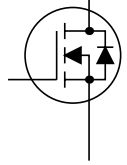
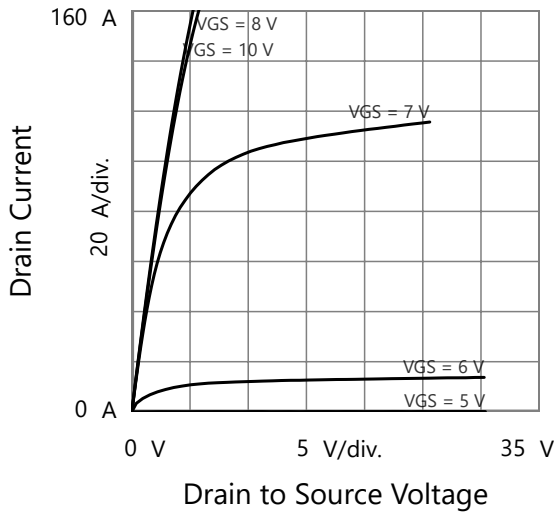


**Part Number:** 2.STW77N65M5  
**Sample ID:** 2B-1  
**Description:** sample  
**Operator:** YM  
**Measurement Instrument:** B1506AH51\_MY59200135

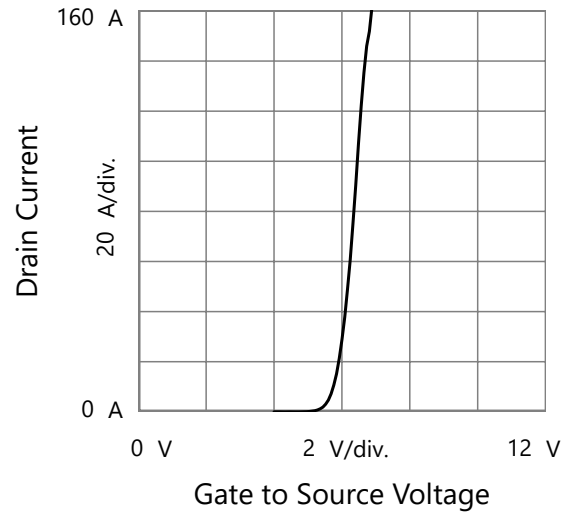


		Maximum Ratings					
Symbol	Parameter	Test Conditions	Value	Unit	Note		
VDSS	Drain to Source Voltage	Tj=-55 °C to 150 °C	650	V			
VGSS	Gate to Source Voltage	Conitnuous	-25 to 25	V			
IDM	Pulsed Drain Current	Tc=25 °C	276	A			
ISM	Pulsed Body Diode Current	Tc=25 °C	276	A			
		Characteristics Parameters					
Symbol	Parameter	Test Conditions	Min.	Act.	Max.	Unit	Note
BVDSS	Drain to Source Breakdown Voltage	VGS=0 V, ID=1 mA	650	725		V	
IDSS	Drain Leakage Current	VDS=650 V, VGS=0 V		159 n	1 μ	A	
IGSS	Gate Leakage Current	VGS=25 V, VDS=0 V		96 p	100 n	A	
IGSS(-)	Gate Leakage Current (-)	VGS=-25 V, VDS=0 V	-100 n	-81.9 p		A	
VGS(th)	Gate to Source Threshold Voltage (VDS=VGS)	ID=250 μA	3	4.11	5	V	Typ. 4V
RDS(on)	Drain to Source On Resistance	VGS=10 V, ID=34.5 A, PulseWidth=200 μs		26.4 m	38 m	ohm	Typ. 0.033 ohm
VSD	Body Diode Forward Voltage	VGS=0 V, IS=69 A, PulseWidth=200 μs		1.01	1.5	V	
Rg	Gate Resistance	VGS=0 V, f=1 MHz		1.4		ohm	Typ. 1.2 ohm D-open
Ciss	Input Capacitance	VGS=0 V, VDS=100 V, f=100 kHz		9.23 n		F	Typ. 9800 pF
Coss	Output Capacitance	VGS=0 V, VDS=100 V, f=100 kHz		251 p		F	Typ. 200 pF
Crss	Reverse Transfer Capacitance	VGS=0 V, VDS=100 V, f=100 kHz		17.1 p		F	Typ. 6 pF
Qg	Total Gate Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=520 V, Id=34.5 A		209 n		C	Typ. 185 nC
Qgs	Gate to Source Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=520 V, Id=34.5 A		56.3 n		C	Typ.45 .nC
Qgd	Gate to Drain Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=520 V, Id=34.5 A		86.8 n		C	Typ. 65 nC

