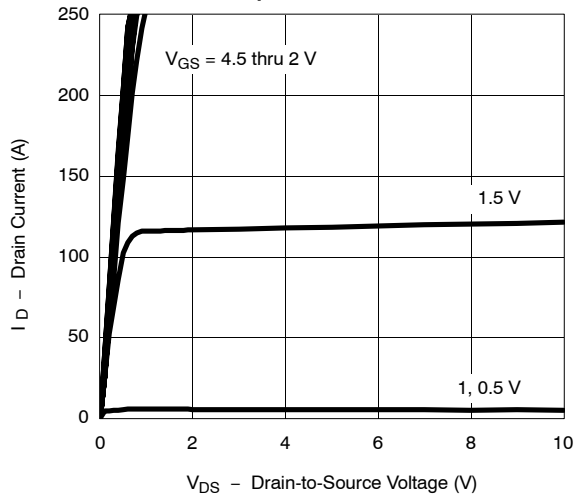
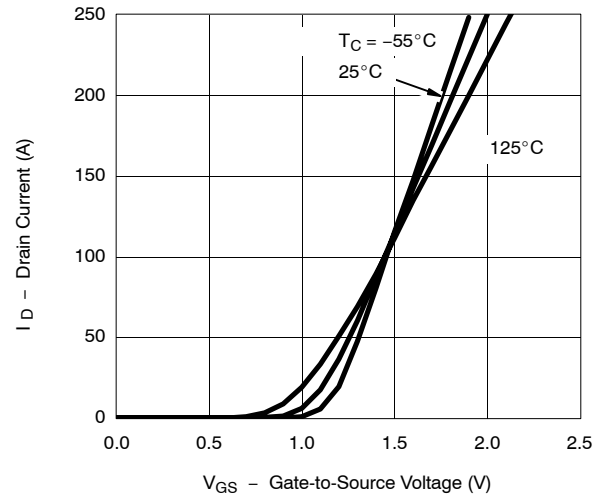
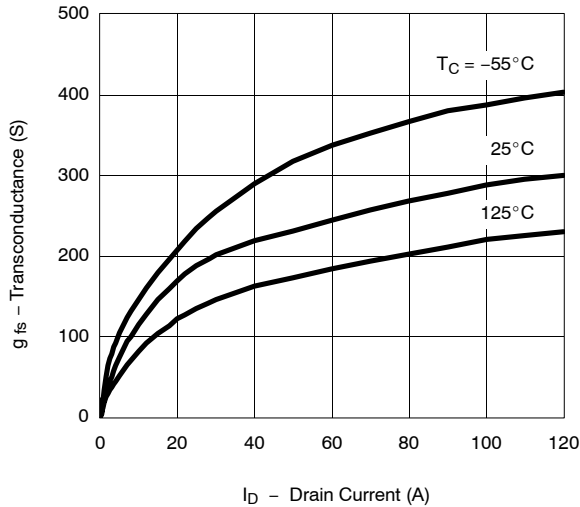
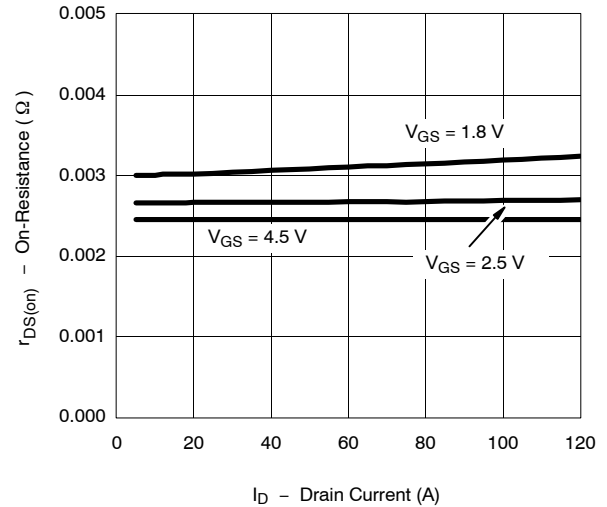
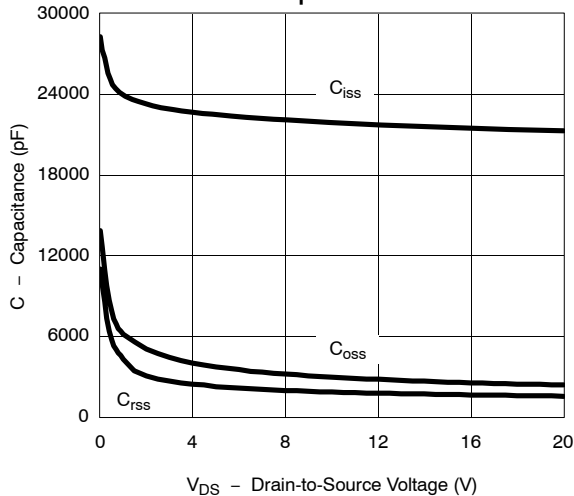
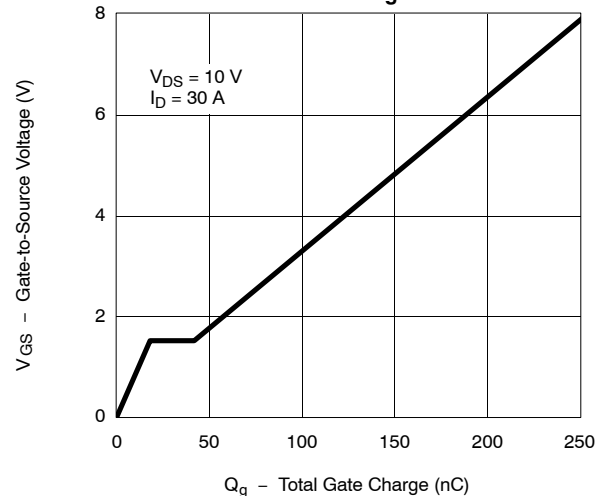


