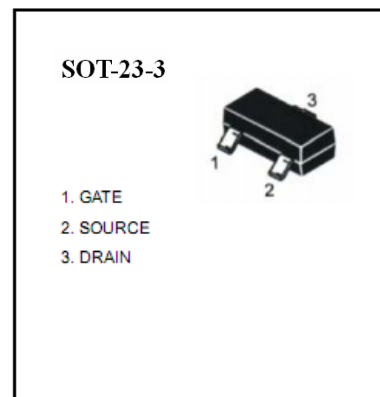
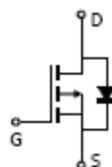


SOT-23-3 Plastic-Encapsulate MOSET**2305** MOSFET(P-Channel)**FEATURES**

High Power and current handing capability
Lead free product is acquired
Surface Mount Packing

**MAXIMUM RATINGS** (TA=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{DS}	Drain-Source voltage	-20	V
V _{GS}	Gate-Source voltage	±8	V
I _D	Drain current (T _c =25°C)	-4.1	A
P _D	Power Dissipation	1.7	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

ELECTRICAL CHARACTERISTICS (T_c=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Drain-Source Breakdown Voltage	V(BR)DSS	VGS=0V, ID=-250uA	-20			V
Gate-Threshold Voltage	Vth(GS)	VDS= VGS, ID=-250 uA	-0.45	-0.7	-1	V
Gate-body Leakage	IGSS	VDS=0V, VGS= ± 8V			± 100	nA
Zero Gate Voltage Drain Current	IDSS	VDS=-20V, VGS=0V			-1	uA
Drain-Source On-Resistance	rDS(ON)	VGS=-4. 5V, ID=-4.1A		39	52	m Ω
		VGS=-2. 5V, ID=-3A		58	75	m Ω
Forward Trans conductance	gfs	VDS=-5V, ID=-3.5A		8.5		s
Dynamic Characteristics						
Input Capacitance	Ciss	VDS=-4V, VGS=0V, f=1MHz		740		pF
Output Capacitance	Coss			290		
Reverse Transfer Capacitance	Crss			190		
Switching Capacitance						
Turn-on Delay Time	td(on)	VDD=-4V, ID=-3. 3A, VGS=-4. 5V RGEN=1 Ω		12		nS
Turn-on Rise Time	tr			35		nS
Turn-off Delay Time	td(off)			30		nS
Turn-off Fall Time	tf			10		nS
Total Gate Charge	Qg	VDS=-4V, ID=-4. 1A, VGS=-4. 5V,		7.8		nC
Gate-Source Charge	Qgs			1.2		nC
Gate-Drain Charge	Qgd			1.6		nC
Drain-Source Diode Characteristics						
Diode Forward Voltage	VSD	VGS=0V, ID=-1. 3A			-1.2	V
Diode Forward Current	IS				-1.3	A

