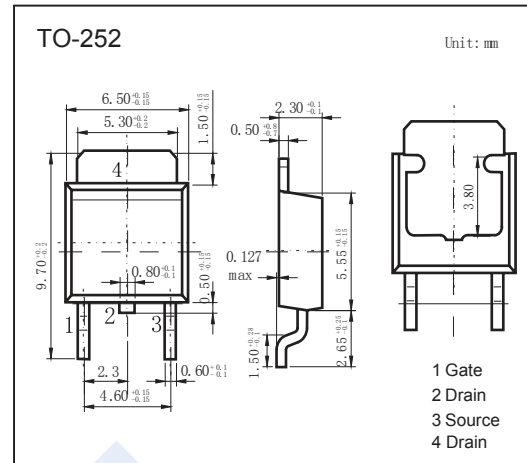
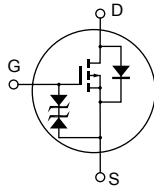


P-Channel MOSFET

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■ Features

- $V_{DS}(V) \approx -200V$
- $I_D = -3A$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 2.3\Omega$ ($V_{GS} = -10V$)
- High speed switching
- Low drive current



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-200	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	-3	A
Pulsed Drain Current (Note.1)	I_{DM}	-12	
Body to Drain Diode Reverse Drain Current	I_{DR}	-3	
Power Dissipation $T_c = 25^\circ C$	P_D	20	W
Junction Temperature	T_J	150	$^\circ C$
Junction Storage Temperature Range	T_{stg}	-55 to 150	