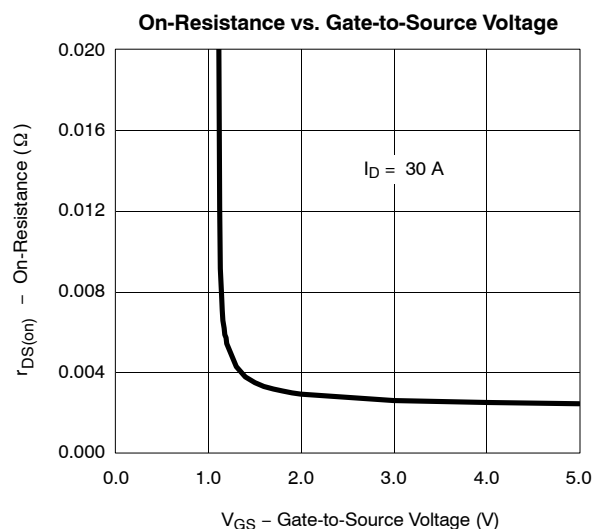
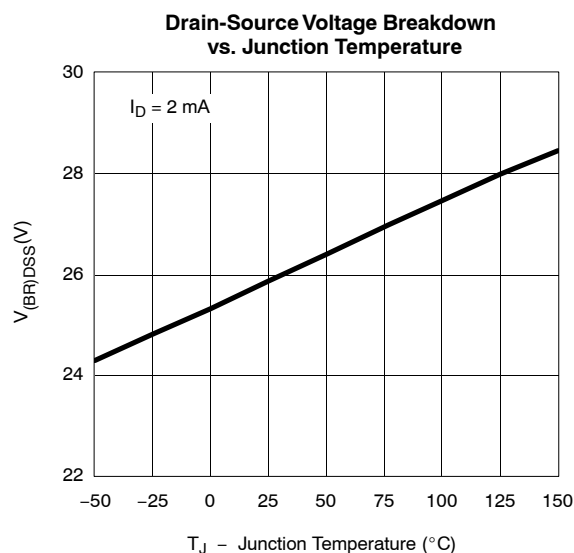
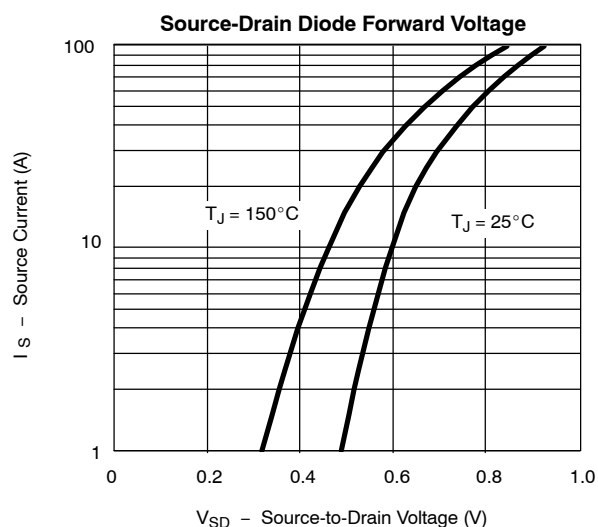
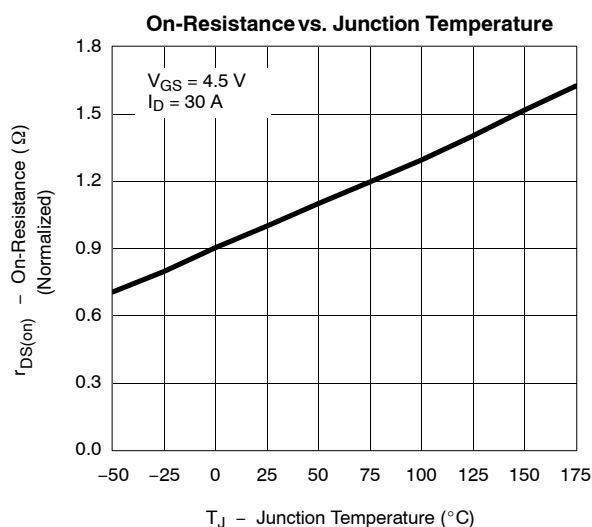
MOSFET SPECIFICATIONS (T _J =25 °C UNLESS OTHERWISE NOTED)						
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static						
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} = 0 V, I _D = 2 mA	20			V
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _{DS} = 2 mA	0.45			
Gate-Body Leakage	I _{GSS}	V _{DS} = 0 V, V _{GS} = ± 8 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 = 125 °C			250	
On-State Drain Current ^a	I _{D(on)}	V _{DS} = 5 V, V _{GS} = 4.5 V	120			A
Drain-Source On-State Resistance ^a	r _{DS(on)}	V _{GS} = 4.5 V, I _D = 30 A		0.0025	0.003	Ω
		V _{GS} = 4.5 V, I _D = 30 A, T _J = 125 °C			0.0042	
		V _{GS} = 4.5 V, I _D = 30 A, T _J = 175 °C			0.005	
		V _{GS} = 2.5 V, I _D = 30 A		0.0027	0.0034	
