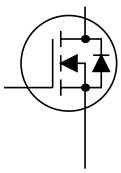
Part Number: 4.SIHG73N60E
Sample ID: 4A-1
Description: sample
Operator: YM
Measurement Instrument: B1506AH51_MY59200135



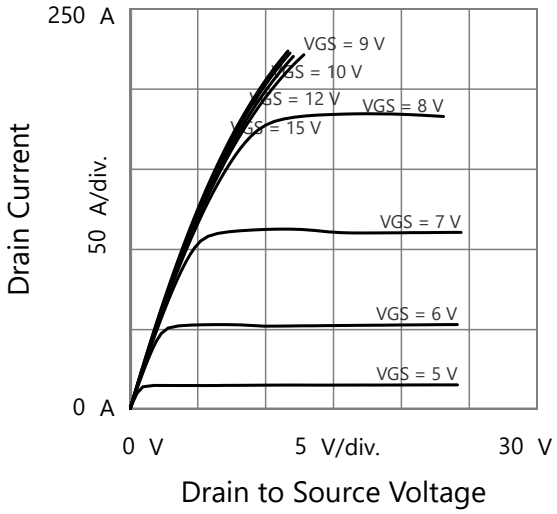
Maximum Ratings

Symbol	*Parameter*	*Test Conditions*	*Value*	*Unit*	*Note*
VDSS	Drain to Source Voltage	Tj=-55 °C to 150 °C	600	V	
VGSS	Gate to Source Voltage	Conitnuous	-30 to 30	V	
IDM	Pulsed Drain Current	Tc=25 °C	236	A	
ISM	Pulsed Body Diode Current	Tc=25 °C	200	A	

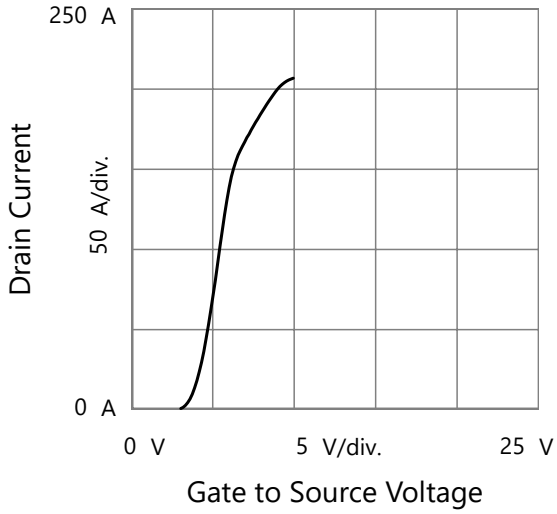
Characteristics Parameters

Symbol	*Parameter*	*Test Conditions*	*Min.*	*Act.*	*Max.*	*Unit*	*Note*
BVDSS	Drain to Source Breakdown Voltage	VGS=0 V, ID=250 µA	600	630		V	
IDSS	Drain Leakage Current	VDS=600 V, VGS=0 V		3.59 n	1 µ	A	
IGSS	Gate Leakage Current	VGS=30 V, VDS=0 V		69 p	1 µ	A	
IGSS(-)	Gate Leakage Current (-)	VGS=-30 V, VDS=0 V	-1 µ	-210 p		A	
VGS(th)	Gate to Source Threshold Voltage (VDS=VGS)	ID=250 µA	2	2.71	4	V	
RDS(on)	Drain to Source On Resistance	VGS=10 V, ID=36 A, PulseWidth=200 µs		35.9 m	39 m	ohm	Typ. 0.032 ohm
VSD	Body Diode Forward Voltage	VGS=0 V, IS=36 A, PulseWidth=200 µs		869 m	1.2	V	Typ. 0.9 V
Rg	Gate Resistance	VGS=0 V, f=1 MHz		1.03		ohm	Typ. 1.52 ohm D-open
Ciss	Input Capacitance	VGS=0 V, VDS=100 V, f=100 kHz		9.24 n		F	Typ. 7700 pF
Coss	Output Capacitance	VGS=0 V, VDS=100 V, f=100 kHz		354 p		F	Typ. 320 pF
Crss	Reverse Transfer Capacitance	VGS=0 V, VDS=100 V, f=100 kHz		7.45 p		F	Typ. 5 pF
Qg	Total Gate Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=480 V, Id=24 A		232 n	362 n	C	Typ. 241 nC
Qgs	Gate to Source Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=480 V, Id=24 A		45.1 n		C	Typ. 48 .nC
Qgd	Gate to Drain Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=480 V, Id=24 A		95 n		C	Typ. 98 nC

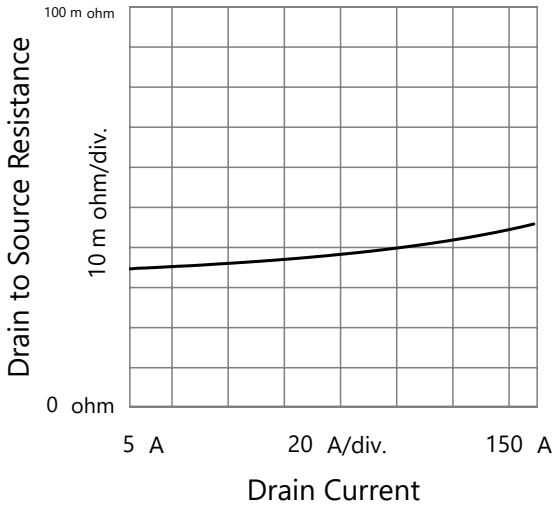
Output Characteristics



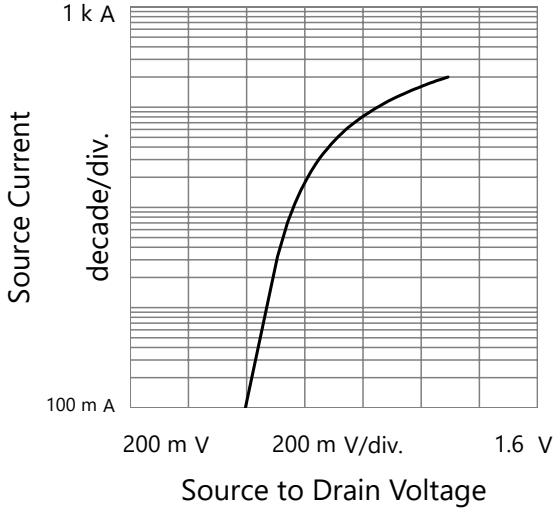
Transfer Characteristics (Vds:26V @ 200A)



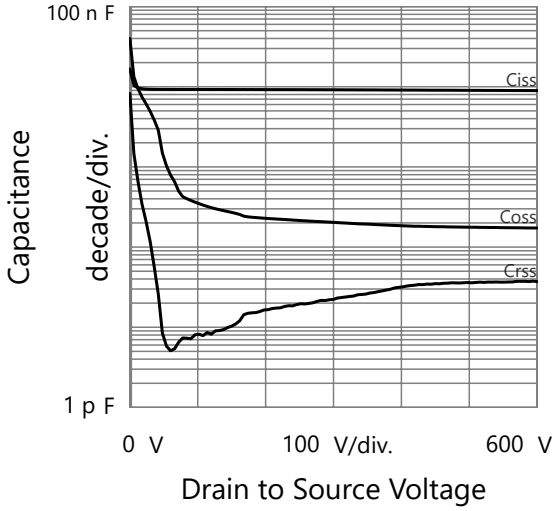
Drain to Source Resistance vs. Drain Current



Body Diode Forward Characteristics



Capacitances



Gate Charge(Vds:480V, Id:24 A)