

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

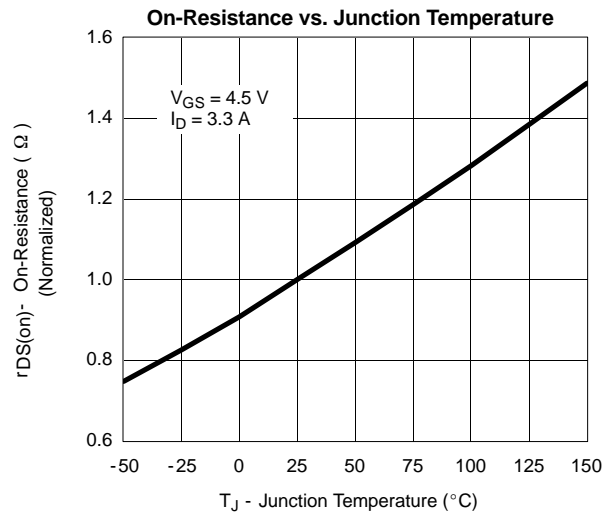
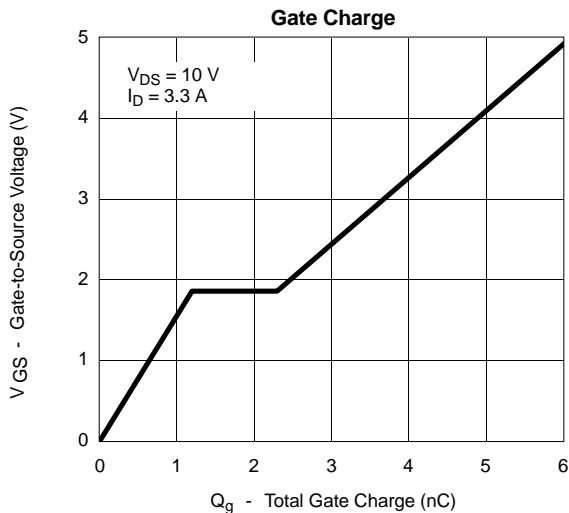
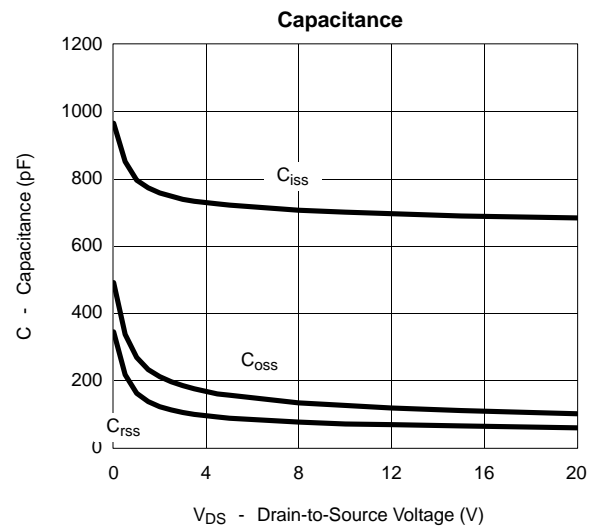
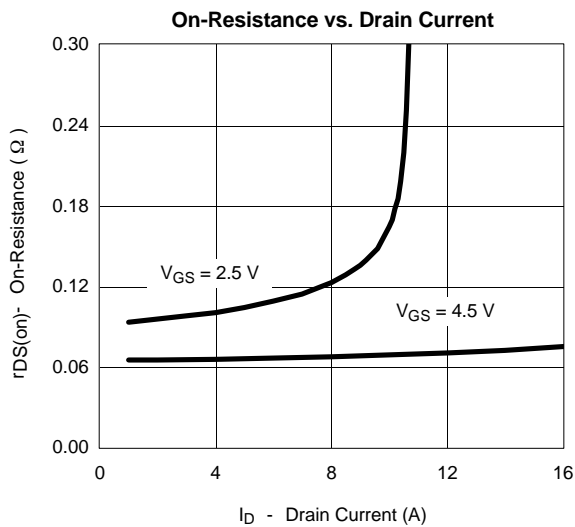
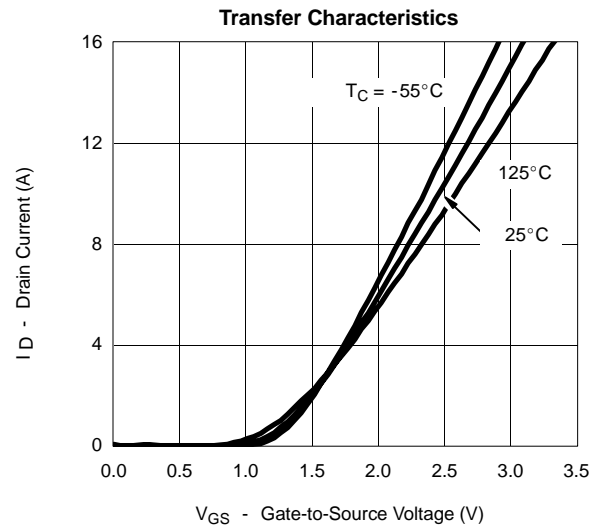
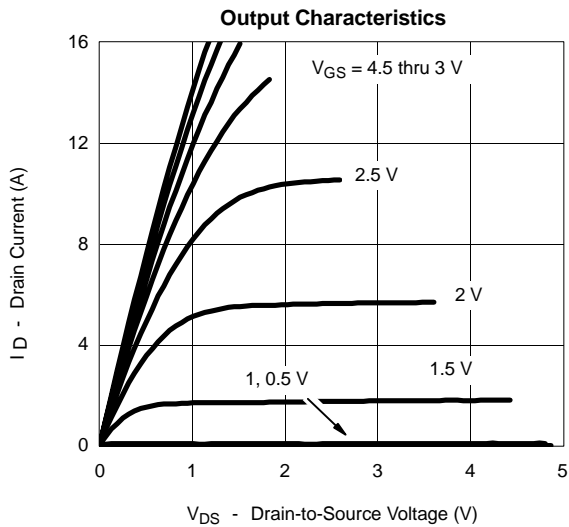
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static						
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250\ \mu\text{A}$	-0.45		-0.95	V
Gate-Body Leakage	I_{GSS}	$V_{DS} = 0\ \text{V}, V_{GS} = \pm 8\ \text{V}$			± 100	nA
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -20\ \text{V}, V_{GS} = 0\ \text{V}$			-1	μA
		$V_{DS} = -20\ \text{V}, V_{GS} = 0\ \text{V}, T_J = 70^\circ\text{C}$			-5	
On-State Drain Current ^a	$I_{D(on)}$	$V_{DS} = -5\ \text{V}, V_{GS} = -4.5\ \text{V}$	-10			A
		$V_{DS} = -5\ \text{V}, V_{GS} = -2.5\ \text{V}$	-4			