Note.1: $PW \leq 10$ ms, duty cycle $\leq 1\%$

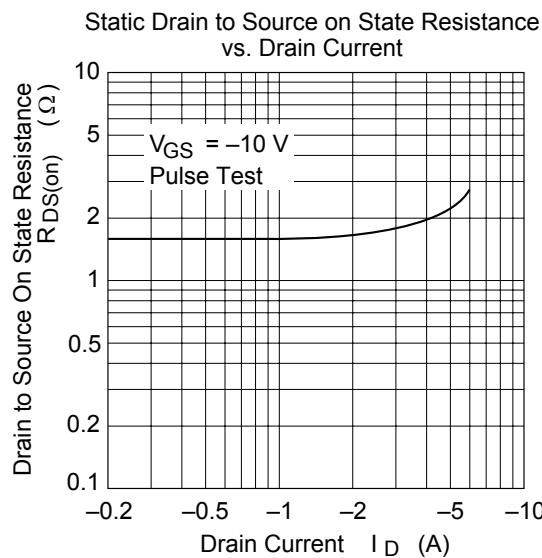
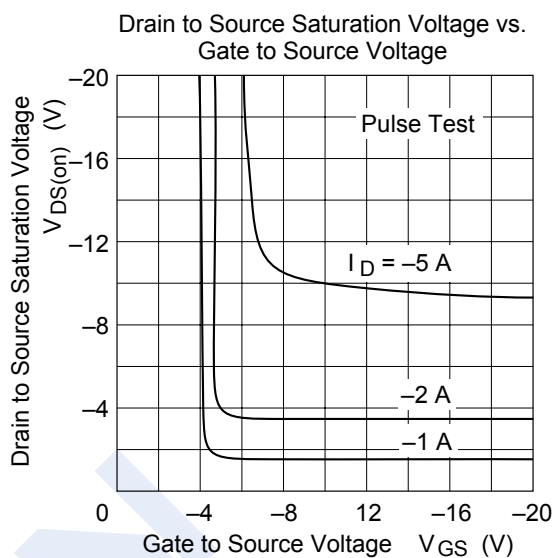
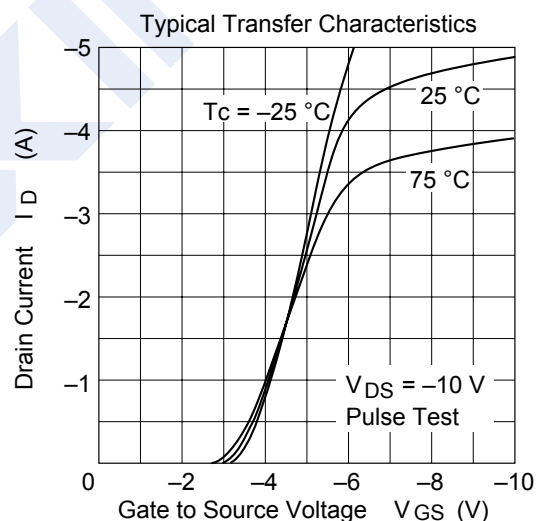
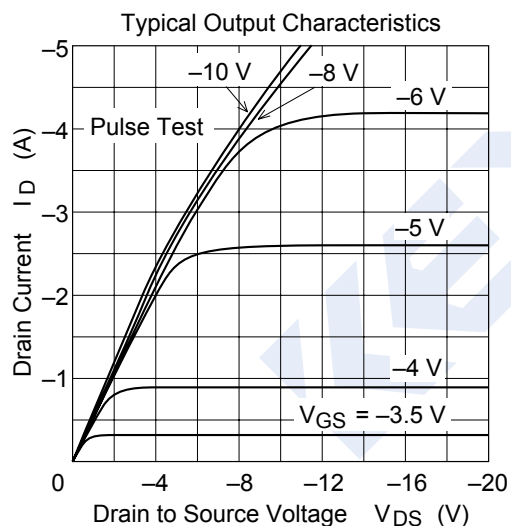
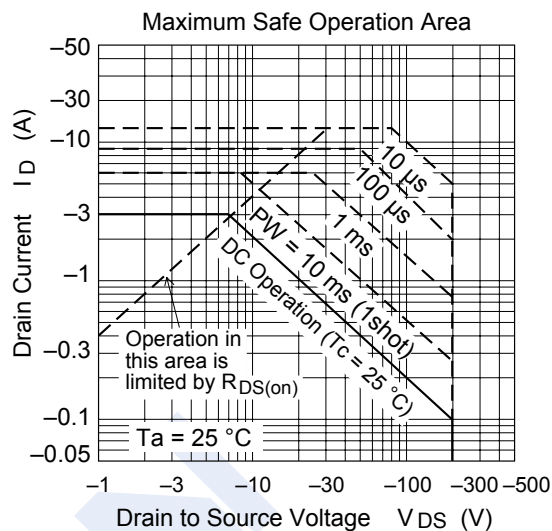
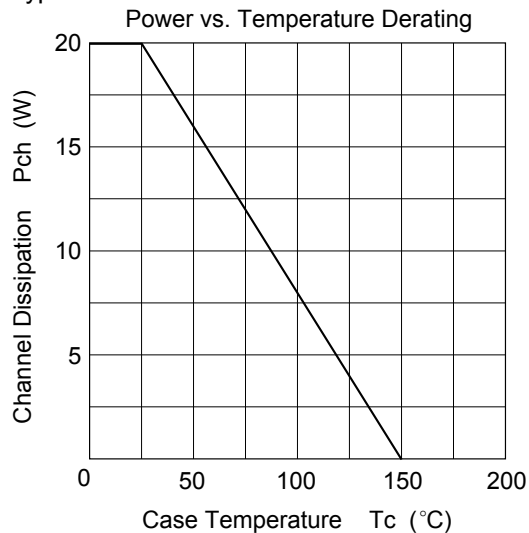
■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$I_D = -10mA, V_{GS} = 0V$	-200			V
Gate to Source Breakdown Voltage	V_{GSS}	$I_G = \pm 100 \mu A, V_{DS} = 0V$	± 20			
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -160V, V_{GS} = 0V$			-100	μA
Gate-Body leakage current	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 16V$			± 10	μA
Gate to Source Cutoff Voltage	$V_{GS(off)}$	$V_{GS} = -10V, I_D = -1mA$	-2		-4	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS} = -10V, I_D = -2A$			2.3	Ω
Forward Transconductance	g_{FS}	$V_{DS} = -10V, I_D = -2A$	1	1.7		S
Input Capacitance	C_{iss}	$V_{GS} = 0V, V_{DS} = -10V, f = 1MHz$		330		pF
Output Capacitance	C_{oss}			130		
Reverse Transfer Capacitance	C_{rss}			25		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS} = -10V, I_D = -2A, R_L = 15\Omega$		10		ns
Turn-On Rise Time	t_r			30		
Turn-Off DelayTime	$t_{d(off)}$			40		
Turn-Off Fall Time	t_f			30		
Body Diode Reverse Recovery Time	t_{rr}	$I_F = -3A, V_{GS} = 0, di/dt = 50A/\mu s$		180		
Diode Forward Voltage	V_{SD}	$I_S = -3A, V_{GS} = 0V$		-1.15		V

