

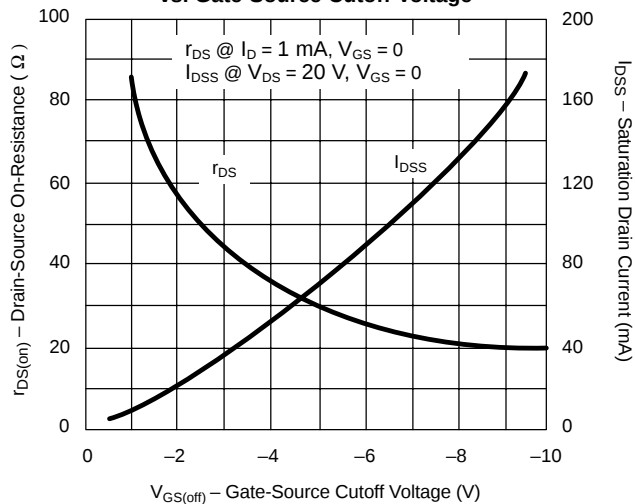
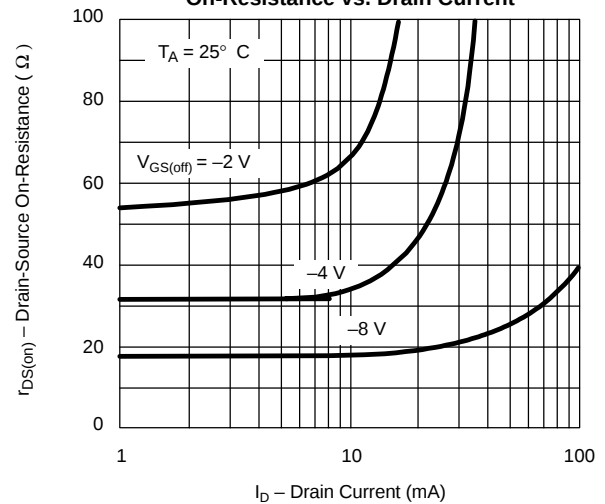
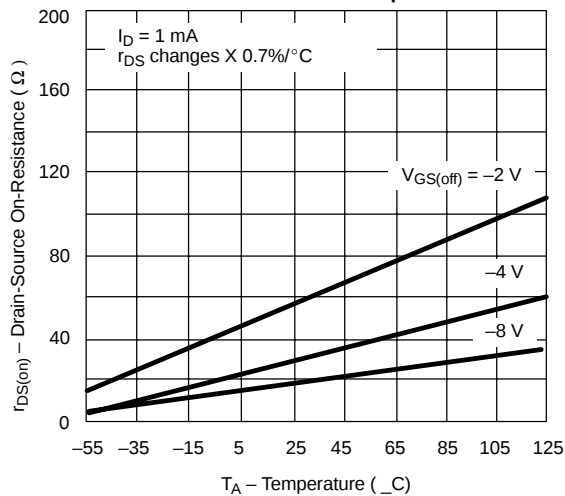
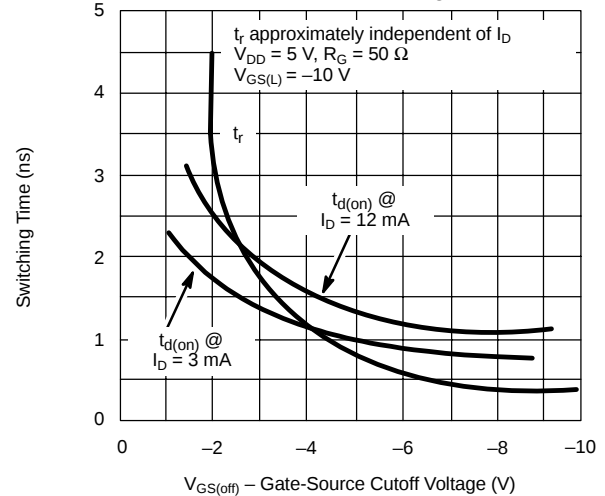
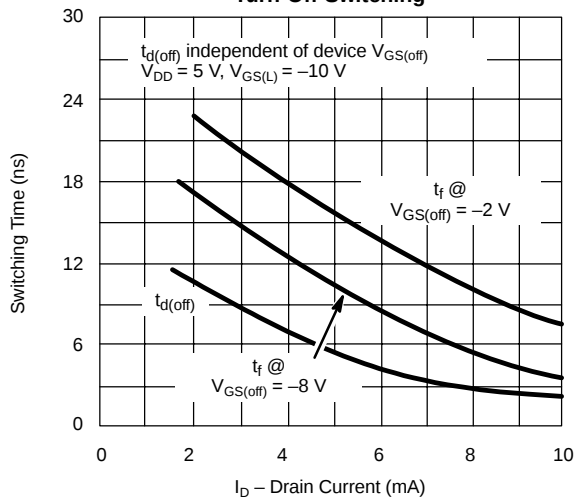
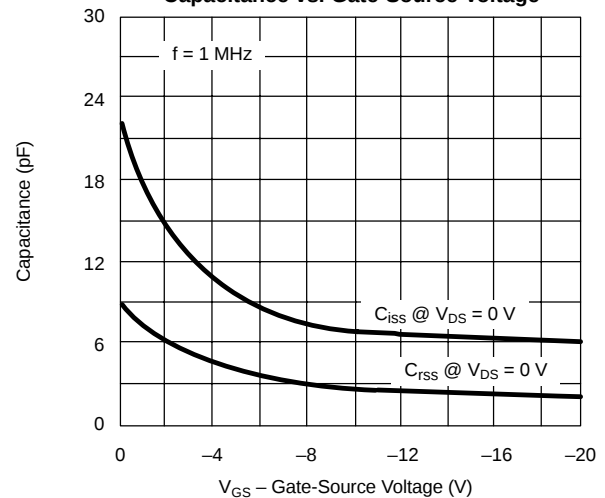
SPECIFICATIONS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

