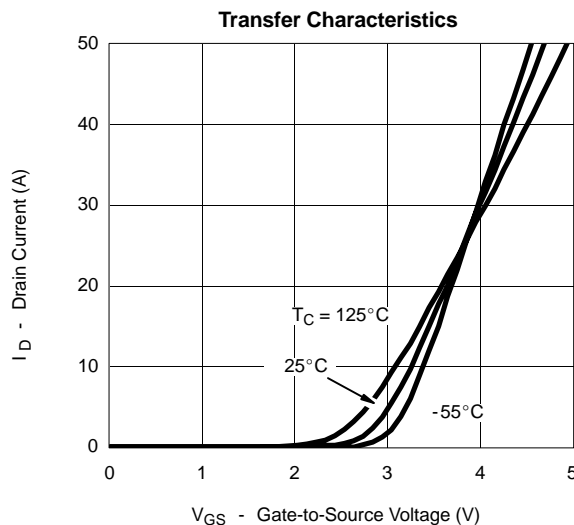
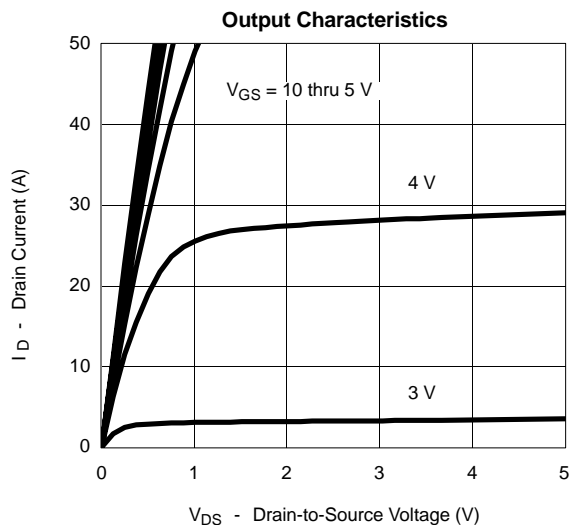


MOSFET SPECIFICATIONS ($T_J = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

Parameter	Symbol	Test Condition	Min	Typ ^a	Max	Unit
Static						
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 250 \mu\text{A}$	1			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}	$V_{DS} = 24 \text{ V}, V_{GS} = 0 \text{ V}$			1	μA
		$V_{DS} = 24 \text{ V}, V_{GS} = 0 \text{ V}, T_J = 55^\circ\text{C}$			25	
On-State Drain Current ^b	$I_{D(on)}$	$V_{DS} \geq 5 \text{ V}, V_{GS} = 10 \text{ V}$	20			A
Drain-Source On-State Resistance ^b	$r_{DS(on)}$	$V_{GS} = 10 \text{ V}, I_D = 9.0 \text{ A}$		0.012	0.018	Ω
		$V_{GS} = 4.5 \text{ V}, I_D = 7.3 \text{ A}$		0.019	0.028	
Forward Transconductance ^b	g_{fs}	$V_{DS} = 15 \text{ V}, I_D = 9.0 \text{ A}$		23		S
Diode Forward Voltage ^b	V_{SD}	$I_S = 2.1 \text{ A}, V_{GS} = 0 \text{ V}$			1.2	V
Dynamic^a						
Gate Charge	Q_g	$V_{DS} = 15 \text{ V}, V_{GS} = 5 \text{ V}, I_D = 9.0 \text{ A}$		14	20	nC
Total Gate Charge	Q_{gt}	$V_{DS} = 15 \text{ V}, V_{GS} = 10 \text{ V}, I_D = 9.0 \text{ A}$		24	35	
Gate-Source Charge	Q_{gs}			4.5		
Gate-Drain Charge	Q_{gd}			5.9		
Gate Resistance	R_g		0.2	1.0	2.4	Ω
Turn-On Delay Time	$t_{d(on)}$	$V_{DD} = 15 \text{ V}, R_L = 15 \Omega$ $I_D \cong 1 \text{ A}, V_{GEN} = 10 \text{ V}, R_G = 6 \Omega$		16	20	ns
Rise Time	t_r			10	20	
Turn-Off Delay Time	$t_{d(off)}$			34	50	
Fall Time	t_f			13	20	
Source-Drain Reverse Recovery Time	t_{rr}	$I_F = 2.1 \text{ A}, di/dt = 100 \text{ A}/\mu\text{s}$		50	90	

