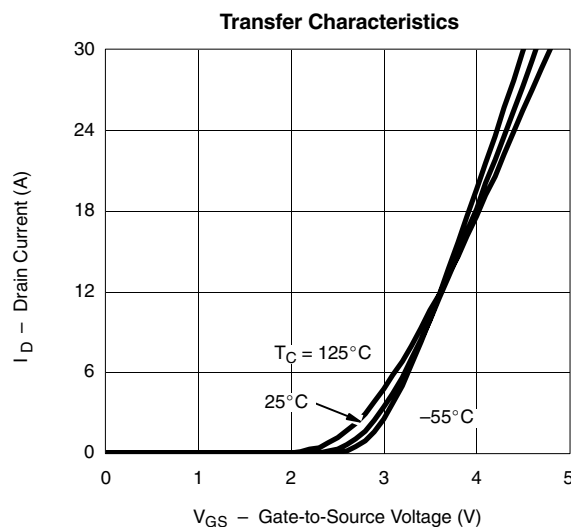
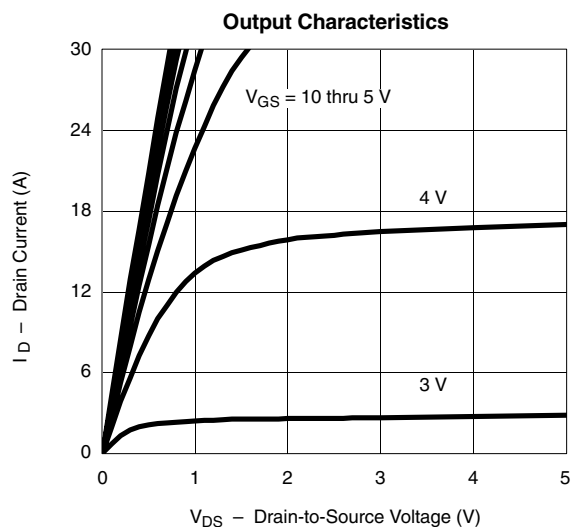


SPECIFICATIONS ($T_J = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static						
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250\ \mu\text{A}$	-1.0		-3.0	V
Gate-Body Leakage	I_{GSS}	$V_{DS} = 0\ \text{V}, V_{GS} = \pm 20\ \text{V}$			± 100	nA
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -30\ \text{V}, V_{GS} = 0\ \text{V}$			-1	μA
		$V_{DS} = -30\ \text{V}, V_{GS} = 0\ \text{V}, T_J = 70^\circ\text{C}$			-10	
On-State Drain Current ^a	$I_{D(on)}$	$V_{DS} = -5\ \text{V}, V_{GS} = -10\ \text{V}$	-30			A
		$V_{DS} = -5\ \text{V}, V_{GS} = -4.5\ \text{V}$	-7			A
Drain-Source On-State Resistance ^a	$r_{DS(on)}$	$V_{GS} = -10\ \text{V}, I_D = -7.2\ \text{A}$		0.024	0.030	Ω
		$V_{GS} = -4.5\ \text{V}, I_D = -5.0\ \text{A}$		0.040	0.052	
Forward Transconductance ^a	g_{fs}	$V_{DS} = -15\ \text{V}, I_D = -7.2\ \text{A}$		14		S
Diode Forward Voltage ^a	V_{SD}	$I_S = -2.1\ \text{A}, V_{GS} = 0\ \text{V}$		-0.78	-1.1	V
Dynamic^b						
Total Gate Charge	Q_g	$V_{DS} = -15\ \text{V}, V_{GS} = -5\ \text{V}, I_D = -7.2\ \text{A}$		12	20	nC
Gate-Source Charge	Q_{gs}			4.7		
Gate-Drain Charge	Q_{gd}			3.7		
Gate Resistance	R_G			3.1	4.7	Ω
Turn-On Delay Time	$t_{d(on)}$	$V_{DD} = -15\ \text{V}, R_L = 15\ \Omega$ $I_D \cong -1\ \text{A}, V_{GEN} = -10\ \text{V}, R_G = 6\ \Omega$		12	20	ns
Rise Time	t_r			15	20	
Turn-Off Delay Time	$t_{d(off)}$			40	60	
Fall Time	t_f			20	25	
Source-Drain Reverse Recovery Time	t_{rr}	$I_F = -2.1\ \text{A}, di/dt = 100\ \text{A}/\mu\text{s}$		30	80	

