

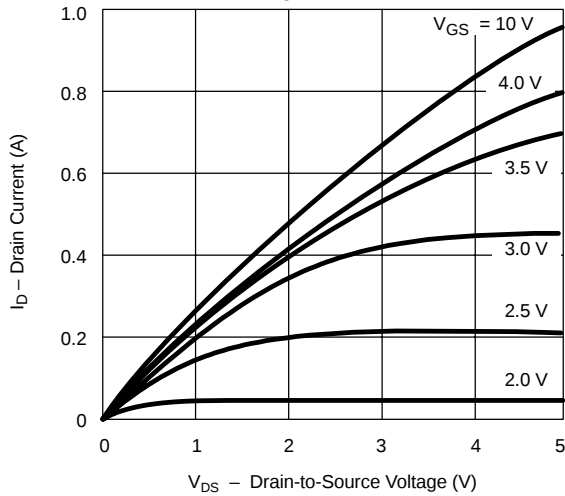
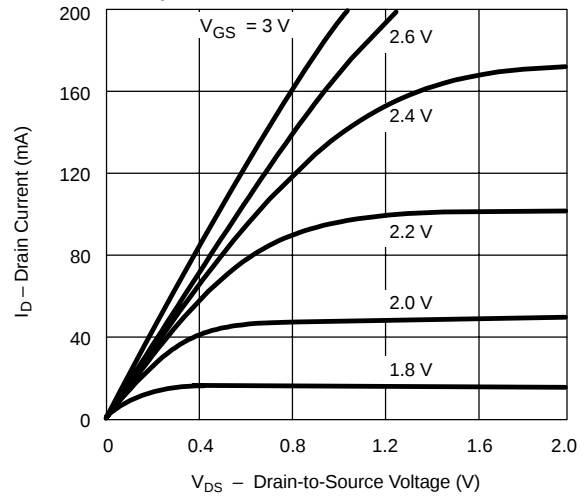
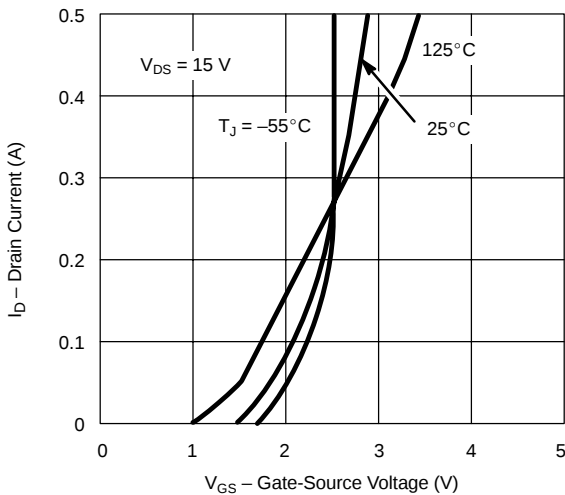
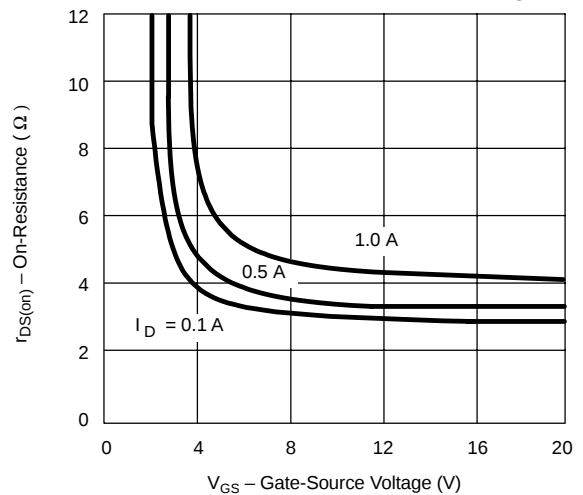
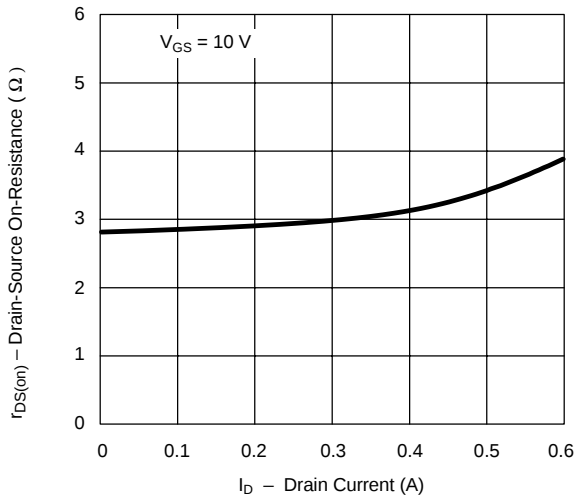
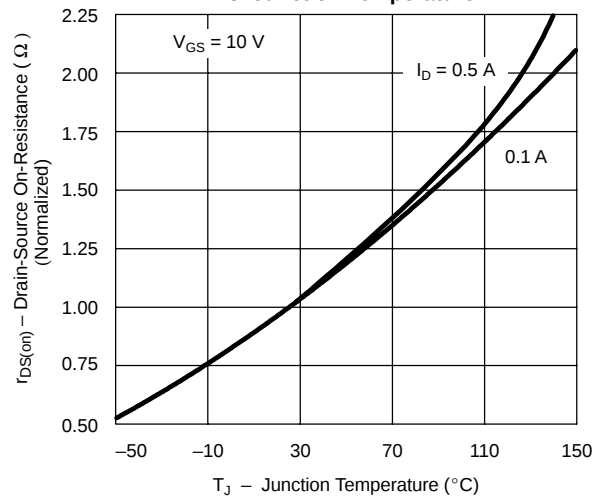
SPECIFICATIONS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

