P-Channel Enhancement Mode MOSFET
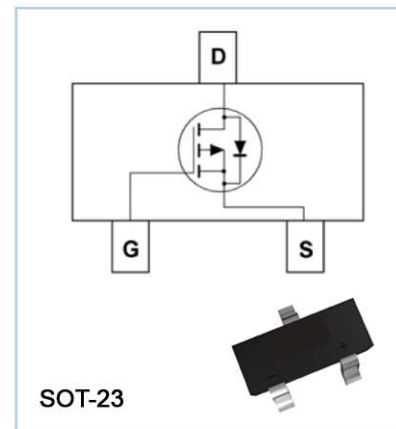
Feature

- -16V/-3A, $R_{DS(ON)}$ = 160m Ω (MAX) @V_{GS} = -4.5V.

 $R_{DS(ON)}$ = 240m Ω (MAX) @V_{GS} = -2.5V.

- Super High dense cell design for extremely low $R_{DS(ON)}$
- Reliable and Rugged
- SOT-23 for Surface Mount Package

SOT-23

Applications

- Power Management

 Portable Equipment and Battery Powered Systems.

Absolute Maximum Ratings

T_A=25℃ Unless Otherwise noted

Parameter	Symbol	Limit	Units
Drain-Source Voltage	V_{DS}	-16	V
Gate-Source Voltage	V_{GS}	± 8	V
Drain Current-Continuous	I_D	-3	A

Electrical Characteristics

T_A=25℃ Unless Otherwise noted

Parameter	Symbol	Test Conditions	Min	Typ.	Max	Units
Off Characteristics						
Drain to Source Breakdown Voltage	BVDSS	VGS=0V, ID=-250μA	-16	-	-	V
Zero-Gate Voltage Drain Current	IDSS	VDS=-12V, VGS=0V	-	-	-5	μA
Gate Body Leakage Current, Forward	IGSSF	VGS=8V, VDS=0V	-	-	100	nA
Gate Body Leakage Current, Reverse	IGSSR	VGS=-8V, VDS=0V	-	-	-100	nA
On Characteristics						
Gate Threshold Voltage	VGS(th)	VGS= VDS, ID=-250μA	-0.45	-	-1.5	V
Static Drain-source On-Resistance	RDS(ON)	VGS =-4.5V, ID =-3.0A	-	-	160	m Ω
		VGS =-2.5V, ID =-2.0A	-	-	240	m Ω
Drain-Source Diode Characteristics and Maximum Ratings						
Drain-Source Diode Forward Voltage	VSD	VGS =0V, IS=-1.25A			-1.8	V