		V _{GS} = 1.8 V, I _D = 30 A		0.003	0.0038	
Forward Transconductance ^a	g _{fs}	V _{DS} = 5 V, I _D = 30 A	30			S
Dynamic ^b						
Input Capacitance	C _{iss}	V _{GS} = 0 V, V _{DS} = 20 V, f = 1 MHz		21250		pF
Output Capacitance	C _{oss}			2350		
Reversen Transfer Capacitance	C _{rss}			1520		
Total Gate Charge ^c	Q _g	V _{DS} = 10 V, V _{GS} = 4.5 V, I _D = 85 A		140	200	nC
Gate-Source Charge ^c	Q _{gs}			18		
Gate-Drain Charge ^c	Q _{gd}			24		
Turn-On Delay Time ^c	t _{d(on)}	V _{DD} = 10 V, R _L = 0.12 Ω I _D ≈ 85 A, V _{GEN} = 4.5 V, R _g = 2.5 Ω		20	30	ns
Rise Time ^c	t _r			200	300	
Turn-Off Delay Time ^c	t _{d(off)}			450	670	
Fall Time ^c	t _f			320	480	
Source-Drain Diode Ratings and Characteristics (T _C = 25 °C) ^b						
Pulsed Current	I _{SM}				240	A
Forward Voltage ^a	V _{SD}	I _F = 100 A, V _{GS} = 0 V		1.2	1.5	V
Reverse Recovery Time	t _{rr}	I _F = 50 A, di/dt = 100 A/μs		75	150	ns

