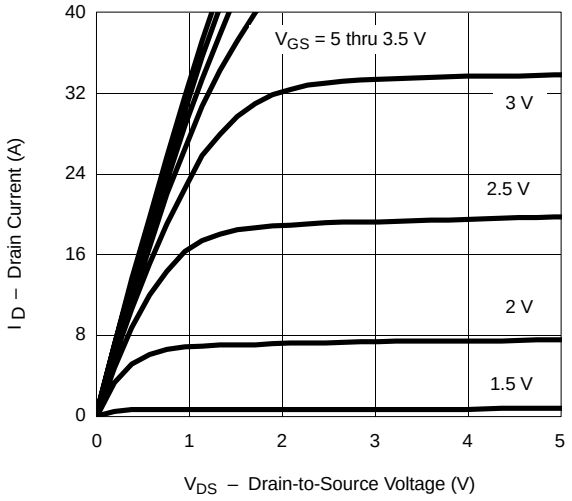
SPECIFICATIONS (T_J = 25°C UNLESS OTHERWISE NOTED)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static						
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS} = V_{GS}, I_D = –250 µA	–0.6		1.4	V
Gate-Body Leakage	I_{GSS}	V_{DS} = 0 V, V_{GS} = ±12 V			±100	nA
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS} = –20 V, V_{GS} = 0 V			–1	µA
		V_{DS} = –20 V, V_{GS} = 0 V, T_J = 55°C			–5	
On-State Drain Current[a]	$I_{D(on)}$	V_{DS} ≤ –5 V, V_{GS} = –4.5 V	–20			A
Drain-Source On-State Resistance[a]	$r_{DS(on)}$	V_{GS} = –4.5 V, I_D = –6.2 A		0.027	0.033	Ω
		V_{GS} = –2.5 V, I_D = –5 A		0.04	0.050	
Forward Transconductance[a]	g_{fs}	V_{DS} = –10 V, I_D = –6.2 A		20		S
Diode Forward Voltage[a]	V_{SD}	I_S = –1.7 A, V_{GS} = 0 V			–1.2	V
Dynamic[b]						
Total Gate Charge	Q_g	V_{DS} = –10 V, V_{GS} = –4.5 V, I_D = –6.2 A		22	35	nC
Gate-Source Charge	Q_{gs}			7		
Gate-Drain Charge	Q_{gd}			3.5		
Turn-On Delay Time	$t_{d(on)}$	V_{DD} = –10 V, R_L = 10 Ω I_D ≅ –1 A, V_{GEN} = –10 V, R_G = 6 Ω		27	50	ns
Rise Time	t_r			32	50	
Turn-Off Delay Time	$t_{d(off)}$			95	150	
Fall Time	t_f			45	70	
Source-Drain Reverse Recovery Time	t_{rr}	I_F = –1.7 A, di/dt = 100 A/µs		40	80	

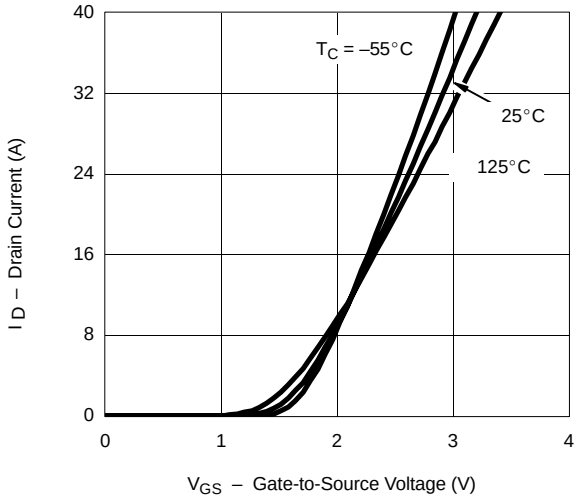
Notes
a. Pulse test; pulse width ≤ 300 µs, duty cycle ≤ 2%.
b. For design aid only; not subject to production testing.

TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)