Notes

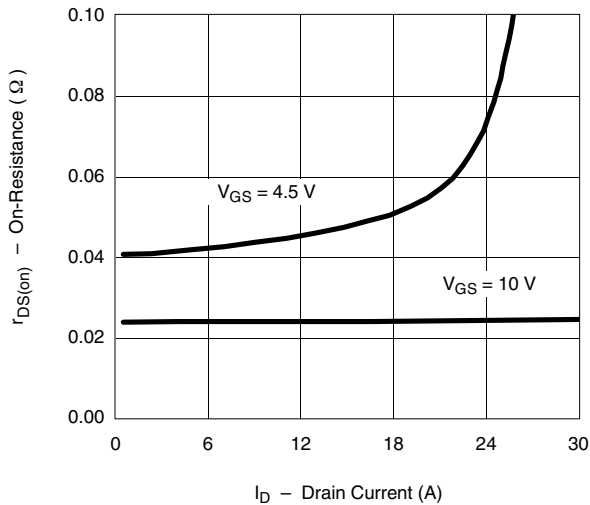
- a. Pulse test; pulse width $\leq 300\ \mu\text{s}$, duty cycle $\leq 2\%$.
b. Guaranteed by design, not subject to production testing.

TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)

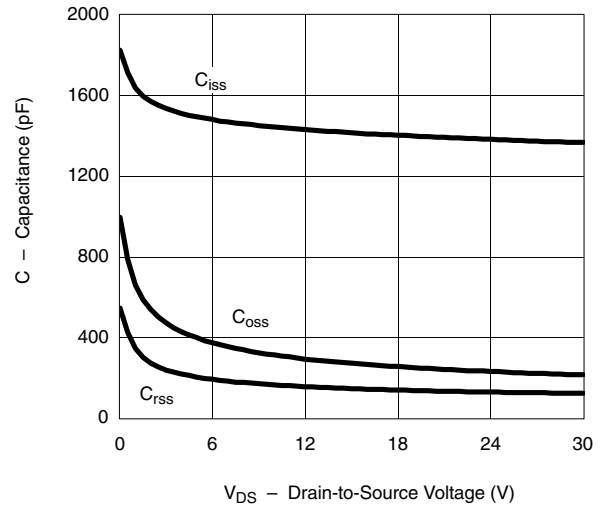


TYPICAL CHARACTERISTICS (25 °C UNLESS NOTED)