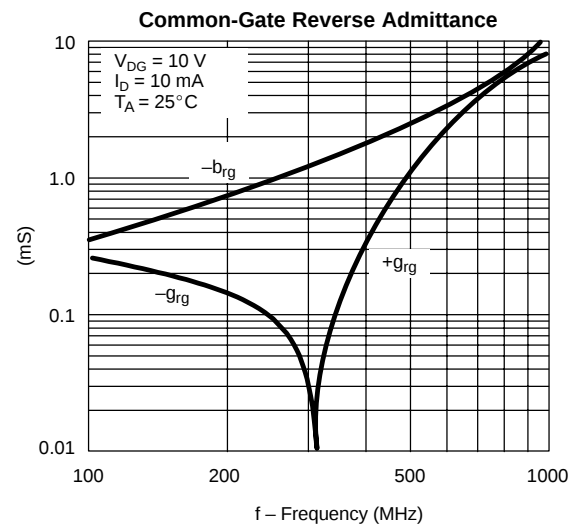
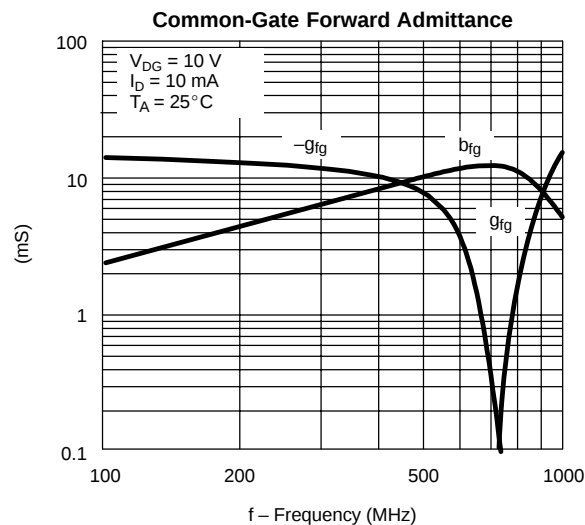
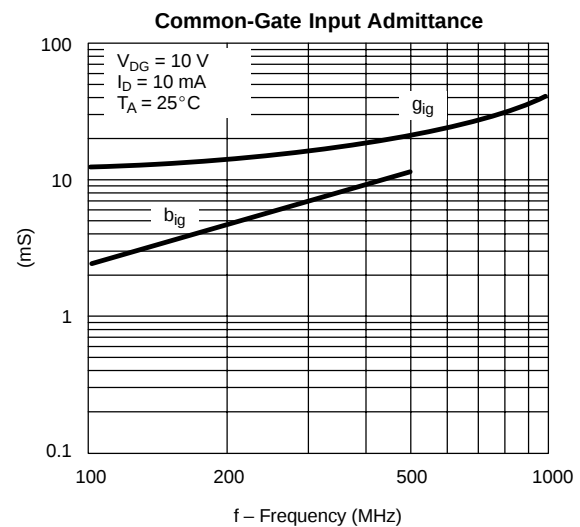
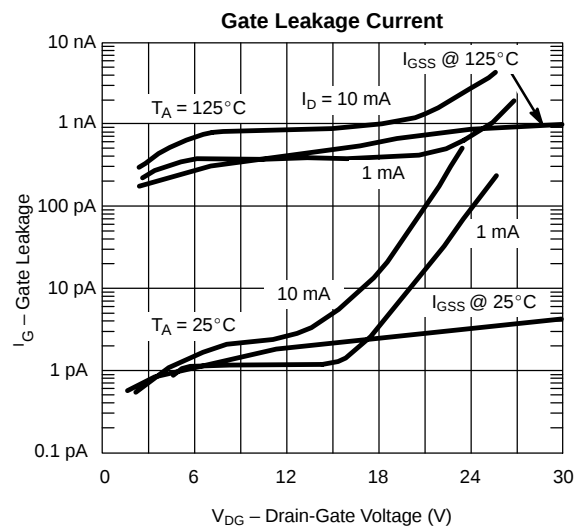
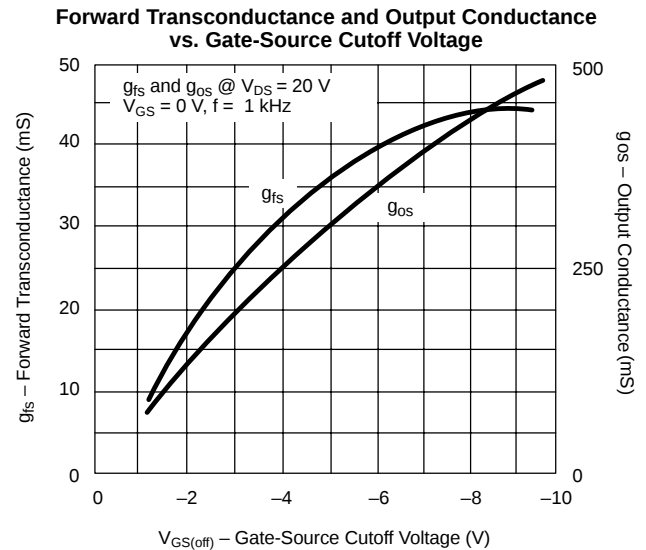
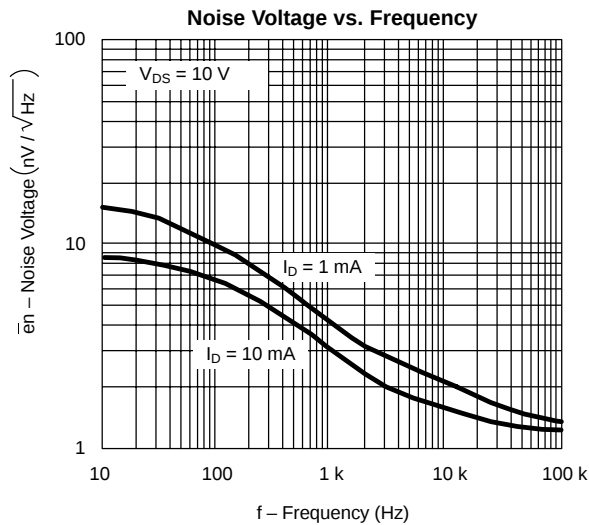
Parameter	Symbol	Test Conditions	Typ ^a	Limits						Unit
				J/SST111		J/SST112		J/SST113		
				Min	Max	Min	Max	Min	Max	
Static										
Gate-Source Breakdown Voltage	V _{(BR)GSS}	I _G = −1 μA , V _{DS} = 0 V	−55	−35		−35		−35		V
Gate-Source Cutoff Voltage	V _{GS(off)}	V _{DS} = 5 V, I _D = 1 μA		−3	−10	−1	−5		−3	
Saturation Drain Current ^b	I _{DSS}	V _{DS} = 15 V, V _{GS} = 0 V		20		5		2		mA
Gate Reverse Current	I _{GSS}	V _{GS} = −15 V, V _{DS} = 0 V	−0.005		−1		−1		−1	nA
		T _A = 125°C	−3							
Gate Operating Current	I _G	V _{DG} = 15 V, I _D = 10 mA	−5							pA
Drain Cutoff Current	I _{D(off)}	V _{DS} = 5 V, V _{GS} = −10 V	0.005		1		1		1	nA
