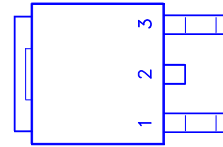
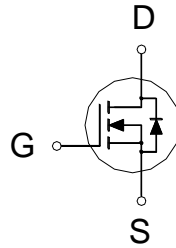


PRODUCT SUMMARY

$V_{(BR)DSS}$	$R_{DS(ON)}$	I_D
250V	230mΩ	18A



1: GATE
2: DRAIN
3: SOURCE

ABSOLUTE MAXIMUM RATINGS ($T_A = 25\text{ }^\circ\text{C}$ Unless Otherwise Noted)

PARAMETERS/TEST CONDITIONS		SYMBOL	LIMITS	UNITS
Drain-Source Voltage		V_{DS}	250	V
Gate-Source Voltage		V_{GS}	±20	V
Continuous Drain Current	$T_C = 25\text{ }^\circ\text{C}$	I_D	18	A
	$T_C = 100\text{ }^\circ\text{C}$		11	
Pulsed Drain Current ¹		I_{DM}	51	
Avalanche Current		I_{AS}	9	
Avalanche Energy	$L = 1\text{mH}$	E_{AS}	40	mJ
Power Dissipation	$T_C = 25\text{ }^\circ\text{C}$	P_D	74	W
	$T_C = 100\text{ }^\circ\text{C}$		29	
Junction & Storage Temperature Range		T_J, T_{stg}	-55 to 150	°C

THERMAL RESISTANCE RATINGS

THERMAL RESISTANCE	SYMBOL	TYPICAL	MAXIMUM	UNITS
Junction-to-Ambient	$R_{\theta JA}$		62.5	°C/W
Junction-to-Case	$R_{\theta JC}$		1.7	

¹Pulse width limited by maximum junction temperature.

ELECTRICAL CHARACTERISTICS ($T_J = 25\text{ }^\circ\text{C}$, Unless Otherwise Noted)

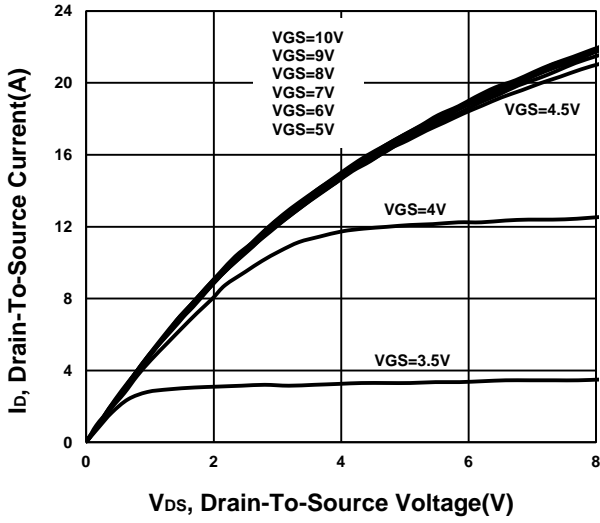
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
STATIC						
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = 250\mu A$	250			V
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 250\mu A$	1	2	3	
Gate-Body Leakage	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 20V$			±100	nA
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 250V, V_{GS} = 0V$			1	μA
		$V_{DS} = 200V, V_{GS} = 0V, T_J = 125\text{ }^\circ\text{C}$			10	
Drain-Source On-State Resistance ¹	$R_{DS(ON)}$	$V_{GS} = 4.5V, I_D = 9A$		210	286	mΩ
		$V_{GS} = 10V, I_D = 9A$		193	230	

Forward Transconductance ¹	g_{fs}	$V_{DS} = 10V, I_D = 9A$		21		S
DYNAMIC						
Input Capacitance	C_{iss}	$V_{GS} = 0V, V_{DS} = 25V, f = 1MHz$		788		pF
Output Capacitance	C_{oss}			115		
Reverse Transfer Capacitance	C_{rss}			14		
Total Gate Charge ²	Q_g	$V_{GS} = 10V, V_{DS} = 200V$ $I_D = 18A$		24		nC
Gate-Source Charge ²	Q_{gs}			3.3		
Gate-Drain Charge ²	Q_{gd}			8.4		
Turn-On Delay Time ²	$t_{d(on)}$	$V_{DS} = 125V,$ $I_D \cong 18A, V_{GS} = 10V, R_{GEN} = 6\Omega$		14		nS
Rise Time ²	t_r			101		
Turn-Off Delay Time ²	$t_{d(off)}$			104		
Fall Time ²	t_f			79		
SOURCE-DRAIN DIODE RATINGS AND CHARACTERISTICS ($T_J = 25^\circ C$)						
Continuous Current	I_S				18	A
Forward Voltage ¹	V_{SD}	$I_F = 18A, V_{GS} = 0V$			1	V
Diode Reverse Recovery Time	t_{rr}	$I_F = 18A, di/dt = 100A/\mu s$		158		nS
Diode Reverse Recovery Charge	Q_{rr}			0.98		uC

