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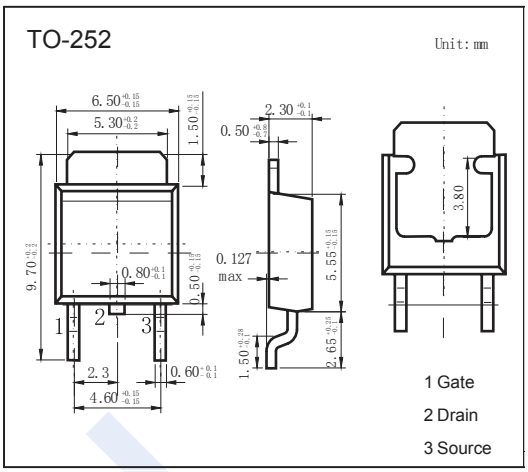
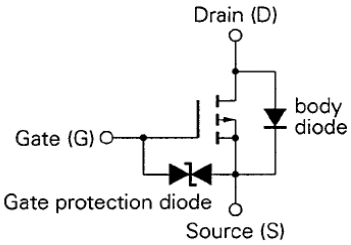


■ Features

- $V_{DS\ (V)}$ =-30V
- I_D =-2 A
- $R_{DS(ON)}$ < 250mΩ (V_{GS} =-10V)
- $R_{DS(ON)}$ < 520mΩ (V_{GS} =-4V)



■ Absolute Maximum Ratings Ta = 25℃

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	-30	V
Gate-Source Voltage		V_{GS}	±20	
Continuous Drain Current		I_D	-2	A
Pulsed Drain Current (Note.1)		I_{DM}	-8	
Power Dissipation	Tc = 25℃	P_D	20	W
	Ta = 25℃		1	
Junction Temperature		T_J	150	℃
Junction Storage Temperature Range		T_{stg}	-55 to 150	

Note.1: PW ≤ 10us,Duty Cycle ≤ 1%

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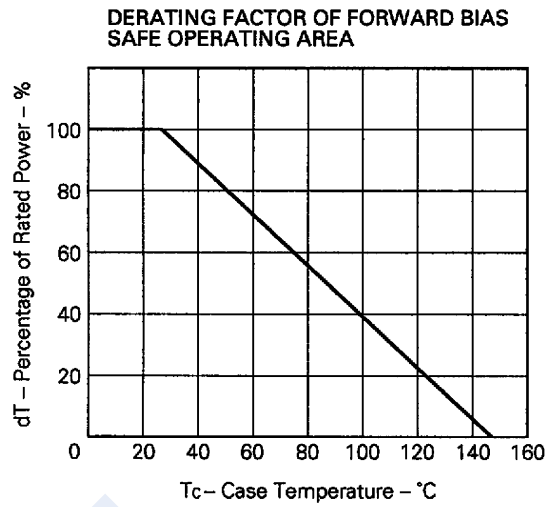
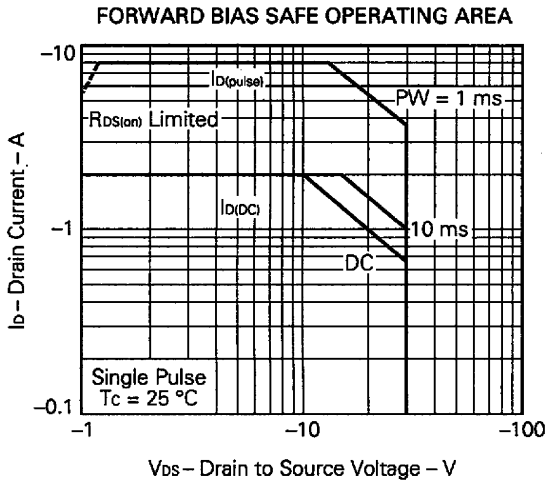
■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	I_D=-250μA, V_{GS}=0V	-30			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-30V, V_{GS}=0V			-10	uA
Gate-Body leakage current	I_{GSS}	V_{DS}=0V, V_{GS}=±16V			±10	uA
Gate Cut off Voltage	$V_{GS(off)}$	V_{DS}=-10V,I_D=-1mA	-1		-2	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V, I_D=-1A			250	mΩ
		V_{GS}=-4V, I_D=-0.8A			520	
Forward Transconductance	g_{FS}	V_{DS}=-10V, I_D=-1A	1	1.9		S
Input Capacitance	C_{iss}	V_{GS}=0V, V_{DS}=-10V, f=1MHz		330		pF
Output Capacitance	C_{oss}			290		
Reverse Transfer Capacitance	C_{rss}			105		
Total Gate Charge	Q_g	V_{GS}=-10V, V_{DS}=-24V, I_D=-2A		12		nC
Gate Source Charge	Q_{gs}			1.5		
Gate Drain Charge	Q_{gd}			4.5		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS(on)}$=-10V, V_{DS}=-15V, I_D=-1A, R_L=15Ω ,R_{GEN}=10Ω		7		ns
Turn-On Rise Time	t_r			35		
Turn-Off DelayTime	$t_{d(off)}$			40		
Turn-Off Fall Time	t_f			30		
Body Diode Reverse Recovery Time	t_{rr}	I_F=-2A, V_{GS}=0, dI/dt=50A/μs		50		
Body Diode Reverse Recovery Charge	Q_{rr}			40		nC
ESD Voltafge	V_{ESD}	C=200pF,R=0,Single Pulse		±130		V
Diode Forward Voltage	V_{SD}	I_F=-2A,V_{GS}=0V		-0.9		V