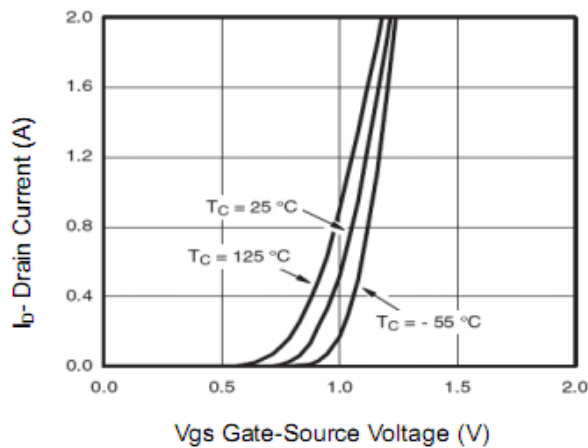


Figure 7 Transfer Characteristics

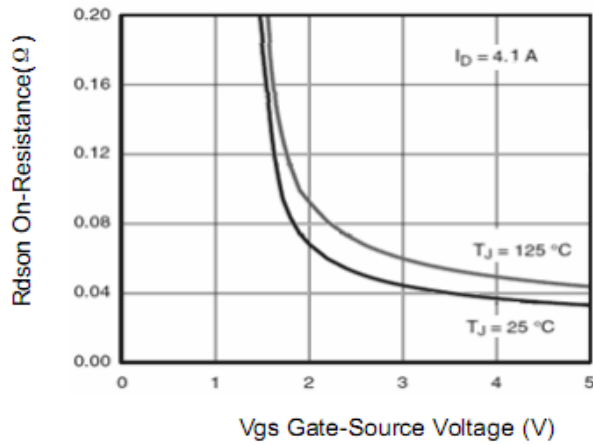


Figure 9 Rdson vs Vgs

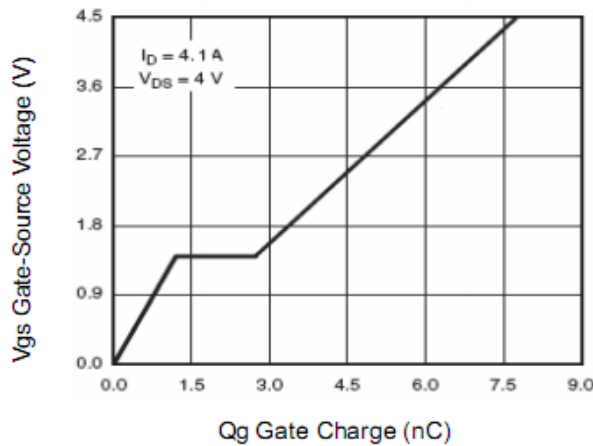


Figure 11 Gate Charge

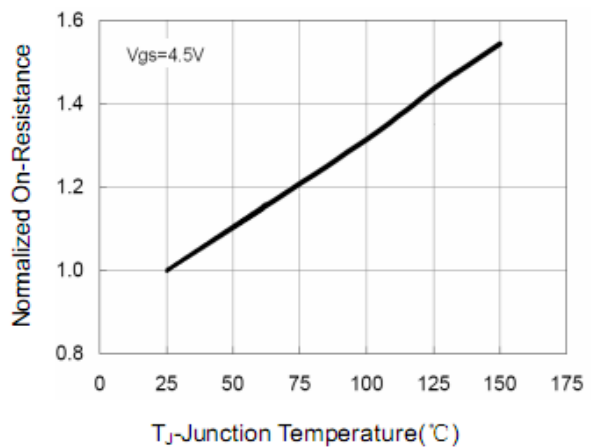


Figure 8 Drain-Source On-Resistance

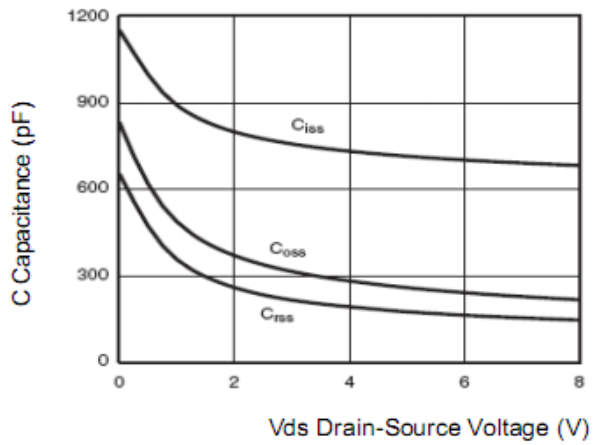


Figure 10 Capacitance vs Vds

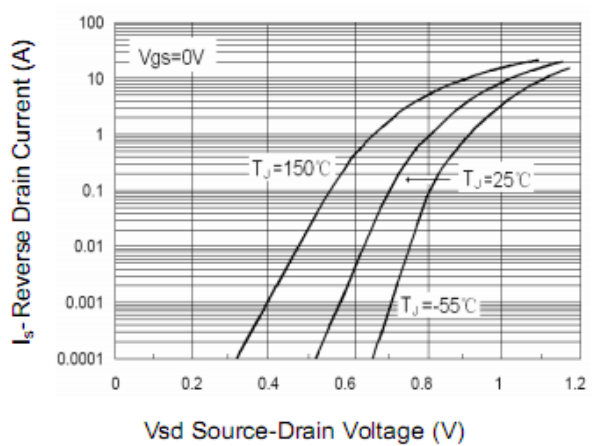


Figure 12 Source- Drain Diode Forward