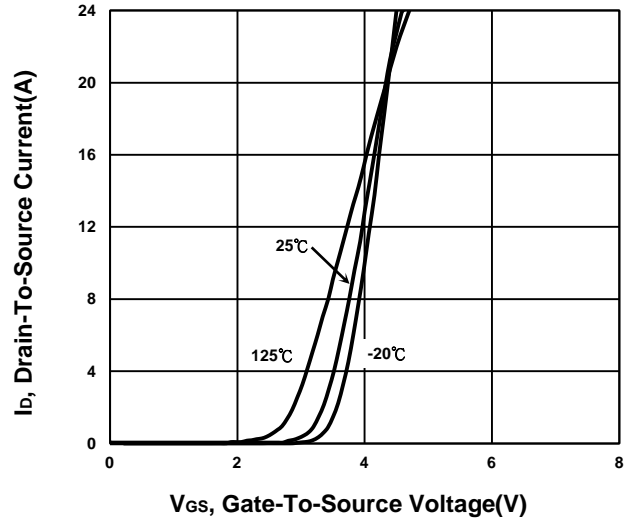
¹Pulse test : Pulse Width $\leq 300 \mu sec$, Duty Cycle $\leq 2\%$.

²Independent of operating temperature.

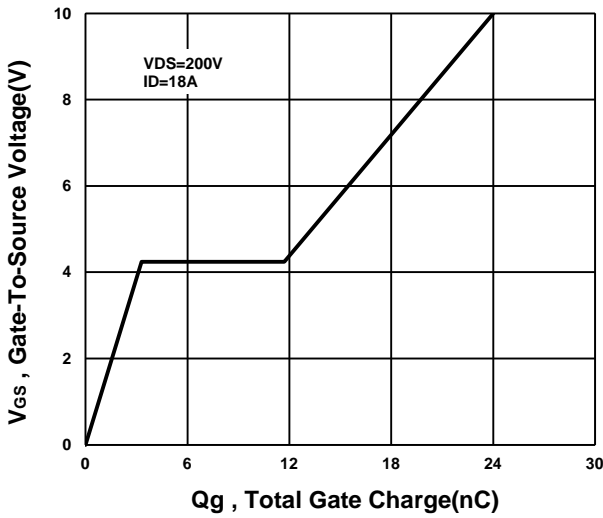
Output Characteristics



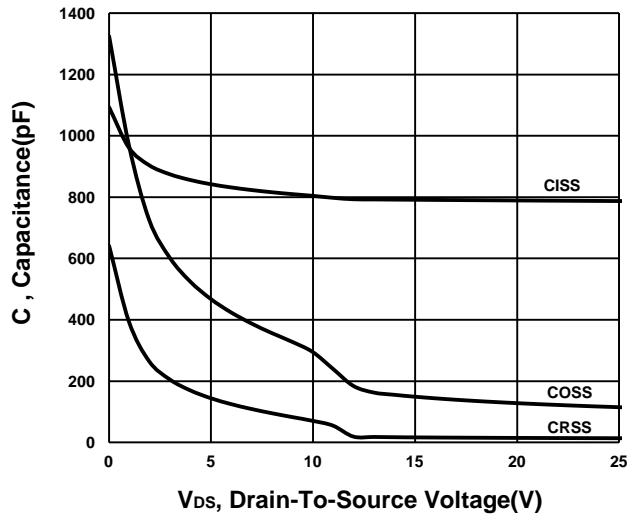
Transfer Characteristics



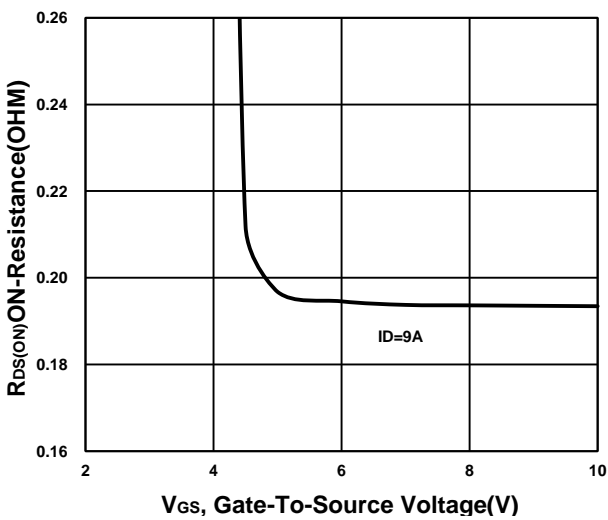
Gate charge Characteristics



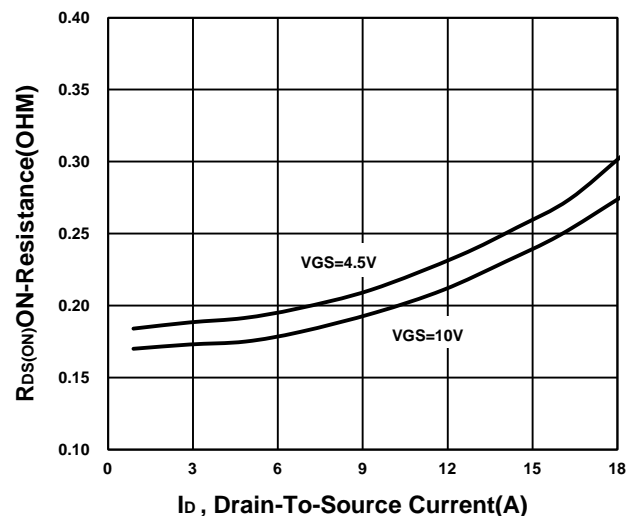
Capacitance Characteristic



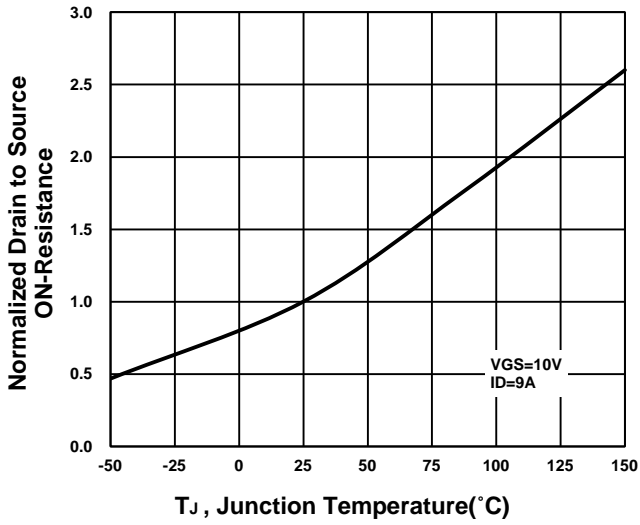
On-Resistance VS Gate-To-Source



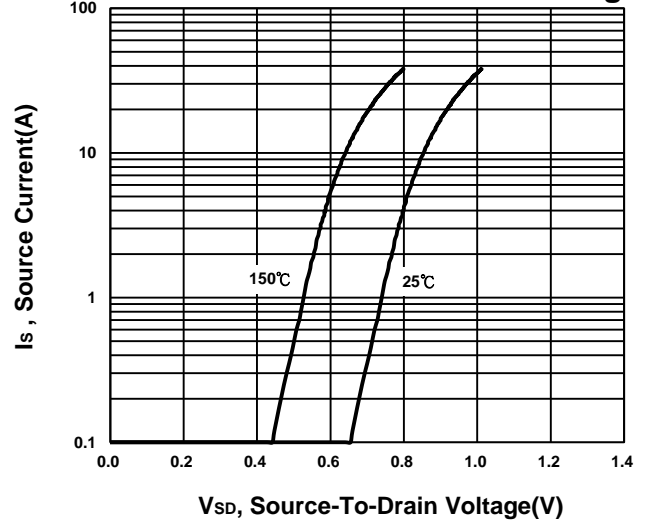
On-Resistance VS Drain Current



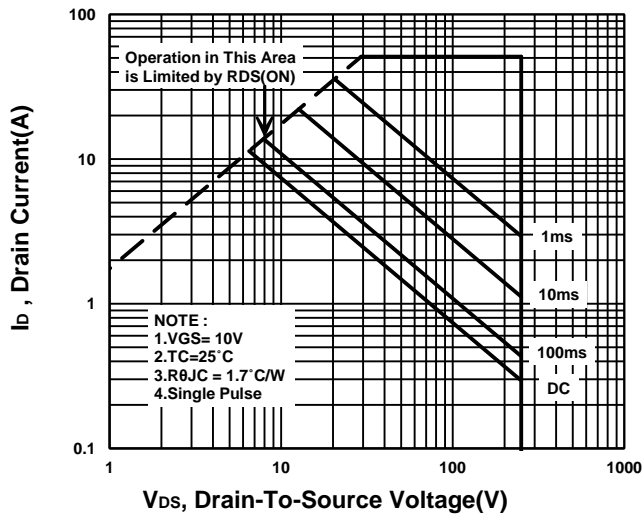