■ Typical Characterisitics





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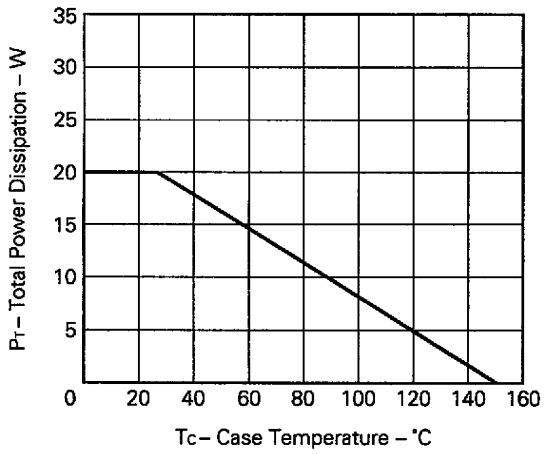
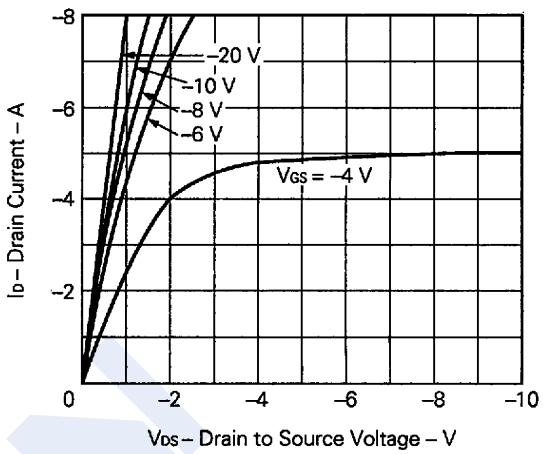
■ Typical Characterisitics

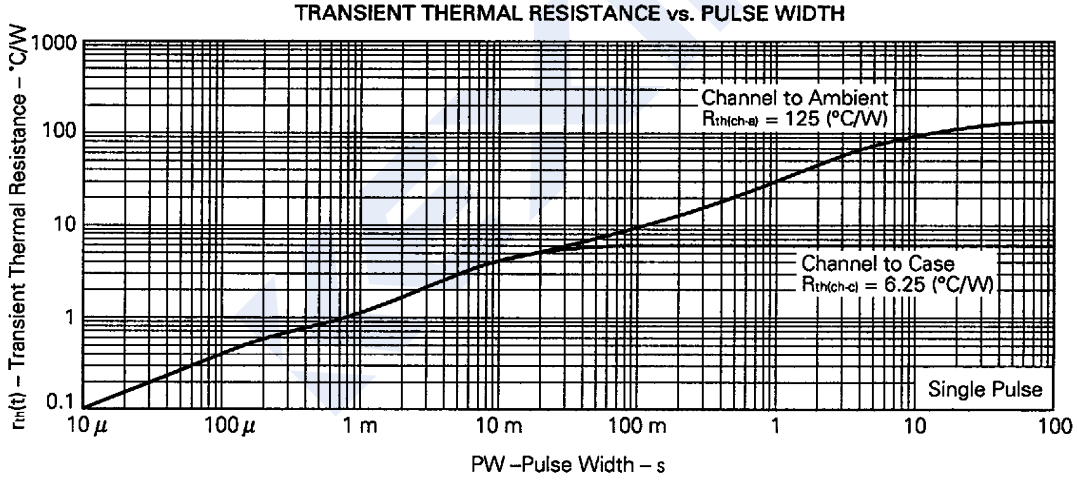
TOTAL POWER DISSIPATION vs. CASE TEMPERATURE