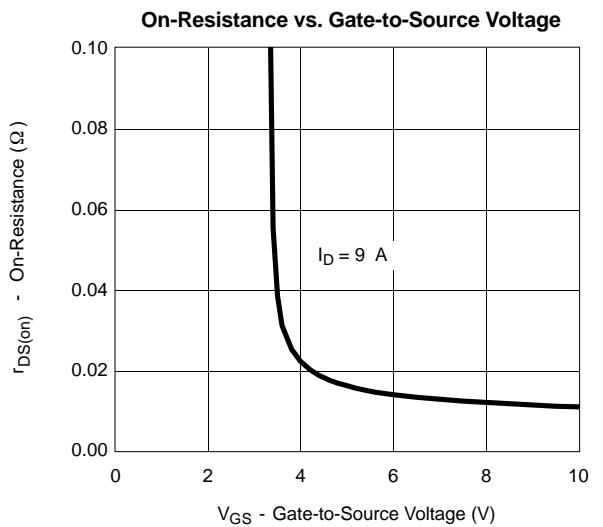
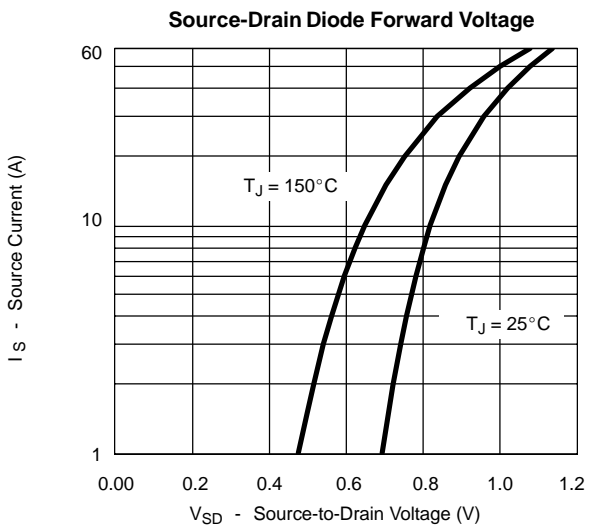
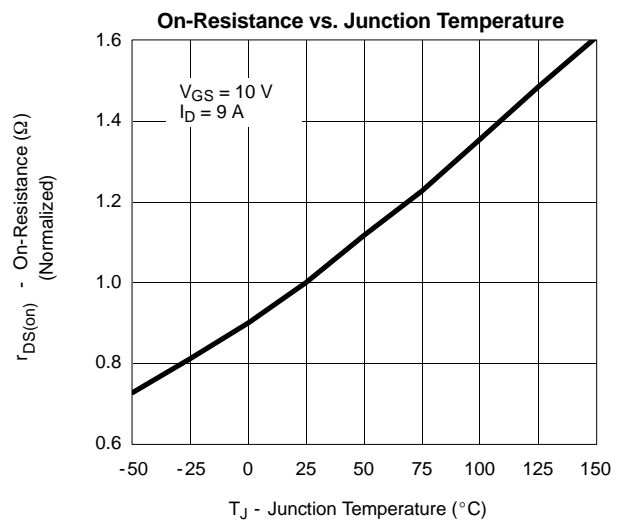
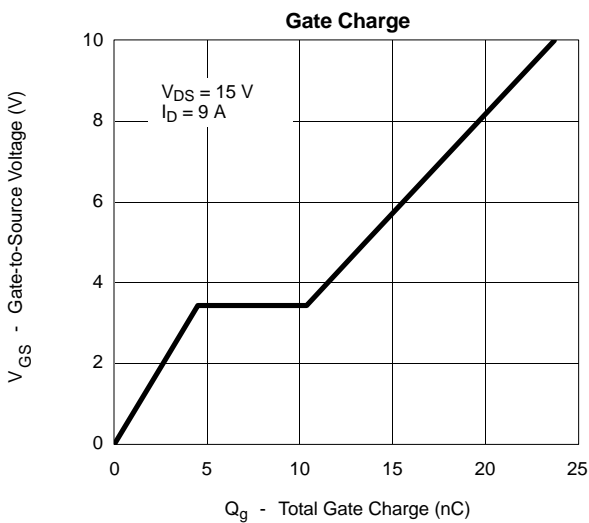
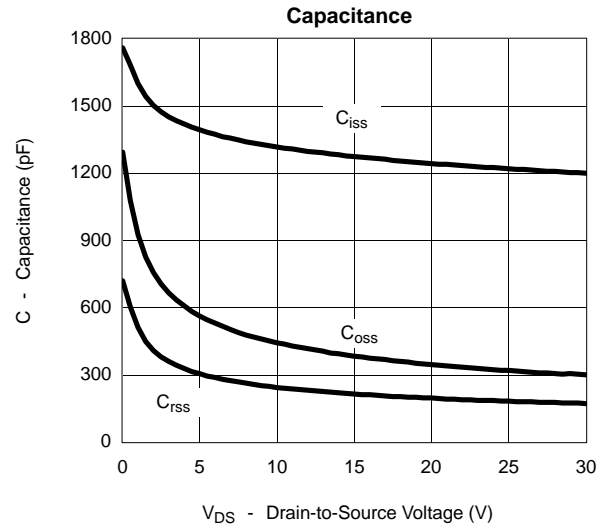
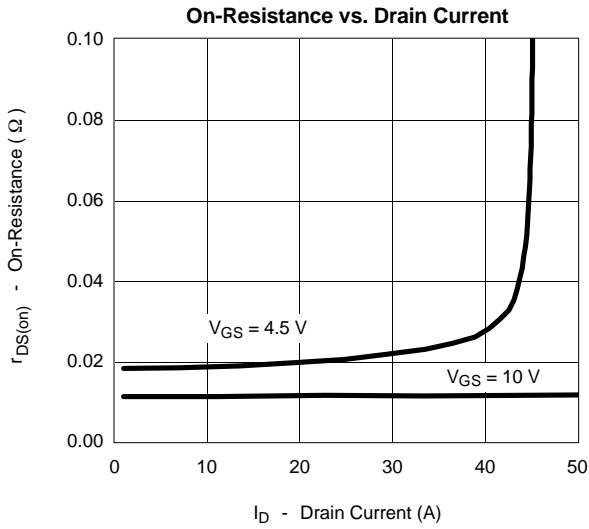
Notes

