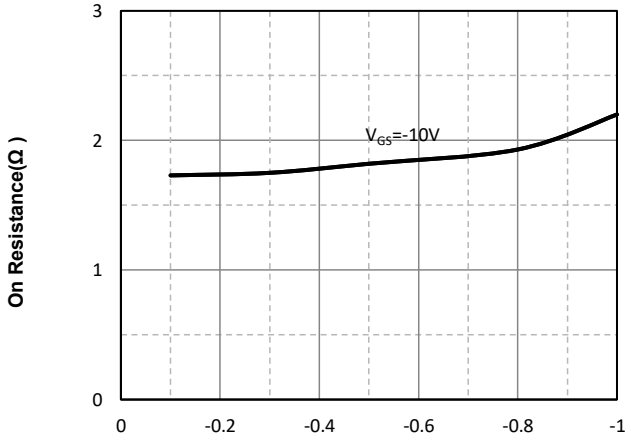


Fig4. On-Resistance Vs. Drain-Source Current

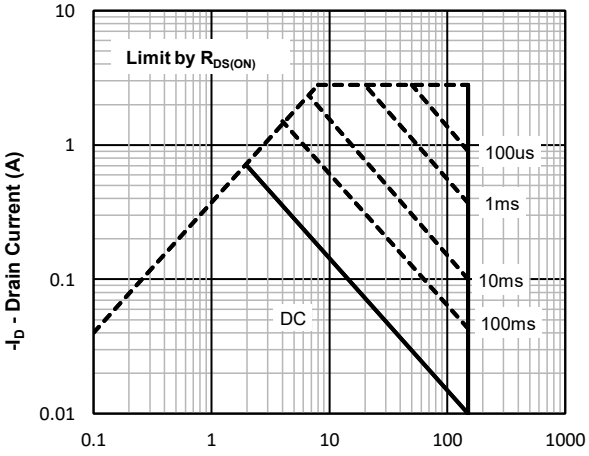


Fig5. Maximum Safe Operating Area

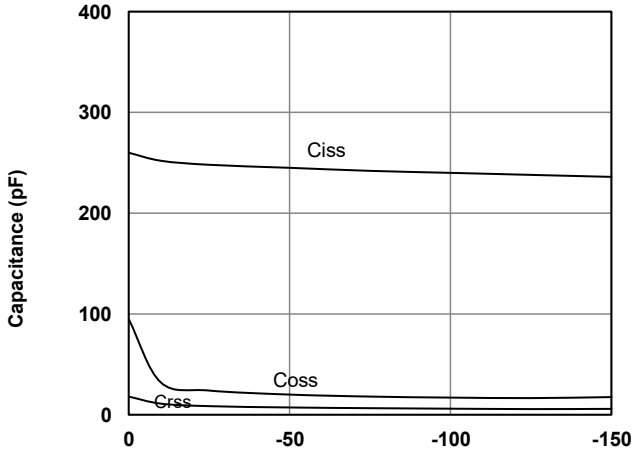
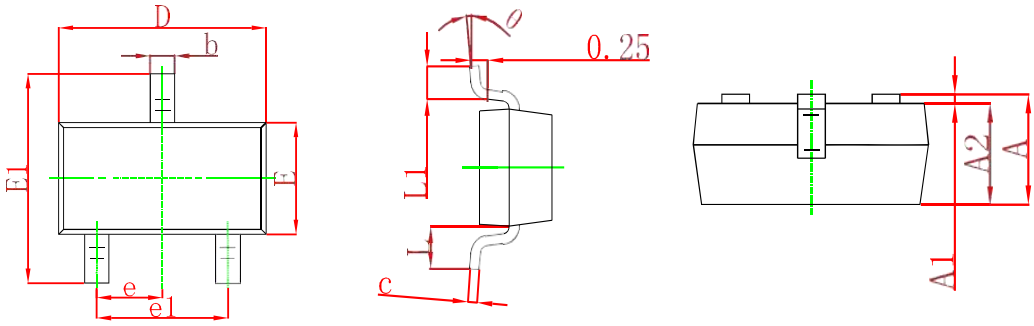


Fig6 Typical Capacitance Vs.Drain-Source Voltage

Package Outline Dimensions (Units: mm)

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Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

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