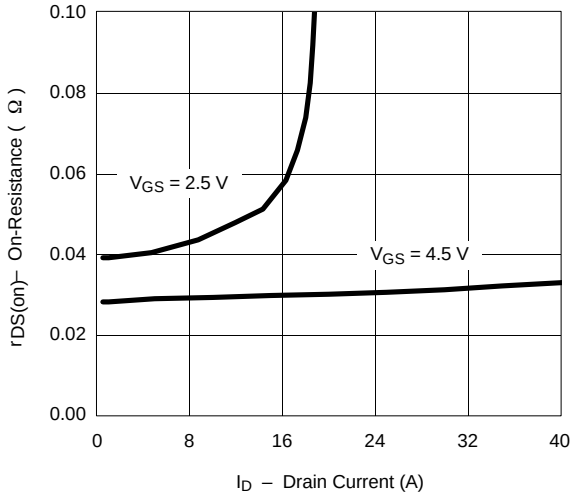
Output Characteristics



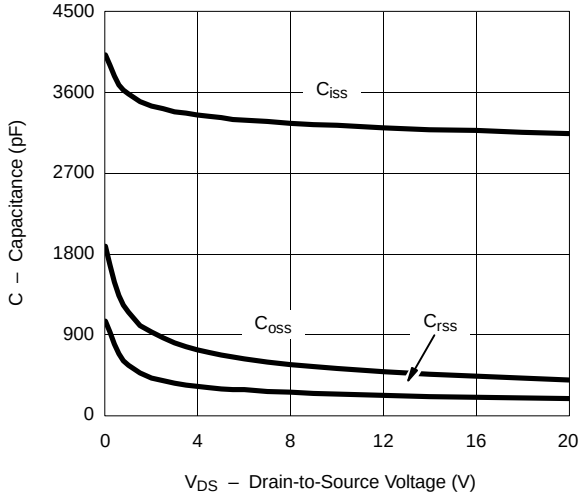
Transfer Characteristics



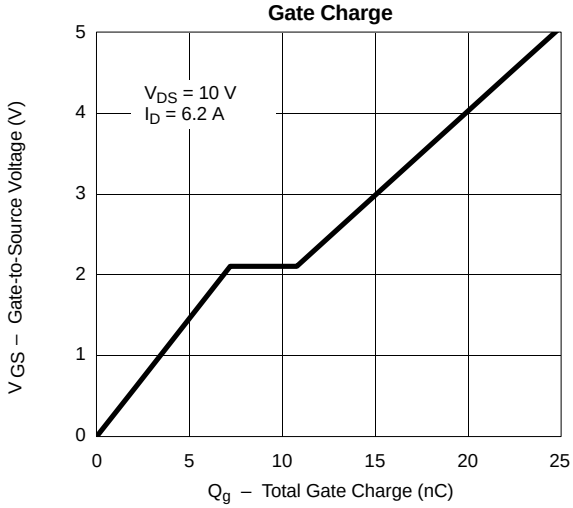
On-Resistance vs. Drain Current



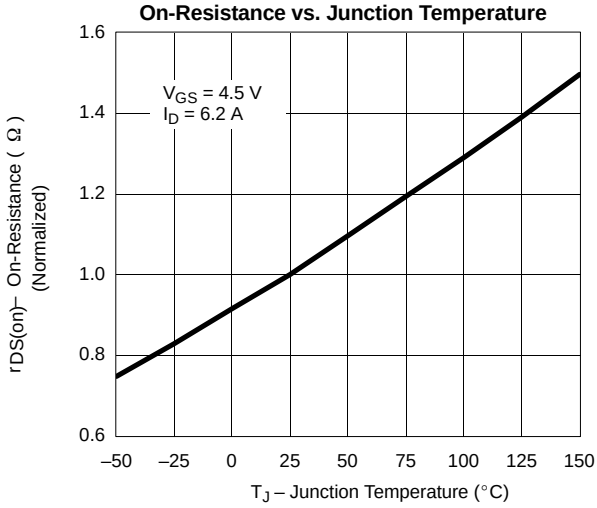
Capacitance



Gate Charge

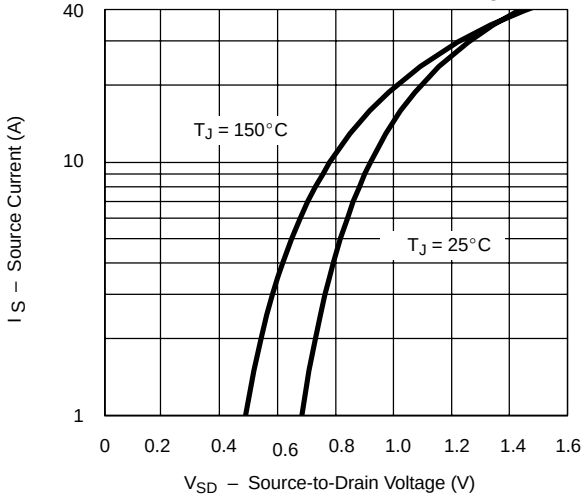


On-Resistance vs. Junction Temperature

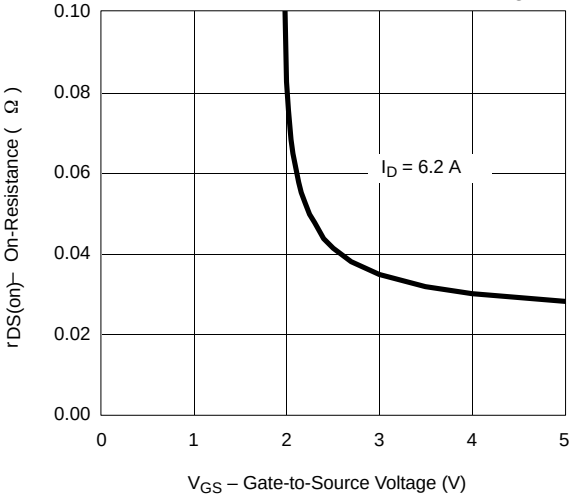


TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)