On-Resistance VS Temperature



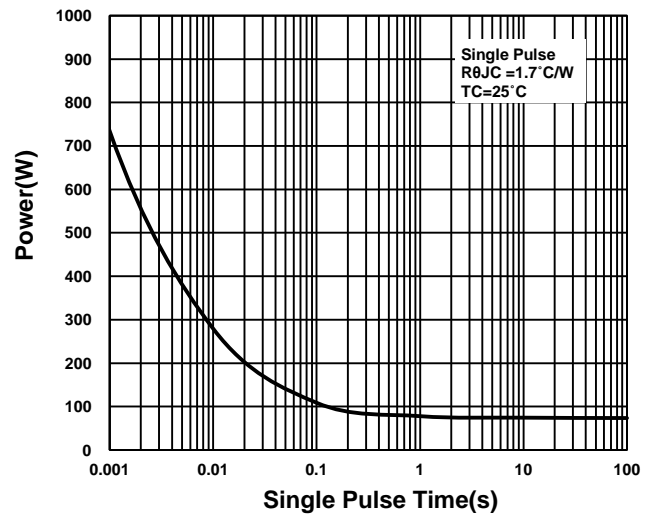
Source-Drain Diode Forward Voltage



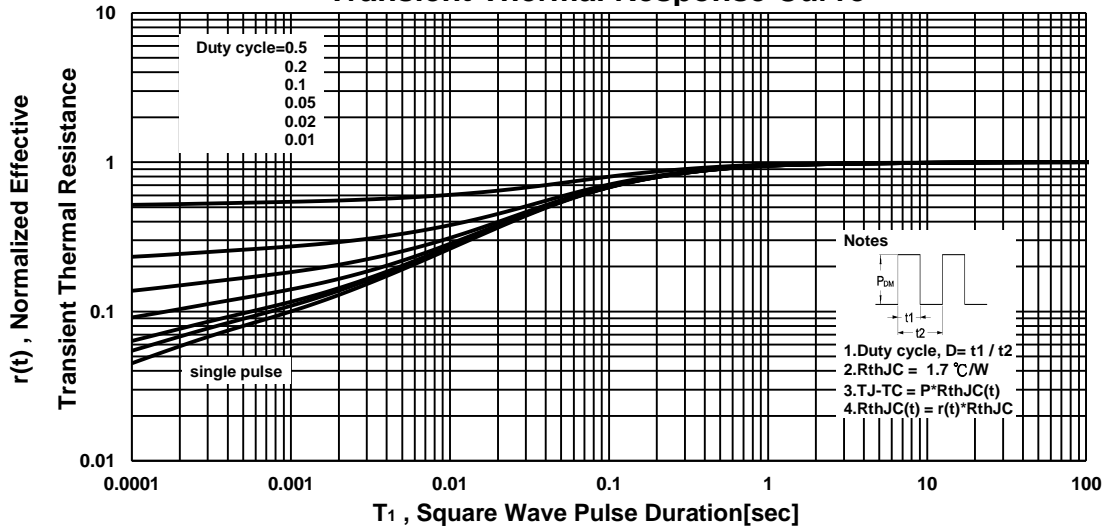
Safe Operating Area



Single Pulse Maximum Power Dissipation



Transient Thermal Response Curve



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [NIKO](#) manufacturer:

Other Similar products are found below :

[614233C](#) [648584F](#) [MCH3443-TL-E](#) [MCH6422-TL-E](#) [FDPF9N50NZ](#) [FW216A-TL-2W](#) [FW231A-TL-E](#) [APT5010JVR](#) [NTNS3A92PZT5G](#)
[IRF100S201](#) [JANTX2N5237](#) [2SK2464-TL-E](#) [2SK3818-DL-E](#) [FCA20N60_F109](#) [FDZ595PZ](#) [STD6600NT4G](#) [FSS804-TL-E](#) [2SJ277-DL-E](#)
[2SK1691-DL-E](#) [2SK2545\(Q,T\)](#) [D2294UK](#) [405094E](#) [423220D](#) [MCH6646-TL-E](#) [TPCC8103,L1Q\(CM](#) [367-8430-0972-503](#) [VN1206L](#)
[424134F](#) [026935X](#) [051075F](#) [SBVS138LT1G](#) [614234A](#) [715780A](#) [NTNS3166NZT5G](#) [751625C](#) [873612G](#) [IRF7380TRHR](#)
[IPS70R2K0CEAKMA1](#) [RJK60S3DPP-E0#T2](#) [RJK60S5DPK-M0#T0](#) [APT5010JVFR](#) [APT12031JFLL](#) [APT12040JVR](#) [DMN3404LQ-7](#)
[NTE6400](#) [JANTX2N6796U](#) [JANTX2N6784U](#) [JANTXV2N5416U4](#) [SQM110N05-06L-GE3](#) [SIHF35N60E-GE3](#)