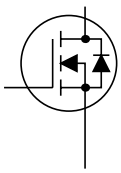
Part Number: 3.STW33N60M2
Sample ID: 3A-1
Description: sample
Operator: YM
Measurement Instrument: B1506AH51_MY59200135



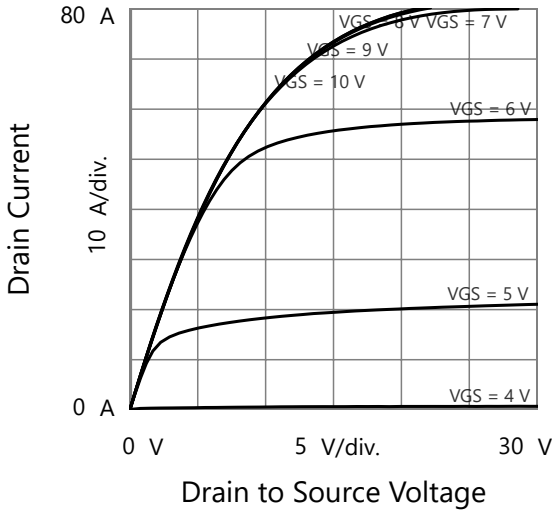
Maximum Ratings

Symbol	*Parameter*	*Test Conditions*	*Value*	*Unit*	*Note*
VDSS	Drain to Source Voltage	Tj=-50 °C to 150 °C	600	V	
VGSS	Gate to Source Voltage	Conitnuous	-25 to 25	V	
IDM	Pulsed Drain Current	Tc=25 °C	104	A	
ISM	Pulsed Body Diode Current	Tc=25 °C	104	A	

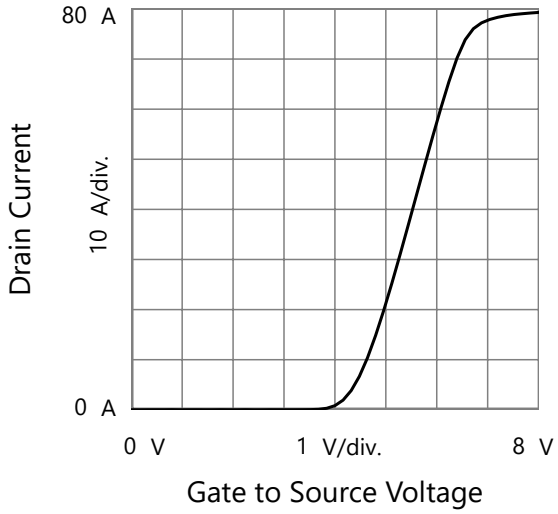
Characteristics Parameters

Symbol	*Parameter*	*Test Conditions*	*Min.*	*Act.*	*Max.*	*Unit*	*Note*
BVDSS	Drain to Source Breakdown Voltage	VGS=0 V, ID=1 mA	600	645		V	
IDSS	Drain Leakage Current	VDS=600 V, VGS=0 V		71.1 n	1 µ	A	
IGSS	Gate Leakage Current	VGS=25 V, VDS=0 V		13.1 n	10 µ	A	
IGSS(-)	Gate Leakage Current (-)	VGS=-25 V, VDS=0 V	-10 µ	-12.3 n		A	
VGS(th)	Gate to Source Threshold Voltage (VDS=VGS)	ID=250 µA	2	3.14	4	V	Typ. 3 V
RDS(on)	Drain to Source On Resistance	VGS=10 V, ID=13 A, PulseWidth=300 µs		108 m	125 m	ohm	Typ. 0.108 ohm
VSD	Body Diode Forward Voltage	VGS=0 V, IS=26 A, PulseWidth=200 µs		952 m	1.6	V	
Rg	Gate Resistance	VGS=0 V, f=1 MHz		4.81		ohm	Typ. 5.2 ohm D-S:short
Ciss	Input Capacitance	VGS=0 V, VDS=100 V, f=100 kHz		1.79 n		F	Typ. 1781 pF
Coss	Output Capacitance	VGS=0 V, VDS=100 V, f=100 kHz		91.5 p		F	Typ. 85 pF
Crss	Reverse Transfer Capacitance	VGS=0 V, VDS=100 V, f=100 kHz		3.03 p		F	2.5 pF
Qg	Total Gate Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=480 V, Id=26 A		41.9 n	1 µ	C	Typ. 45.5 nC
Qgs	Gate to Source Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=480 V, Id=26 A		8.93 n		C	Typ. 9.9 nC
Qgd	Gate to Drain Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=480 V, Id=26 A		17.4 n		C	Typ. 18.5 nC

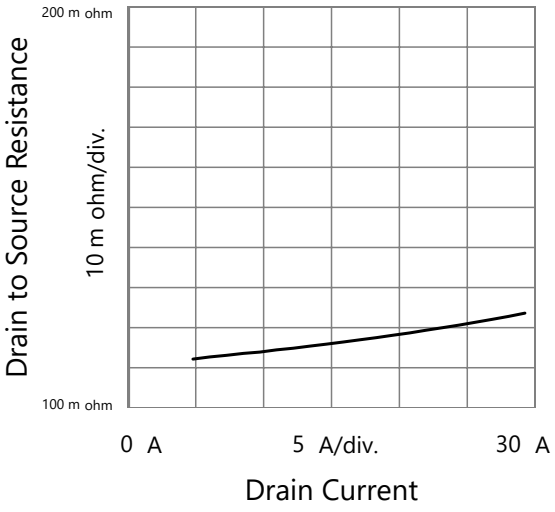
Output Characteristics



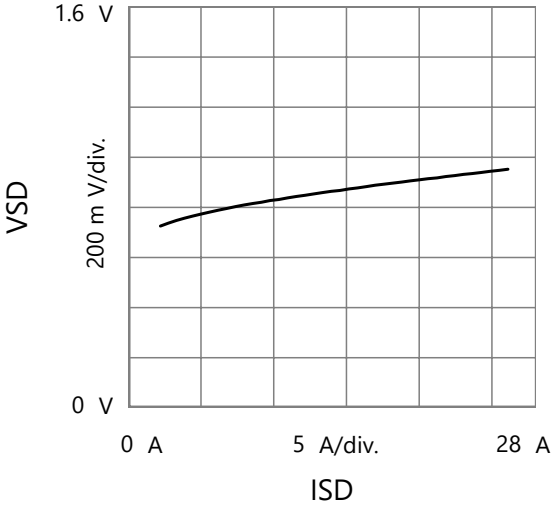
Transfer Characteristics(approximate)



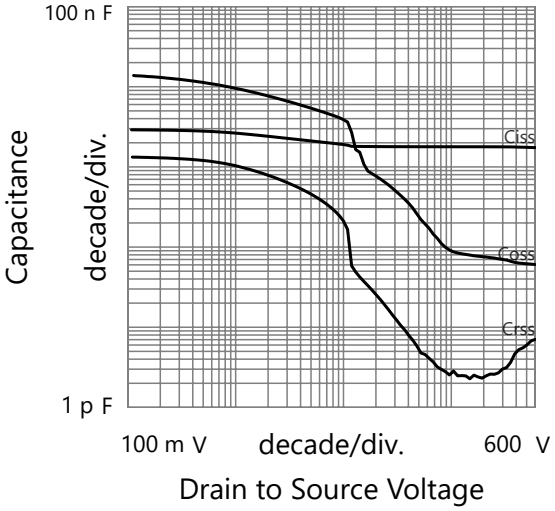
Drain to Source Resistance vs. Drain Current



Body Diode Forward Characteristics



Capacitances



Gate Charge