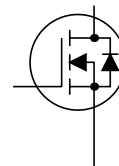
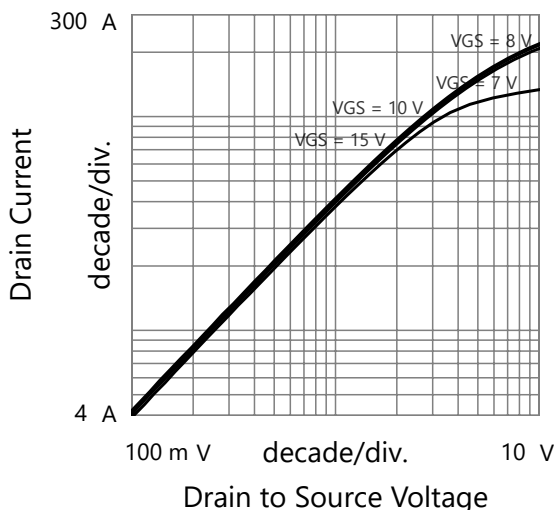


Part Number: 1.IRFP4227PBF
Sample ID: 1B-1
Description: sample
Operator: YM
Measurement Instrument: B1506AH51_MY59200135

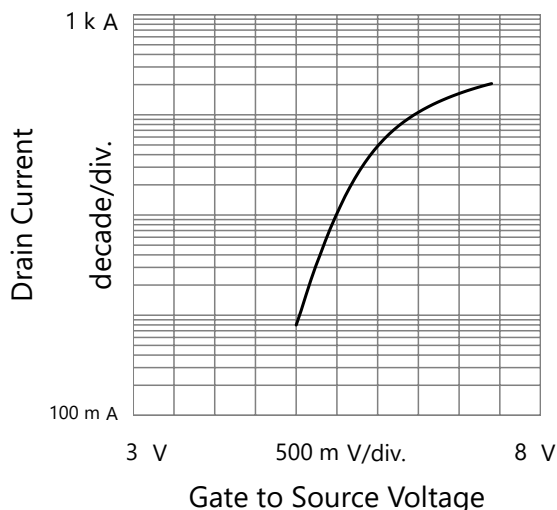


		Maximum Ratings					
Symbol	Parameter	Test Conditions	Value	Unit	Note		
VDSS	Drain to Source Voltage	Tj=-40 °C to 175 °C	200	V			
VGSS	Gate to Source Voltage	Conitnuous	-30 to 30	V			
IDM	Pulsed Drain Current	Tc=25 °C	260	A			
ISM	Pulsed Body Diode Current	Tc=25 °C	260	A			
		Characteristics Parameters					
Symbol	Parameter	Test Conditions	Min.	Act.	Max.	Unit	Note
BVDSS	Drain to Source Breakdown Voltage	VGS=0 V, ID=250 μA	200	221		V	
IDSS	Drain Leakage Current	VDS=200 V, VGS=0 V		11.7 n	20 μ	A	
IGSS	Gate Leakage Current	VGS=20 V, VDS=0 V		-18.5 p	100 n	A	
IGSS(-)	Gate Leakage Current (-)	VGS=-20 V, VDS=0 V	-100 n	-35.9 p		A	
VGS(th)	Gate to Source Threshold Voltage (VDS=VGS)	ID=250 μA	3	4.03	5	V	
RDS(on)	Drain to Source On Resistance	VGS=10 V, ID=46 A, PulseWidth=200 μs		24.8 m	25 m	ohm	Typ. 21 m ohm
VSD	Body Diode Forward Voltage	VGS=0 V, IS=46 A, PulseWidth=200 μs		860 m	1.3	V	
Rg	Gate Resistance	VGS=0 V, f=1 MHz		NaN		ohm	Not specified
Ciss	Input Capacitance	VGS=0 V, VDS=25 V, f=100 kHz		4.32 n		F	Typ. 4600 pF
Coss	Output Capacitance	VGS=0 V, VDS=25 V, f=100 kHz		468 p		F	Typ. 460 pF
Crss	Reverse Transfer Capacitance	VGS=0 V, VDS=25 V, f=100 kHz		155 p		F	Typ. 91 pF
Qg	Total Gate Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=100 V, Id=46 A		73 n	98 n	C	Typ. 70 nC
Qgs	Gate to Source Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=100 V, Id=46 A		NaN		C	Not specified
Qgd	Gate to Drain Charge	Vgs(on)=10 V, Vgs(off)=0 V, Vds=100 V, Id=46 A		26 n		C	Typ. 23 nC

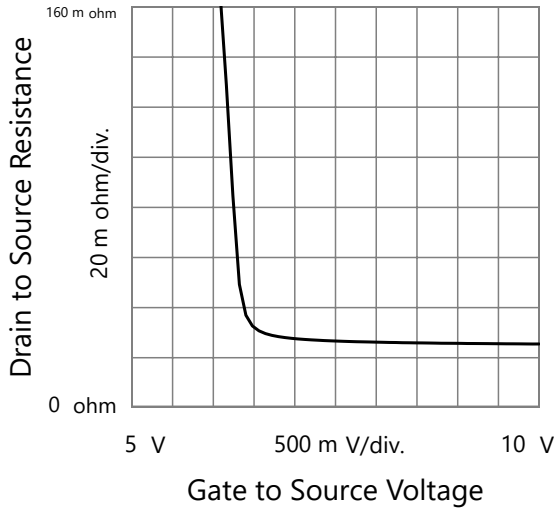
Output Characteristics



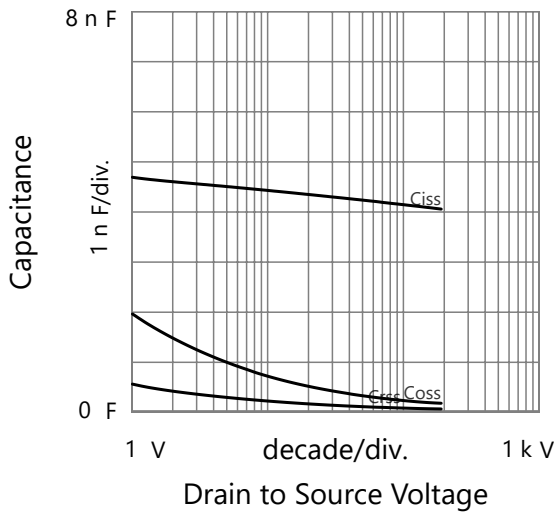
Transfer Characteristics(Vds:25V @200A)



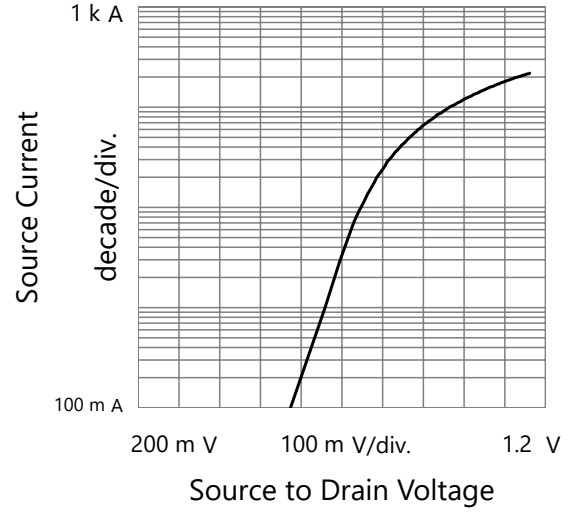
Drain to Source Resistance vs. Gate to Source Voltage



Capacitances



Body Diode Forward Characteristics



Gate Charge (Vds:160 V, Id:46 A)