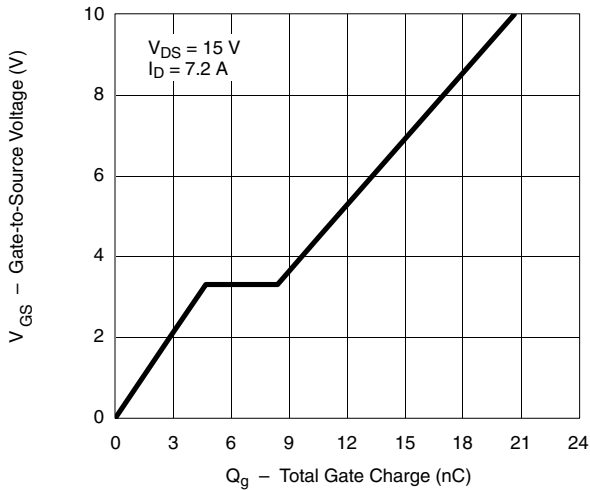
On-Resistance vs. Drain Current



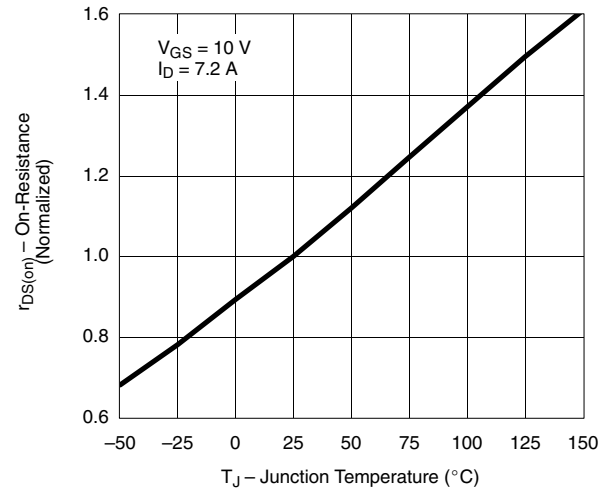
Capacitance



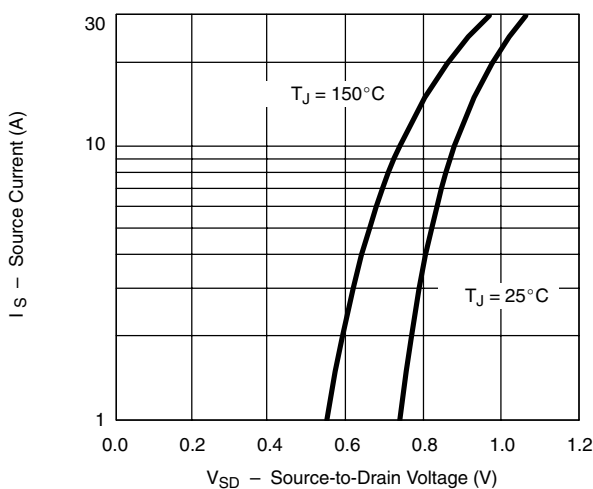
Gate Charge



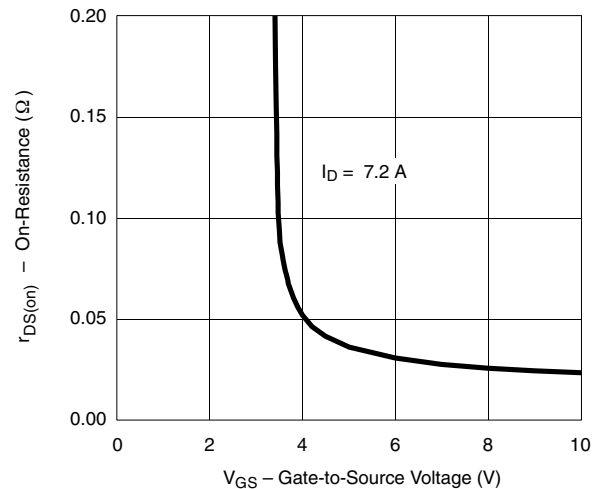
On-Resistance vs. Junction Temperature



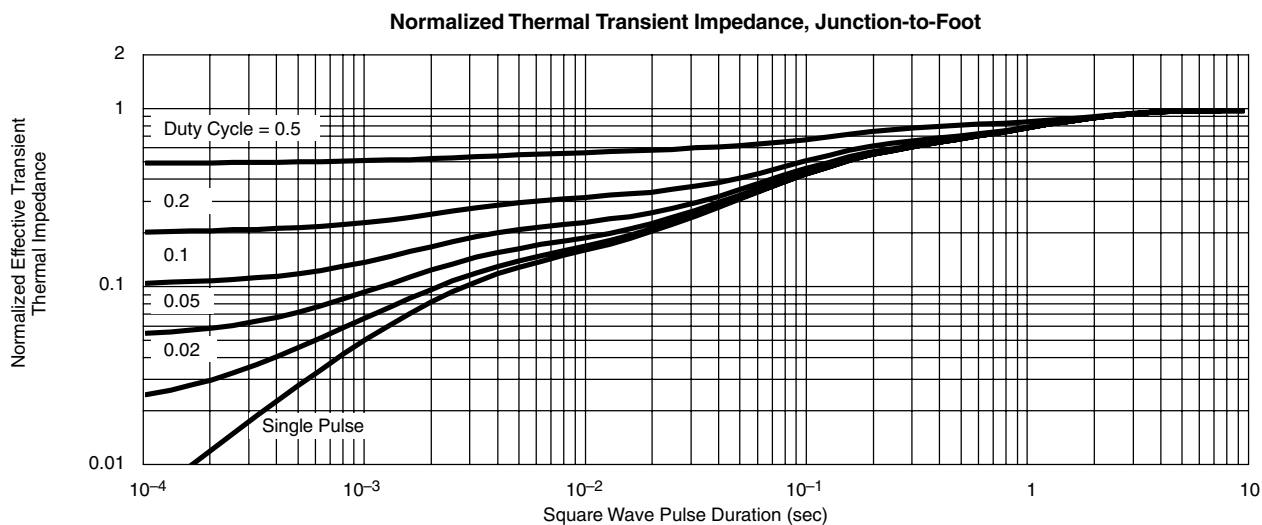