Drain-Source On-State Resistance ^a	$r_{DS(on)}$	$V_{GS} = -4.5\ \text{V}, I_D = -3.3\ \text{A}$		0.067	0.10	Ω
		$V_{GS} = -2.5\ \text{V}, I_D = -2.9\ \text{A}$		0.100	0.135	
Forward Transconductance ^a	g_{fs}	$V_{DS} = -10\ \text{V}, I_D = -3.3\ \text{A}$		8		S
Diode Forward Voltage ^a	V_{SD}	$I_S = -1.6\ \text{A}, V_{GS} = 0\ \text{V}$		0.8	-1.2	V
Dynamic^b						
Total Gate Charge	Q_g	$V_{DS} = -10\ \text{V}, V_{GS} = -4.5\ \text{V}, I_D = -3.3\ \text{A}$		5.5	14	nC
Gate-Source Charge	Q_{gs}			1.2		
Gate-Drain Charge	Q_{gd}			1.1		
Turn-On Delay Time	$t_{d(on)}$	$V_{DD} = -10\ \text{V}, R_L = 10\ \Omega$ $I_D \cong -1.6\ \text{A}, V_{GEN} = -4.5\ \text{V}, R_G = 6\ \Omega$		15	50	ns
Rise Time	t_r			40	60	
Turn-Off Delay Time	$t_{d(off)}$			40	80	
Fall Time	t_f			50	70	
Source-Drain Reverse Recovery Time	t_{rr}	$I_F = -1.6\ \text{A}, di/dt = 100\ \text{A}/\mu\text{s}$		50	80	

