

**Electrical Characteristics @ 25°C (Unless Otherwise Specified)**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
<b>Static Characteristics</b>						
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0V, I_D=-250\mu A$	-100			V
Gate-Source Leakage Current	$I_{GSS}$	$V_{DS}=0V, V_{GS}=\pm 16V$			$\pm 10$	$\mu A$
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=-100V, V_{GS}=0V$			-1	$\mu A$
Gate-Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=-250\mu A$	-1.2	-1.75	-2.8	V
Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=-10V, I_D=-6A$			205	m $\Omega$
		$V_{GS}=-4.5V, I_D=-6A$			250	
Forward Transconductance	$g_{FS}$	$V_{DS}=-15V, I_D=-5A$	10			S
<b>Dynamic Characteristics</b>						
Input Capacitance	$C_{iss}$	$V_{DS}=-25V, V_{GS}=0V, f=1MHz$		760		pF
Output Capacitance	$C_{oss}$			260		
Reverse Transfer Capacitance	$C_{rss}$			170		
<b>Switching Characteristics</b>						
Total Gate Charge	$Q_g$	$V_{DD}=-50V, V_{GS}=-10V, I_D=-6A$		25		nC
Gate-Source Charge	$Q_{gs}$			5		
Gate-Drain Charge	$Q_{gd}$			7		
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=-50V, V_{GEN}=-10V$ $I_D=-6A, R_{GEN}=9.1\Omega$		14		ns
Turn-On Rise Time	$t_r$			18		
Turn-Off Delay Time	$t_{d(off)}$			50		
Turn-Off Fall Time	$t_f$			18		
<b>Drain-Source Body Diode Characteristics</b>						
Diode Forward Current	$I_S$				-13	A
Diode Forward Voltage	$V_{SD}$	$I_{SD}=-6A, V_{GS}=0V$			-1.2	V
Reverse Recovery Time	$t_{rr}$	$I_F=-6A, di/dt=100A/\mu s$		35		ns
Reverse Recovery Charge	$Q_{rr}$				46	
Forward Turn-On Time	$T_{on}$	Intrinsic Turn-On Time is Negligible (Turn-On is Dominated by LS+LD)				