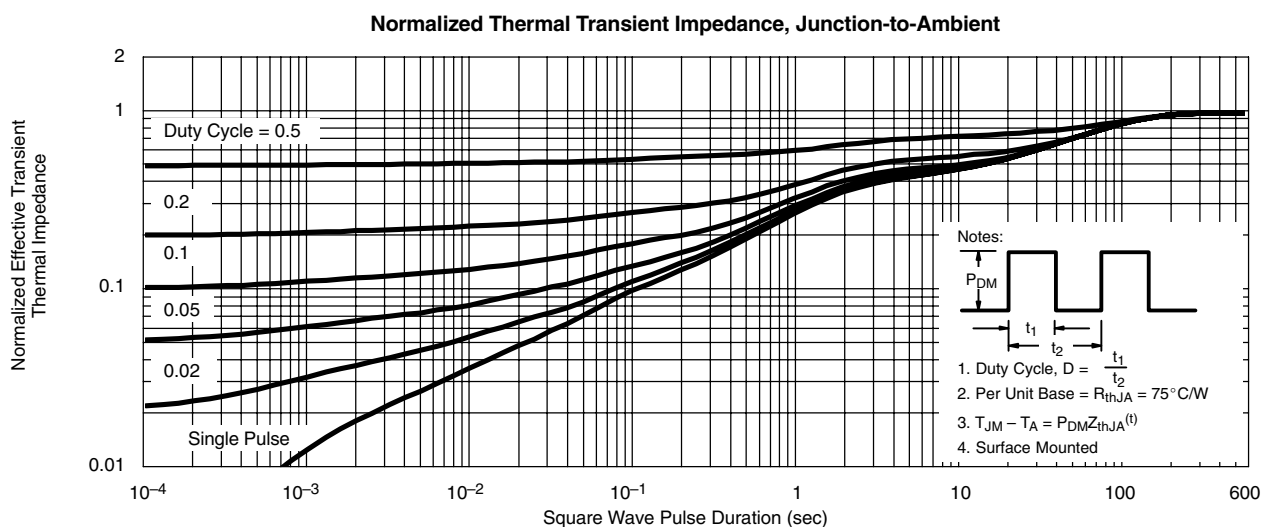
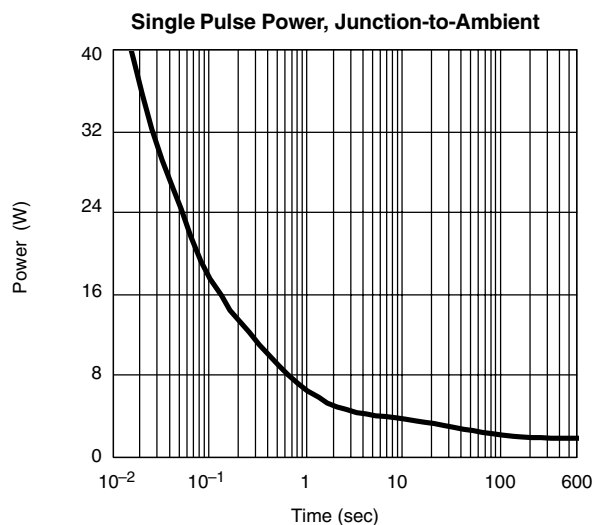
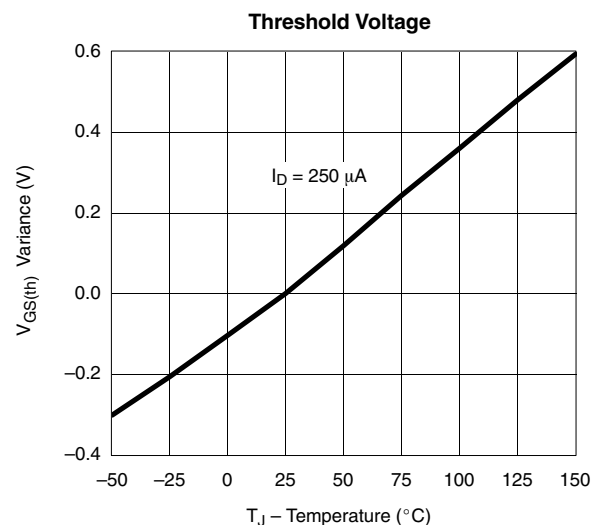
Source-Drain Diode Forward Voltage



On-Resistance vs. Gate-to-Source Voltage



TYPICAL CHARACTERISTICS (25 °C UNLESS NOTED)





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