		T _A = 125°C	3							
Drain-Source On-Resistance	r _{DS(on)}	V _{GS} = 0 V, V _{DS} = 0.1 V			30		50		100	Ω
Gate-Source Forward Voltage	V _{GS(F)}	I _G = 1 mA , V _{DS} = 0 V	0.7							V
Dynamic										
Common-Source Forward Transconductance	g _{fs}	V _{DS} = 20 V, I _D = 1 mA f = 1 kHz	6							mS
Common-Source Output Conductance	g _{os}		25							μS
Drain-Source On-Resistance	r _{ds(on)}	V _{GS} = 0 V, I _D = 0 mA f = 1 kHz			30		50		100	Ω
Common-Source Input Capacitance	C _{iss}	V _{DS} = 0 V, V _{GS} = −10 V f = 1 MHz	7		12		12		12	pF
Common-Source Reverse Transfer Capacitance	C _{rss}		3		5		5		5	
Equivalent Input Noise Voltage	$\bar{e}_n$	V _{DG} = 10 V, I _D = 1 mA f = 1 kHz	3							nV/ √Hz
Switching										
Turn-On Time	t _{d(on)}	V _{DD} = 10 V, V _{GS(H)} = 0 V See Switching Circuit	2							ns
	t _r		2							
Turn-Off Time	t _{d(off)}		6							
	t _f		15							