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

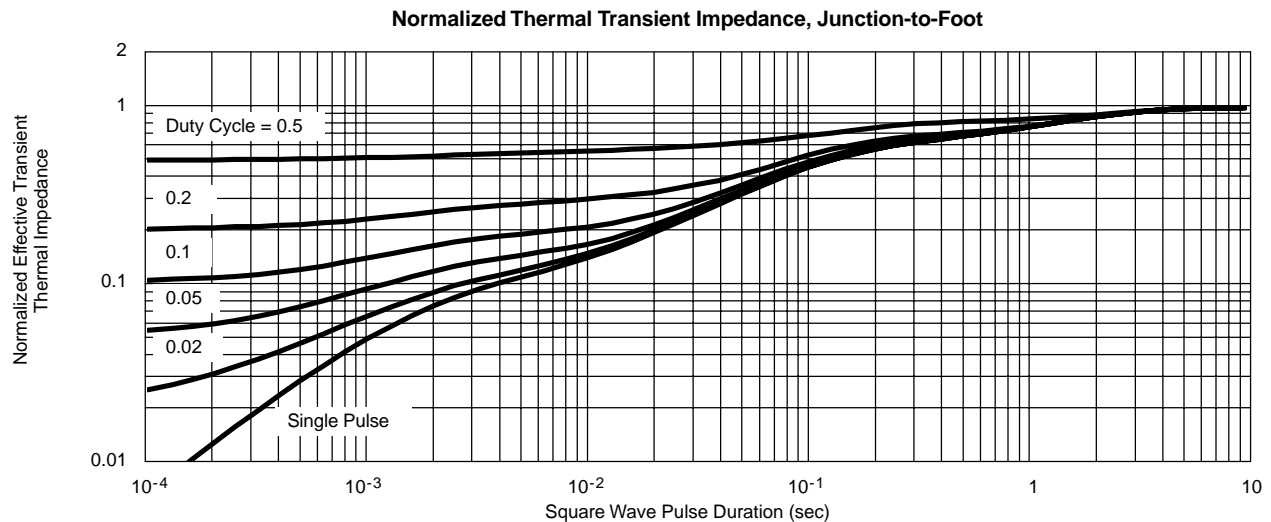
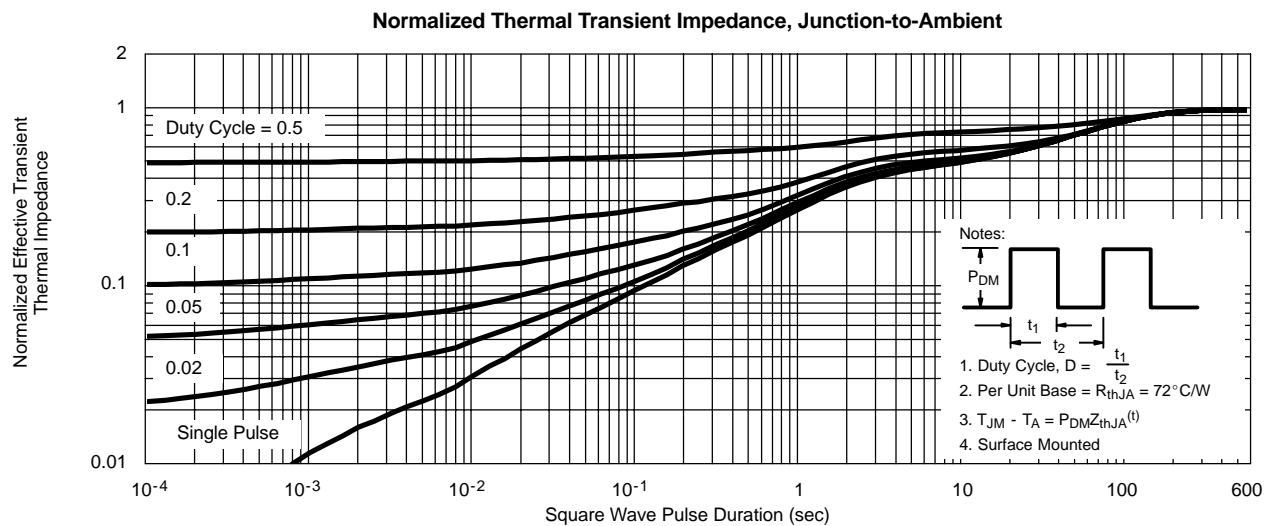
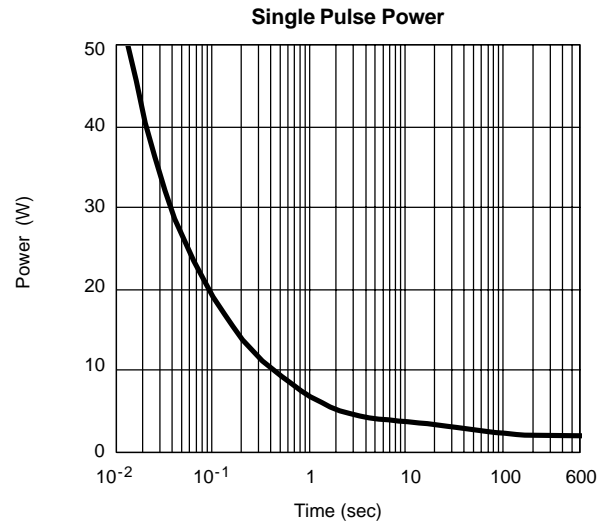
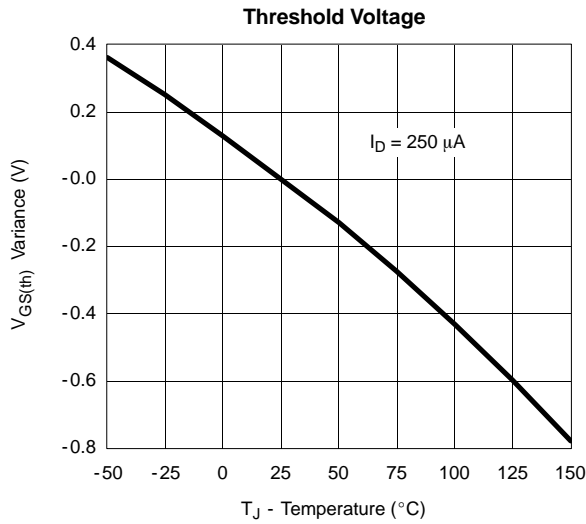
TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)



TYPICAL CHARACTERISTICS (25 °C UNLESS NOTED)



TYPICAL CHARACTERISTICS (25 °C UNLESS NOTED)





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