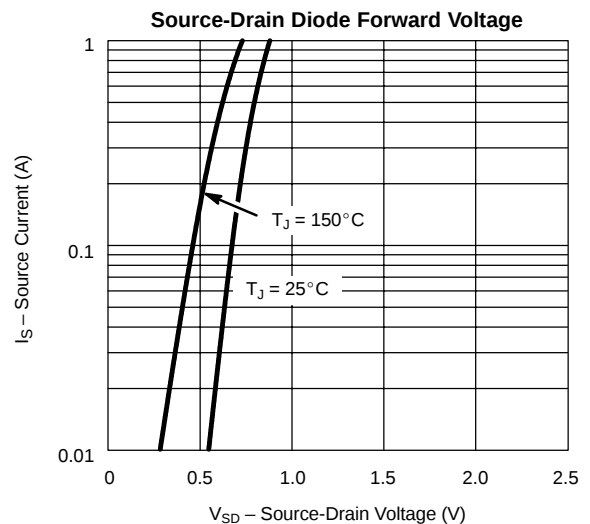
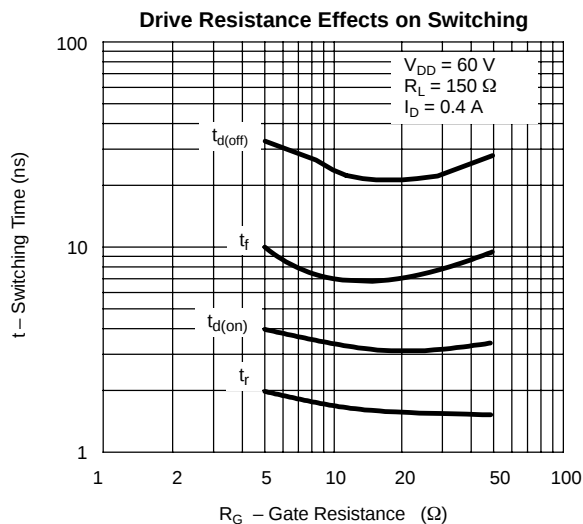
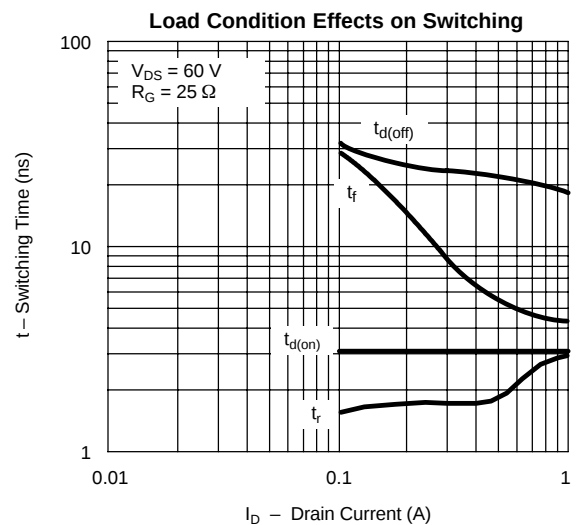
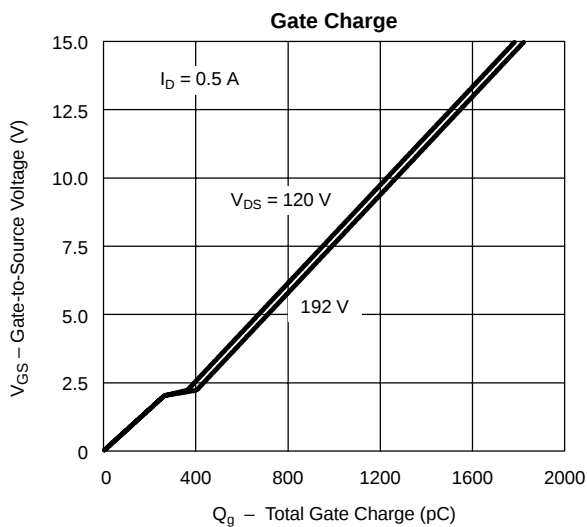
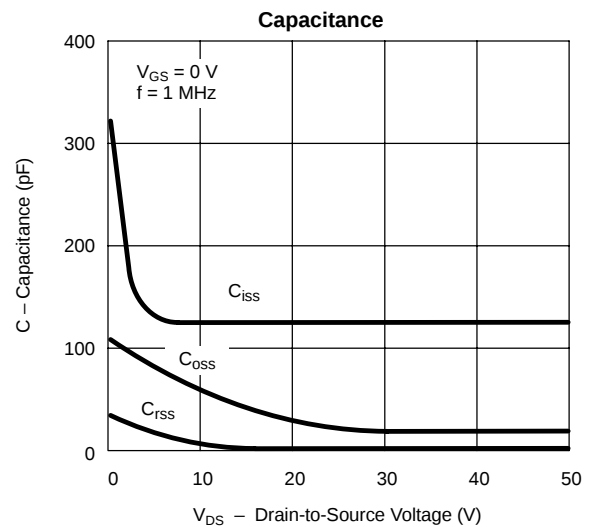
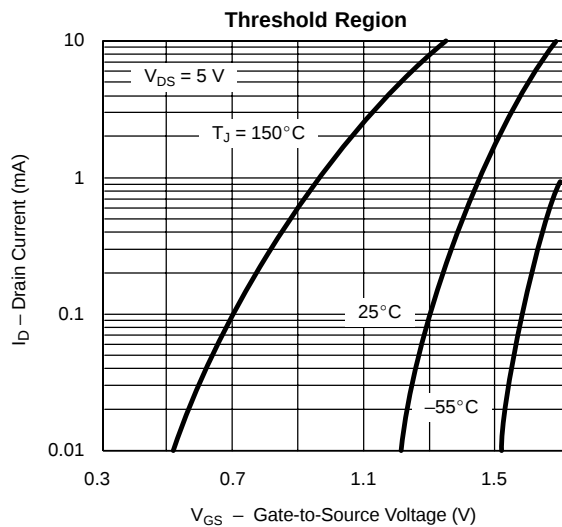
Parameter	Symbol	Test Conditions	Typ ^a	Limits						Unit
				TN2410L		VN2406D/L		VN2410L/LS		
				Min	Max	Min	Max	Min	Max	
Static										
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} = 0 V, I _D = 100 μA	260	240		240		240		V
Gate-Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = 1 mA	1.4	0.5	1.8	0.8	2	0.8	2	
Gate-Body Leakage	I _{GSS}	V _{DS} = 0 V, V _{GS} = ±15 V					±100		±100	nA
		T _J = 125°C				±500		±500		
		V _{DS} = 0 V, V _{GS} = ±20 V			±10					
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = 192 V, V _{GS} = 0 V	0.01		1					μA
		T _J = 125°C	1		100					
		V _{DS} = 120 V, V _{GS} = 0 V					10		10	
		T _J = 125°C					500		500	