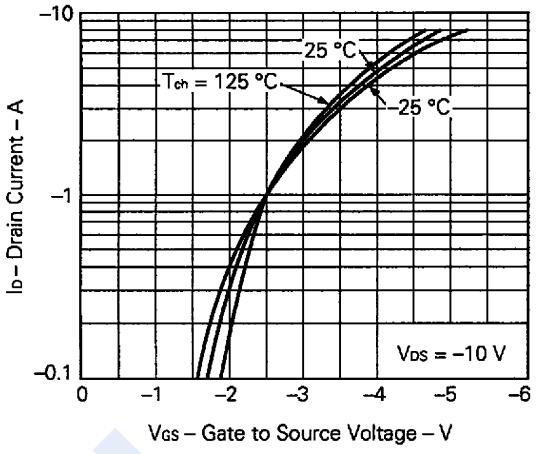
DRAIN CURRENT vs. DRAIN TO SOURCE VOLTAGE



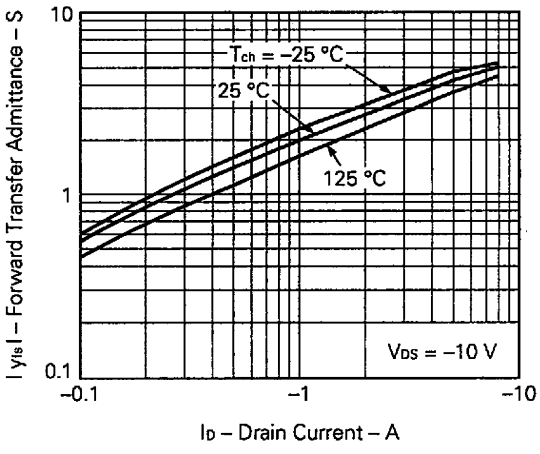
TRANSIENT THERMAL RESISTANCE vs. PULSE WIDTH



TRANSFER CHARACTERISTICS



FORWARD TRANSFER ADMITTANCE vs. DRAIN CURRENT



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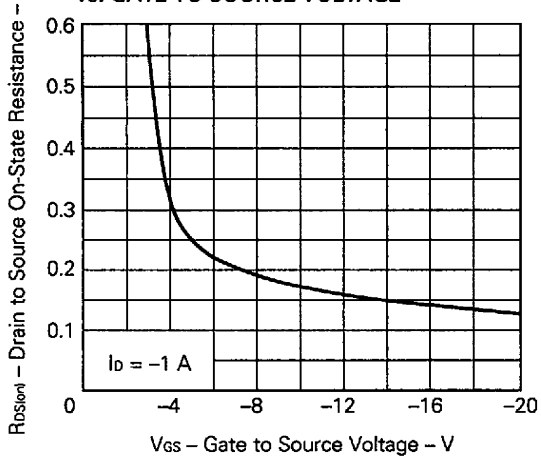
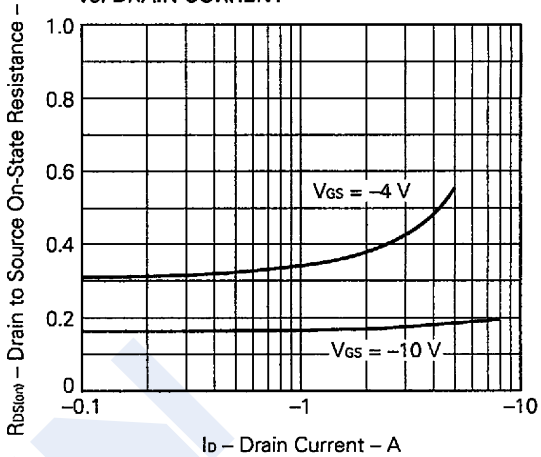
■ Typical Characterisitics

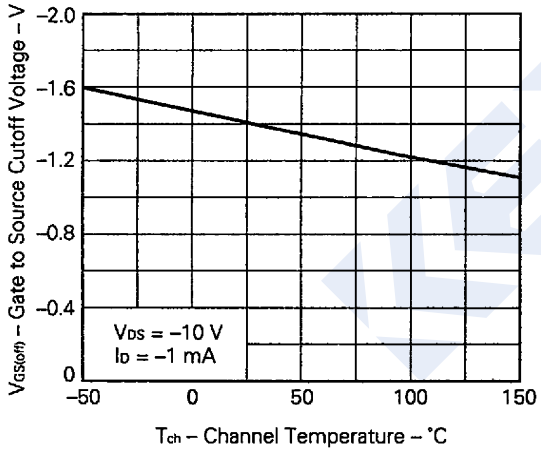
DRAIN TO SOURCE ON-STATE RESISTANCE vs. GATE TO SOURCE VOLTAGE



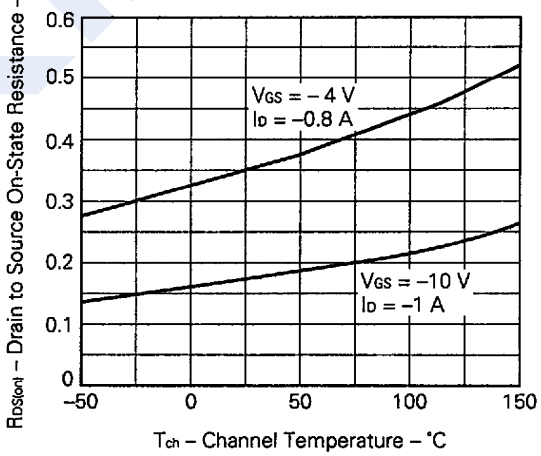
DRAIN TO SOURCE ON-STATE RESISTANCE vs. DRAIN CURRENT