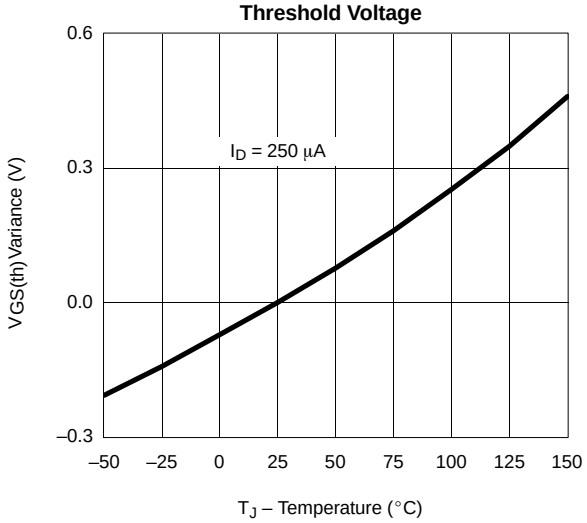
Source-Drain Diode Forward Voltage



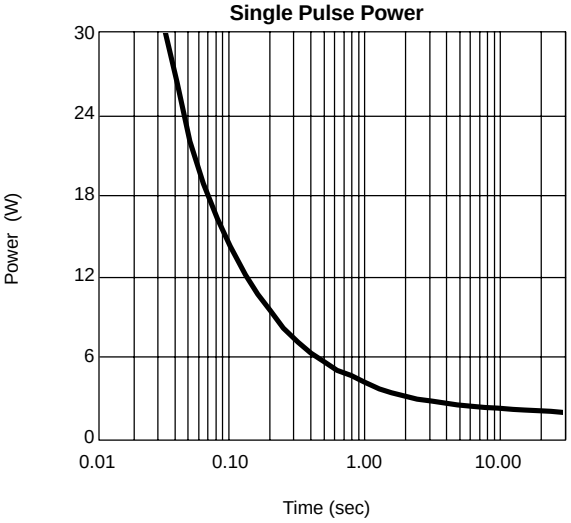
On-Resistance vs. Gate-to-Source Voltage



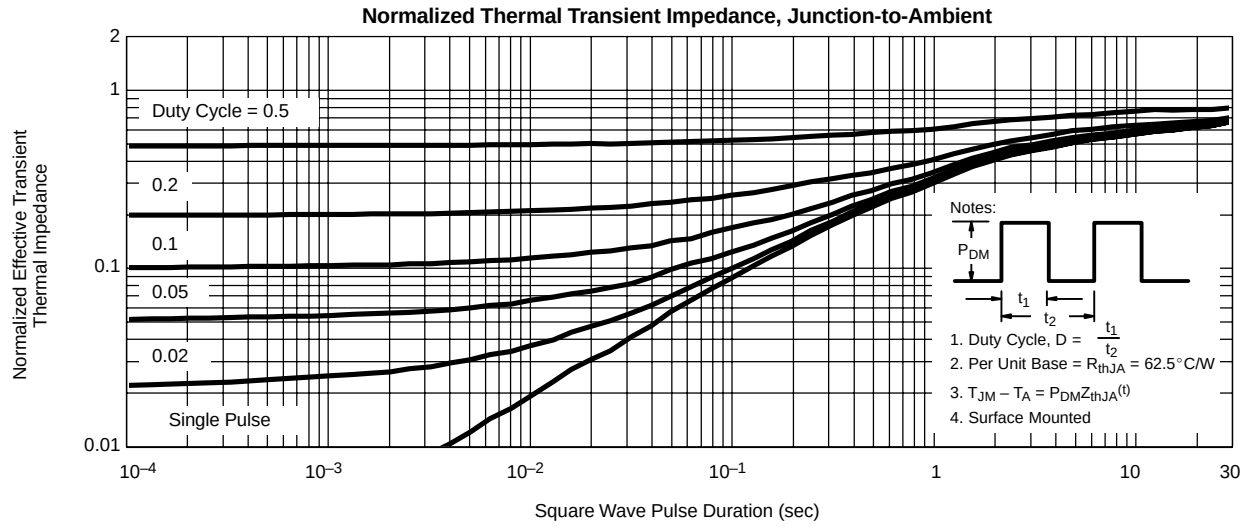
Threshold Voltage



Single Pulse Power



Normalized Thermal Transient Impedance, Junction-to-Ambient



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