Notes

- a. Typical values are for DESIGN AID ONLY, not guaranteed nor subject to production testing.
b. Pulse test: $PW \leq 300\ \mu\text{s}$ duty cycle $\leq 3\%$.

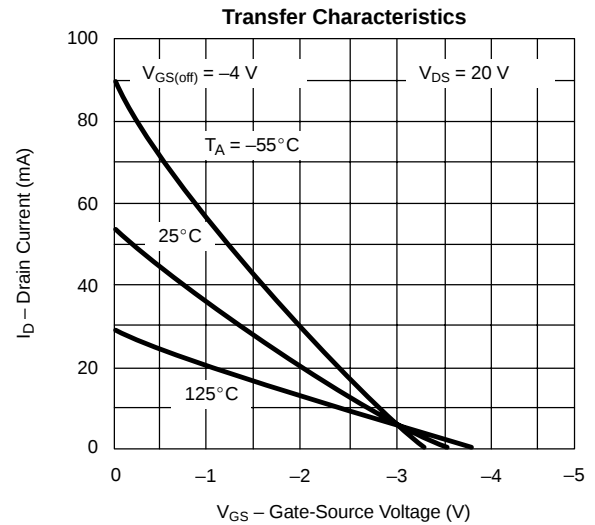
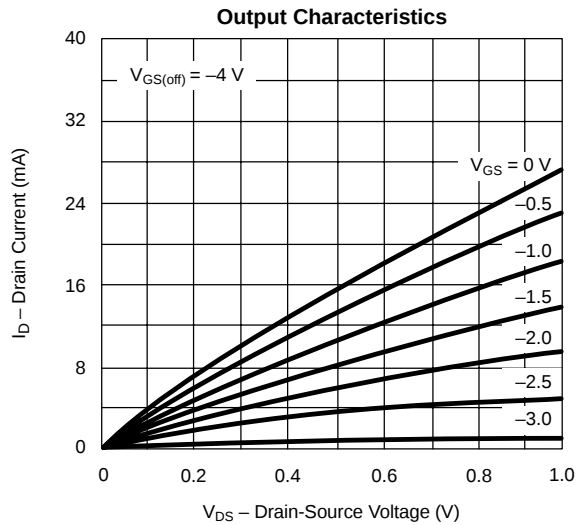
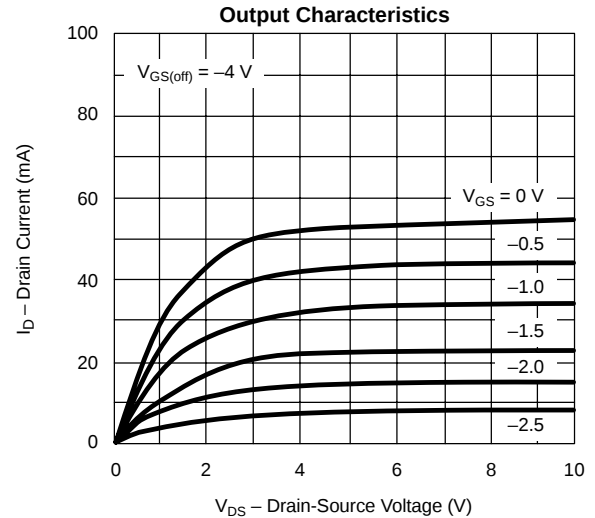
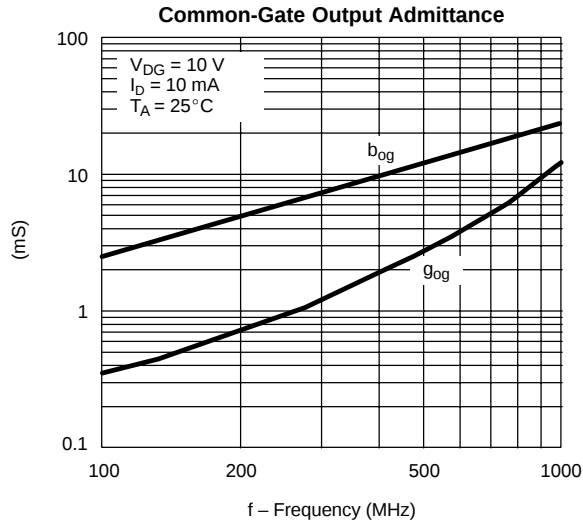
NCB

**TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)****On-Resistance and Drain Current vs. Gate-Source Cutoff Voltage****On-Resistance vs. Drain Current****On-Resistance vs. Temperature****Turn-On Switching****Turn-Off Switching****Capacitance