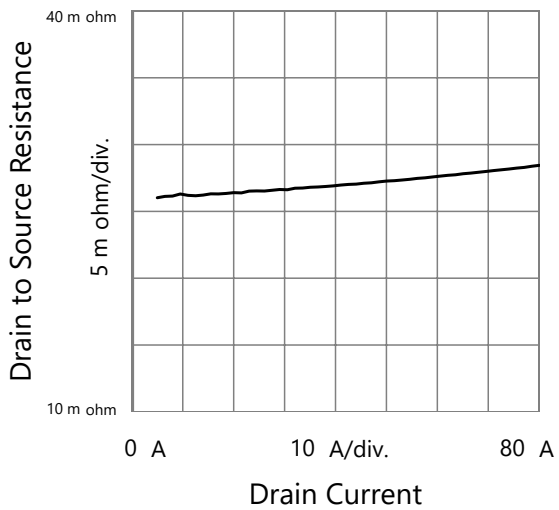
Output Characteristics



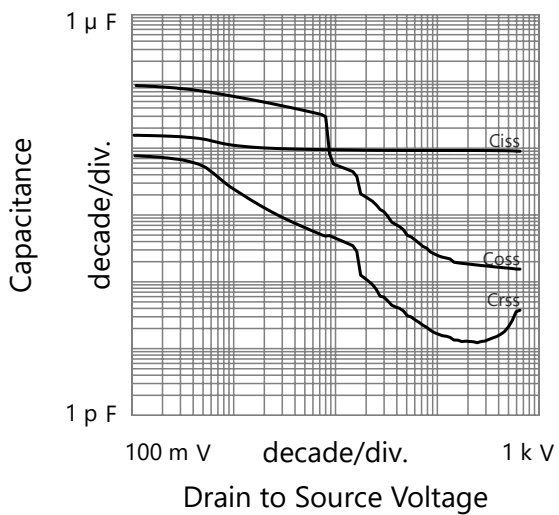
Transfer Characteristics(Vds:25V @Id:150A)



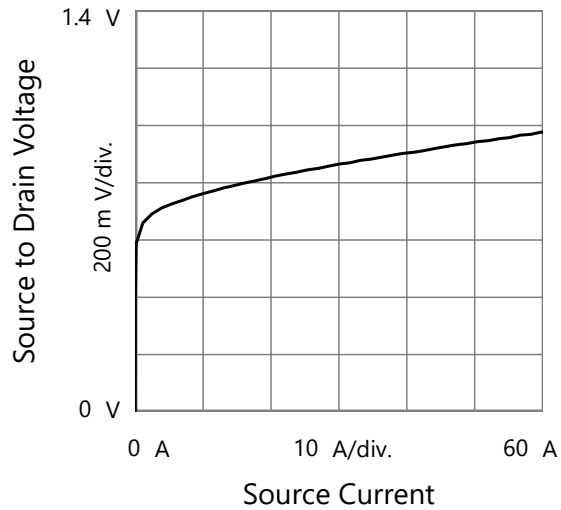
Drain to Source Resistance  $V_{gs}=10\text{ V}$



Capacitances



Body Diode Forward Characteristics



Gate Charge