Notes

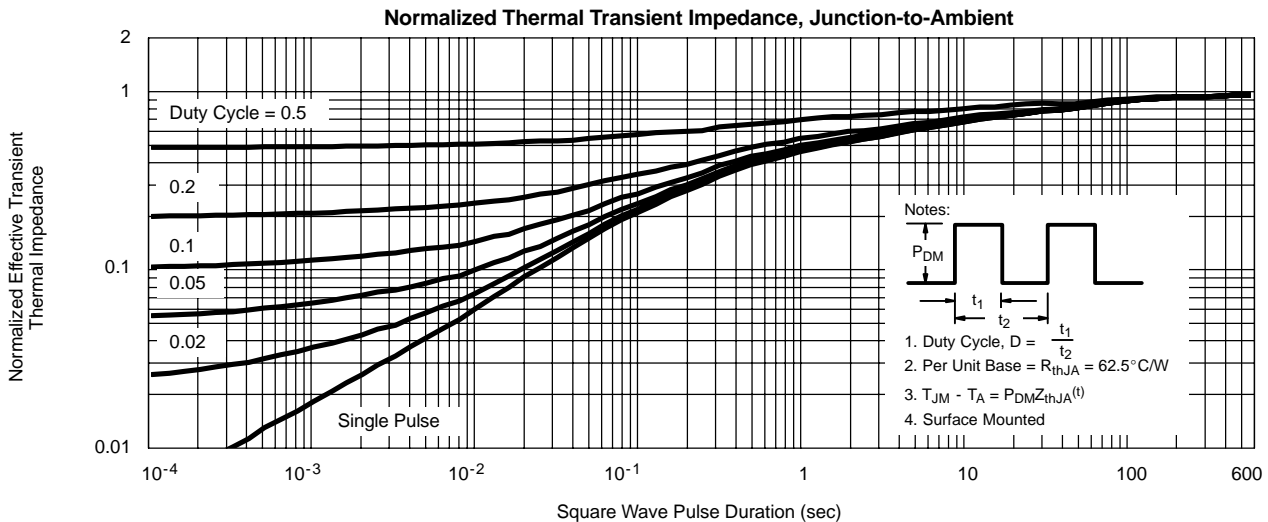
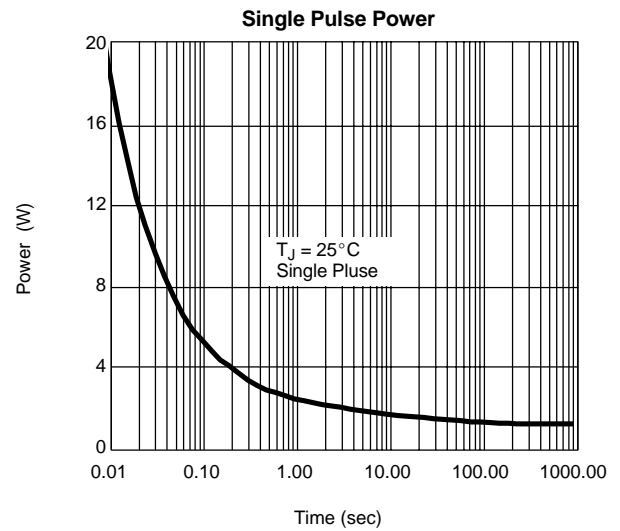
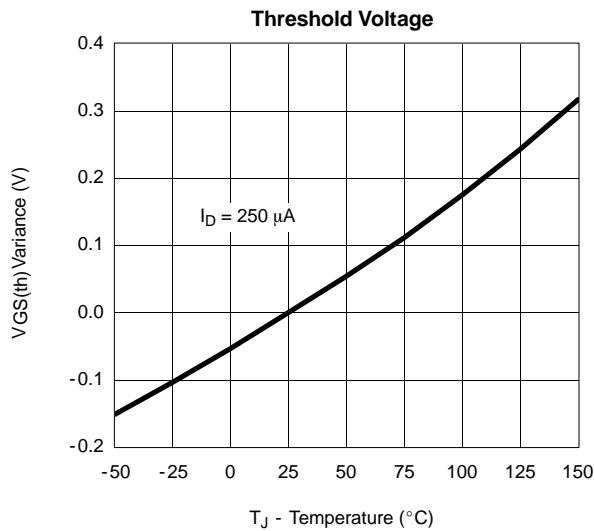
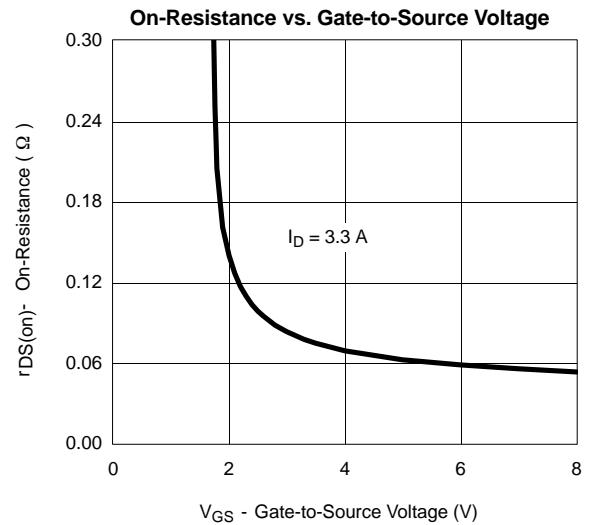
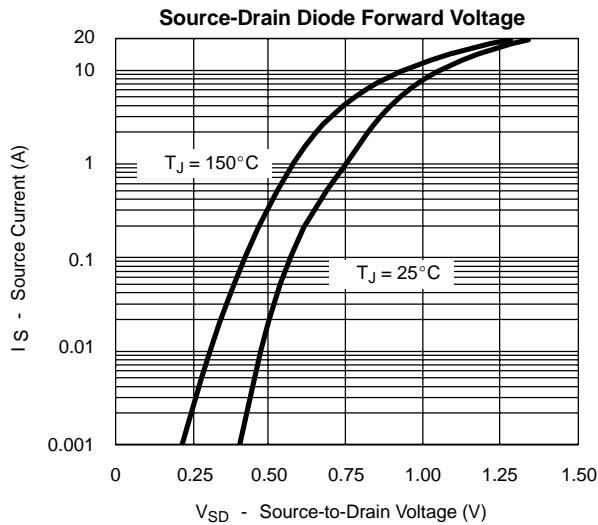
- a. Pulse test; pulse width $\leq 300\ \mu\text{s}$, duty cycle $\leq 2\%$.
b. Guaranteed by design, not subject to production testing.



TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)



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