**Curve Characteristics**

Fig. 1 - Output Characteristics

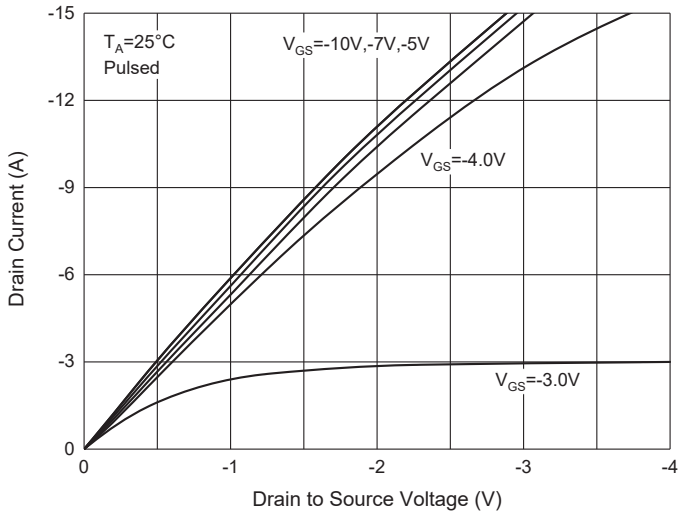


Fig. 2 -  $R_{DS(ON)}$ —Temperature

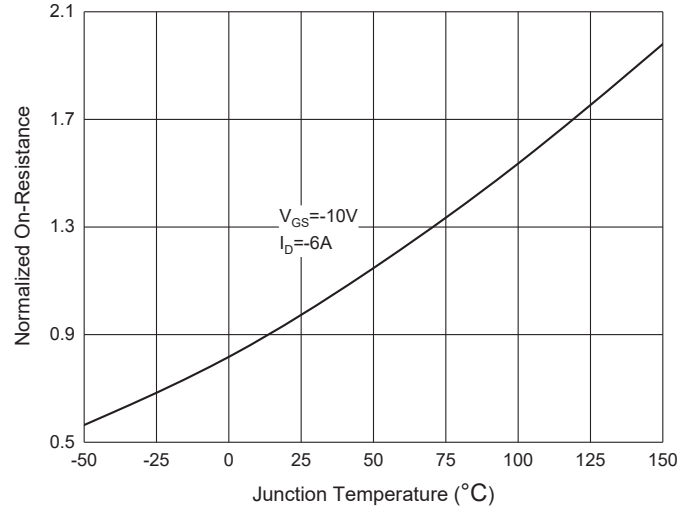


Fig. 3 - Transfer Characteristics

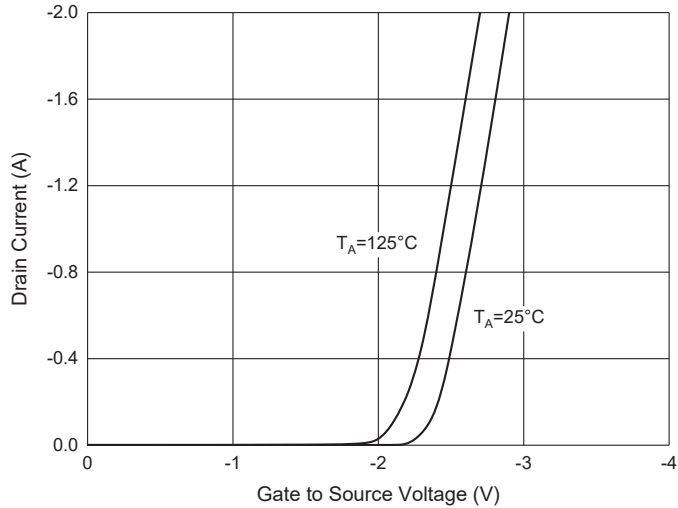


Fig. 4 - Gate Charge

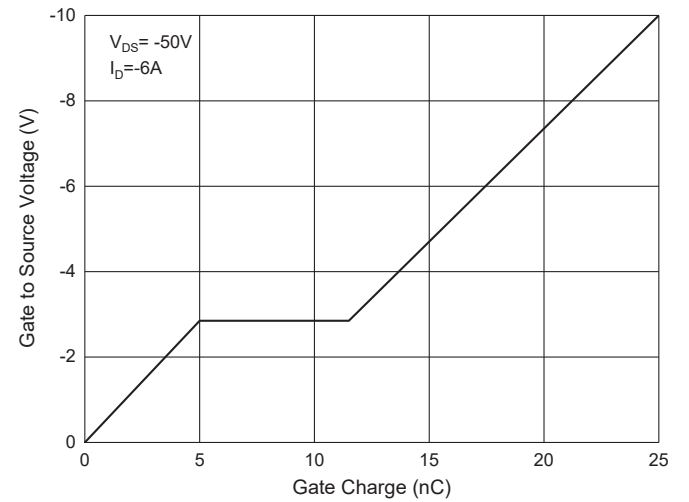


Fig. 5 -  $I_S$ — $V_{SD}$

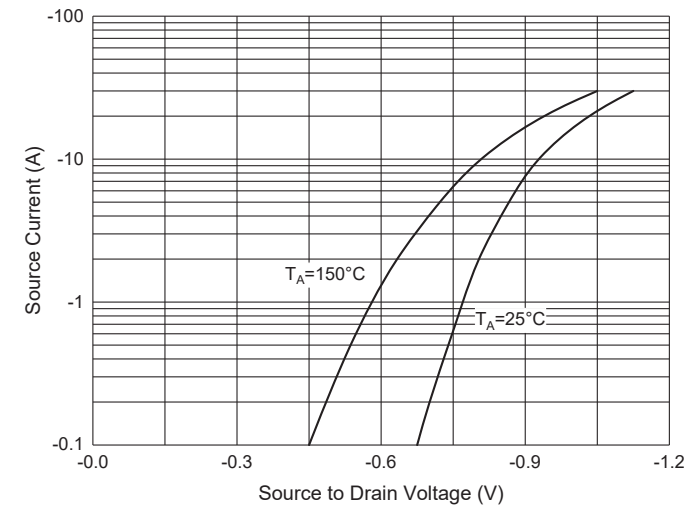


Fig. 6 -  $R_{DS(ON)}$ — $I_D$

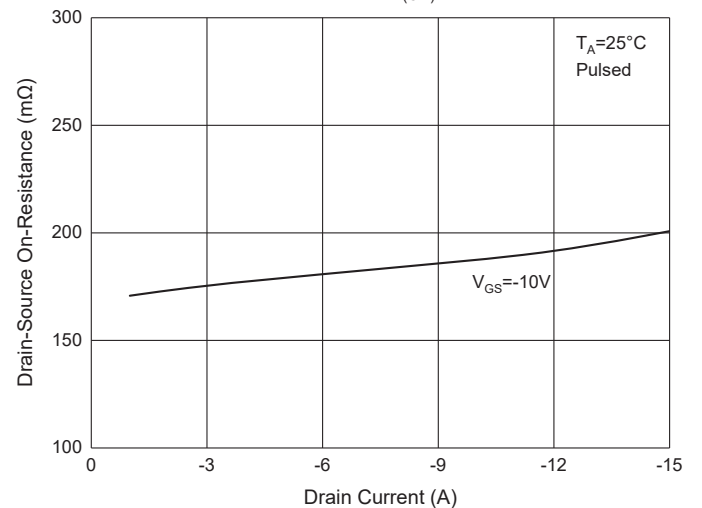
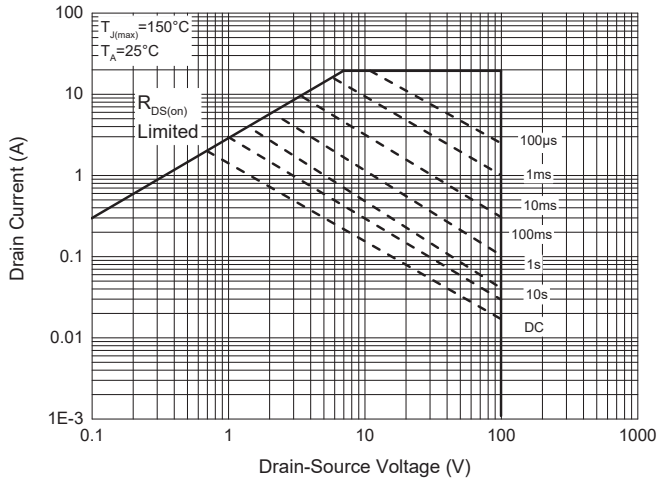


Fig. 7 - Safe Operation Area



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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