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■ Typical Characteristics

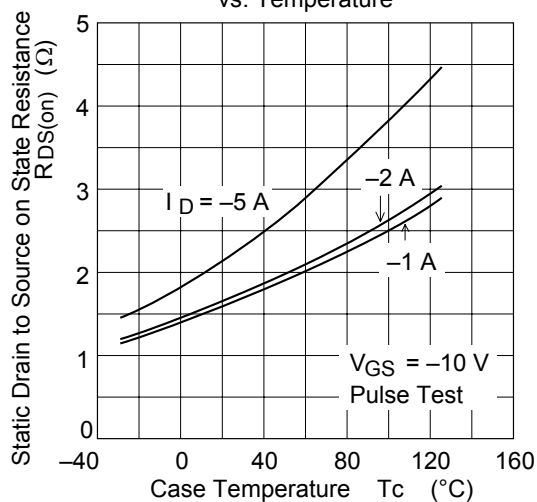


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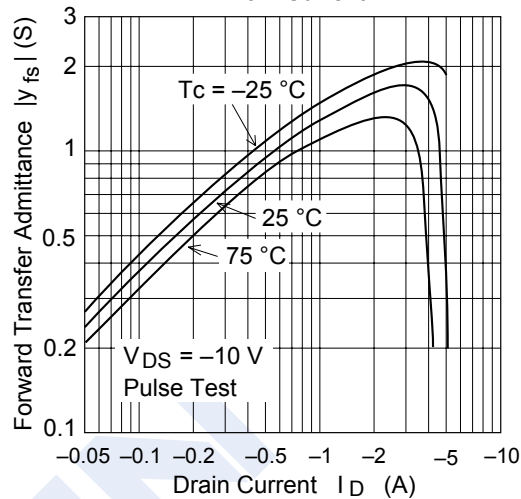
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■ Typical Characteristics

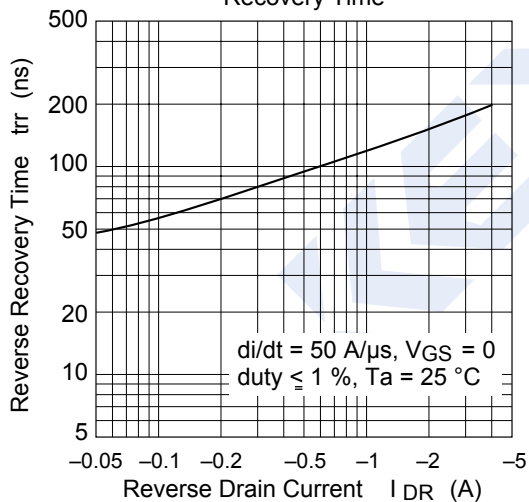
Static Drain to Source on State Resistance vs. Temperature



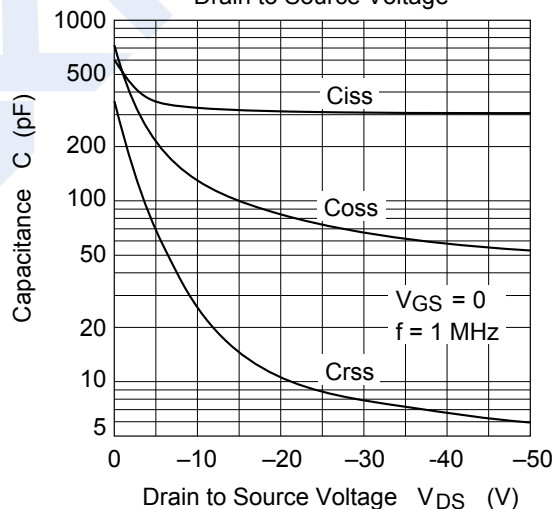
Forward Transfer Admittance vs. Drain Current



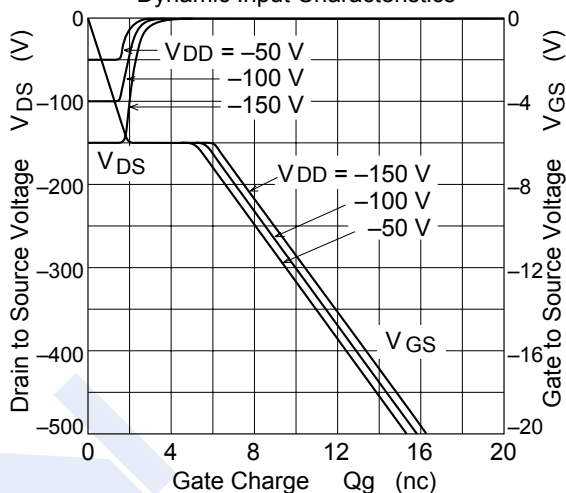
Body-Drain Diode Reverse Recovery Time



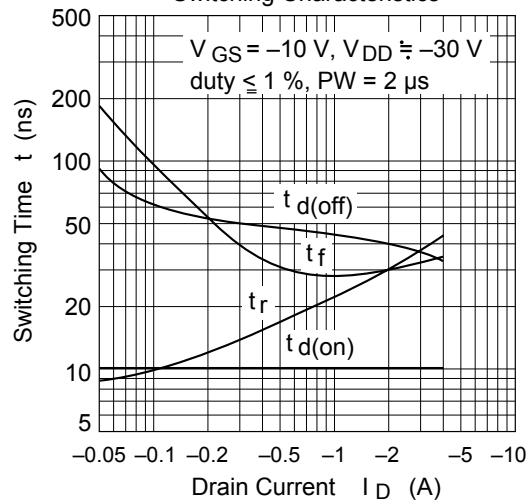
Typical Capacitance vs. Drain to Source Voltage



Dynamic Input Characteristics



Switching Characteristics



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■ Typical Characteristics