On-State Drain Current ^b	I _{D(on)}	V _{DS} = 10 V, V _{GS} = 4.5 V	0.8	0.25						A
		V _{DS} = 15 V, V _{GS} = 10 V	1.5			1		1		
Drain-Source On-Resistance ^b	r _{DS(on)}	V _{GS} = 2.5 V, I _D = 0.1 A	7.5				10		10	Ω
		V _{GS} = 3.5 V, I _D = 0.05 A	4.5		15					
		V _{GS} = 4.5 V, I _D = 0.2 A	4		10					
		T _J = 125°C	7.5		20					
		V _{GS} = 10 V, I _D = 0.5 A	3.5				6		10	
		T _J = 125°C	6.5				14.8		24.7	
Forward Transconductance ^b	g _{fs}	V _{DS} = 10 V, I _D = 0.2 A	500	100						mS
		V _{DS} = 10 V, I _D = 0.5 A	530			300		300		
Input Capacitance	C _{iss}	V _{DS} = 25 V, V _{GS} = 0 V f = 1 MHz	115		135		135		135	pF
Output Capacitance	C _{oss}		30		50		50		50	
Reverse Transfer Capacitance	C _{rss}		5		20		20		20	
Switching ^c										
Turn-On Time	t _{ON}	V _{DD} = 60 V, R _L = 150 Ω I _D ≅ 0.4 A, V _{GEN} = 10 V R _G = 25 Ω	5		35					ns
	t _{d(on)}		3				8		8	
	t _r		2				8		8	
Turn-Off Time	t _{OFF}		26		60					
	t _{d(off)}		20				23		23	
	t _f		6				34		34	