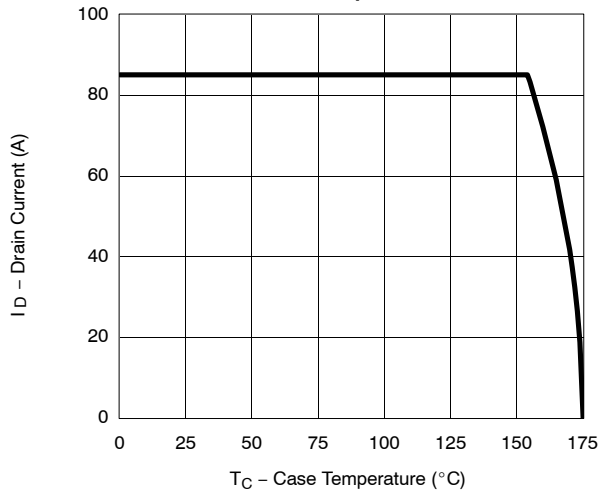
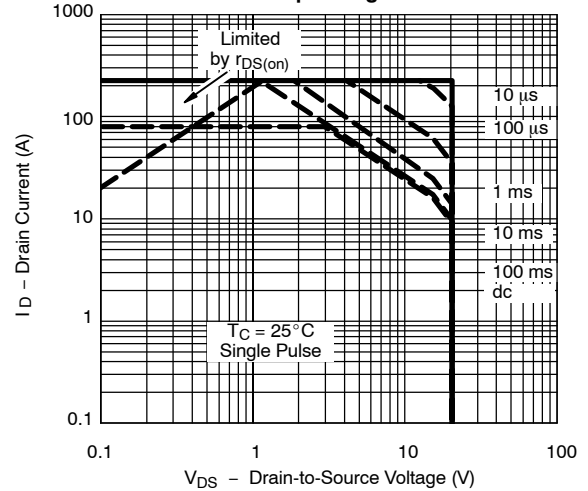
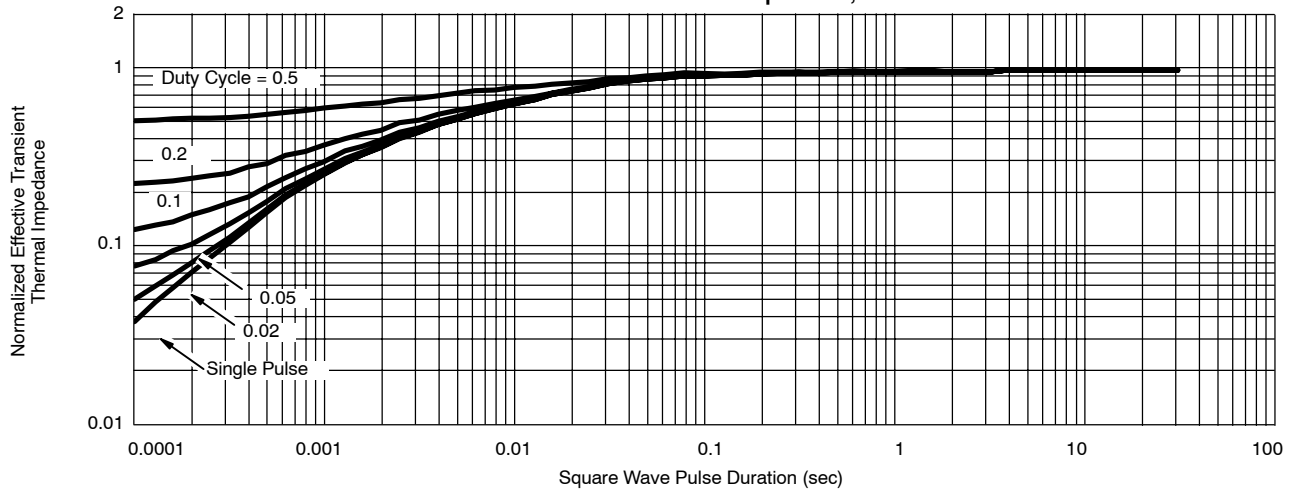
Notes:

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

**TYPICAL CHARACTERISTICS (25 °C UNLESS NOTED)****Output Characteristics****Transfer Characteristics****Transconductance****On-Resistance vs. Drain Current****Capacitance****Gate Charge**

TYPICAL CHARACTERISTICS (25 °C UNLESS NOTED)



**THERMAL RATINGS****Maximum Drain Current vs.
Case Temperature****Safe Operating Area****Normalized Thermal Transient Impedance, Junction-to-Case**



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