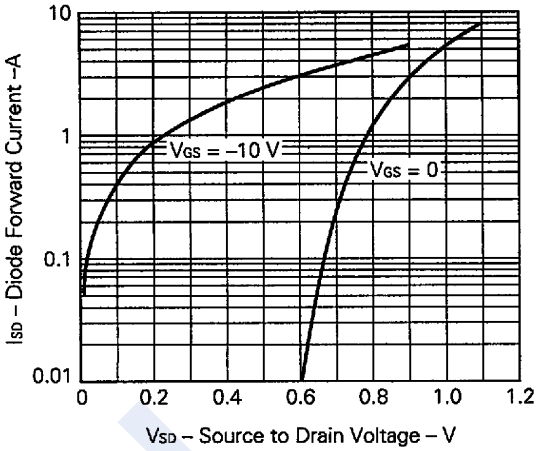
GATE TO SOURCE CUTOFF VOLTAGE vs. CHANNEL TEMPERATURE



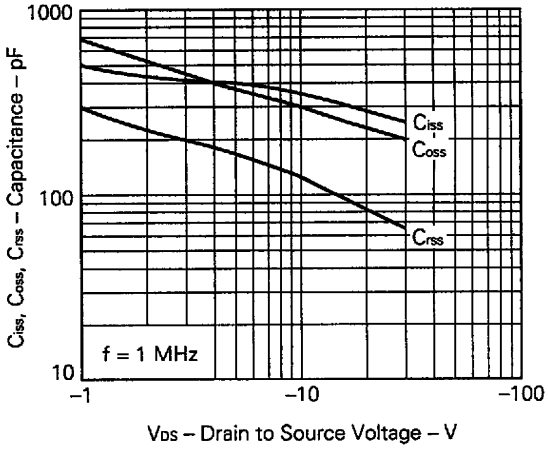
DRAIN TO SOURCE ON-STATE RESISTANCE vs. CHANNEL TEMPERATURE



SOURCE TO DRAIN DIODE FORWARD VOLTAGE



CAPACITANCE vs. DRAIN TO SOURCE VOLTAGE



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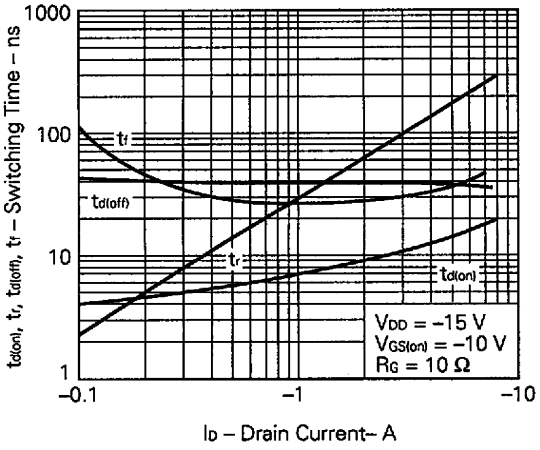
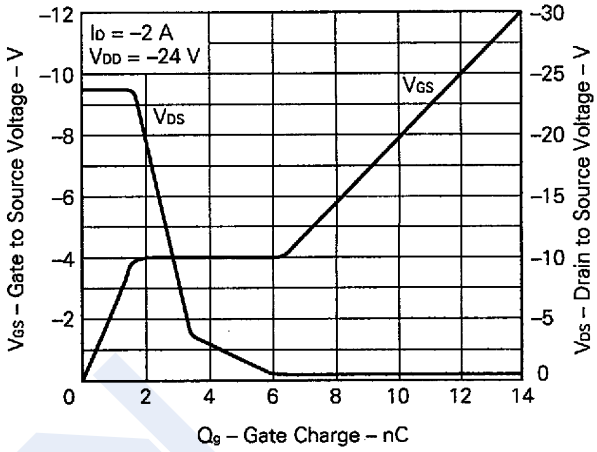
■ Typical Characterisitics

SWITCHING CHARACTERISTICS



DYNAMIC INPUT/OUTPUT CHARACTERISTICS



REVERSE RECOVERY TIME vs. REVERSE DRAIN CURRENT