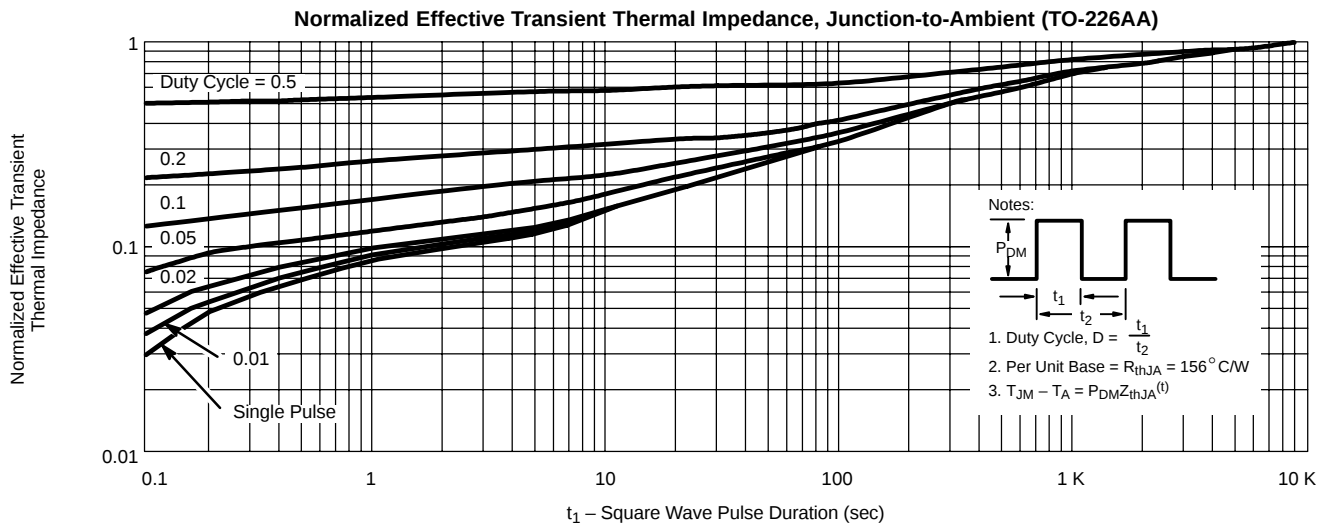
Notes

- a. For DESIGN AID ONLY, not subject to production testing.
b. Pulse test: $PW \leq 300\text{ }\mu\text{s}$ duty cycle $\leq 2\%$.
c. Switching time is essentially independent of operating temperature.

VNDB24

**TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)****Ohmic Region Characteristics****Output Characteristics for Low Gate Drive****Transfer Characteristics****On-Resistance vs. Gate-to-Source Voltage****On-Resistance vs. Drain Current****Normalized On-Resistance vs. Junction Temperature**

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

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



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