vs. Gate-Source Voltage**

TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)




TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)



SWITCHING TIME TEST CIRCUIT

	J/SST111	J/SST112	J/SST113
$V_{GS(L)}$	-12 V	-7 V	-5 V
R_L^*	800 Ω	1600 Ω	3200 Ω
$I_{D(on)}$	12 mA	6 mA	3 mA

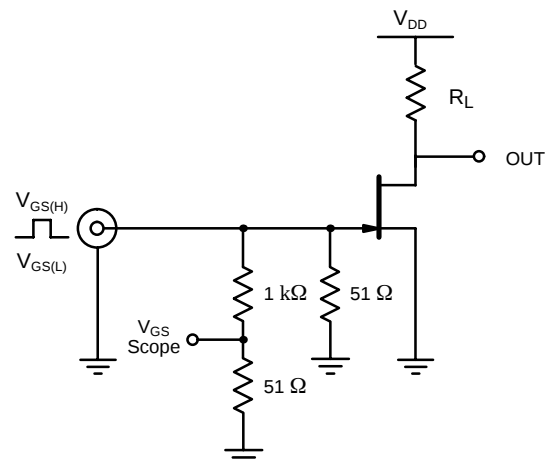
*Non-inductive

INPUT PULSE

Rise Time < 1 ns
 Fall Time < 1 ns
 Pulse Width 100 ns
 PRF 1 MHz

SAMPLING SCOPE

Rise Time 0.4 ns
 Input Resistance 10 M Ω
 Input Capacitance 1.5 pF





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