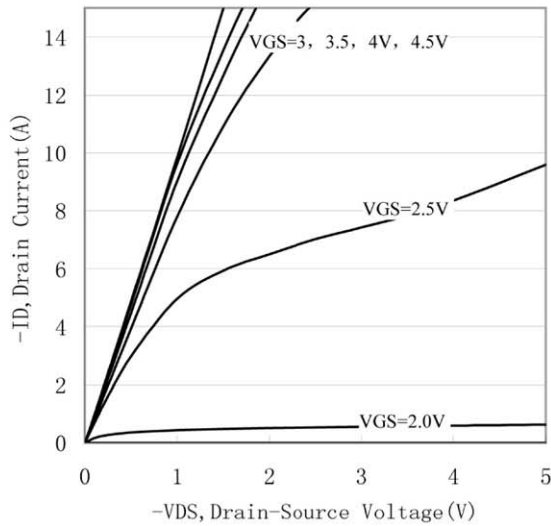## Typical Characteristics

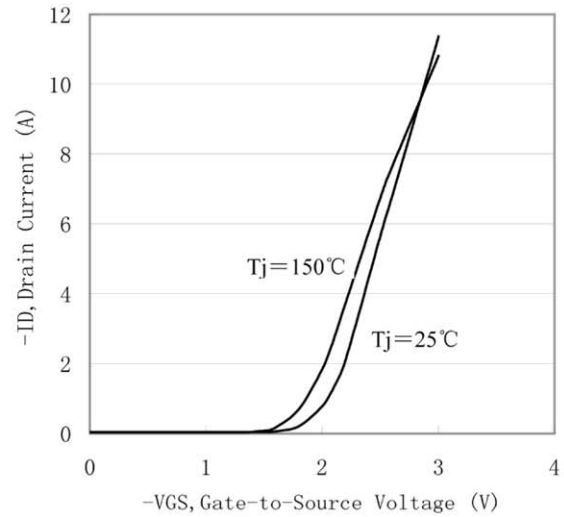**Figure 1. Output Characteristics**
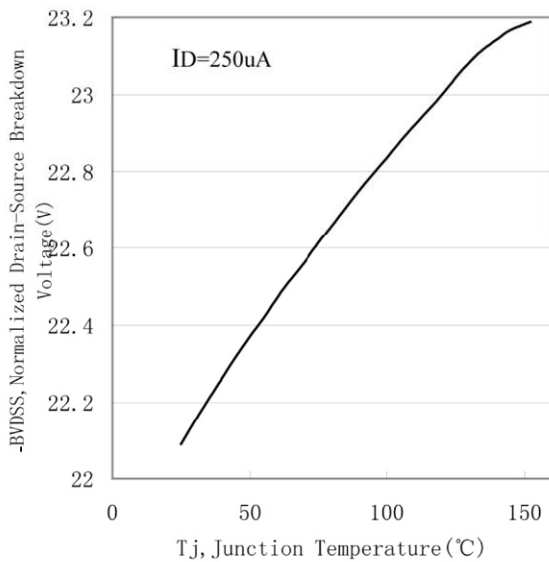

Figure 2. Transfer Characteristics

**Figure 3. Breakdown Voltage Variation
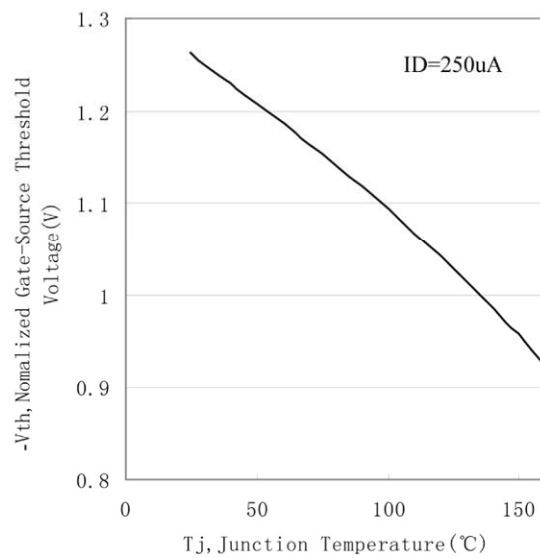with Temperature**

**Figure 4. Gate Threshold Variation
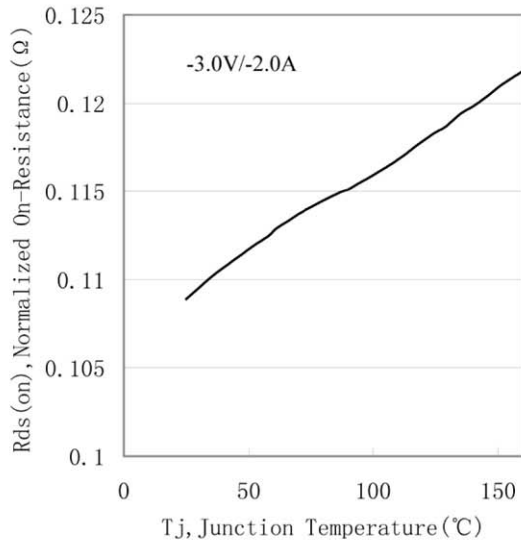with Temperature**

Typical Characteristics

Figure 5. On-Resistance Variation with Temperature
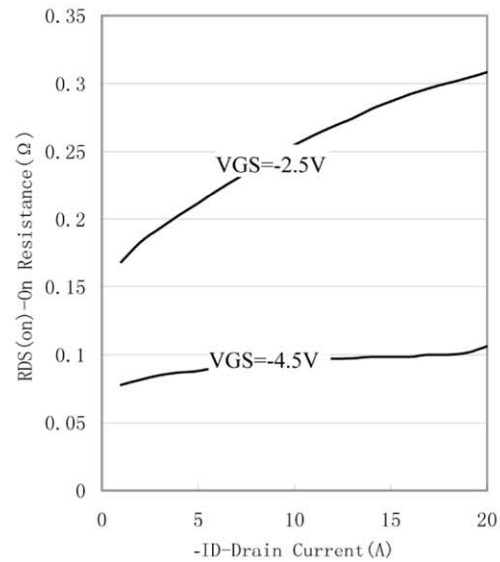

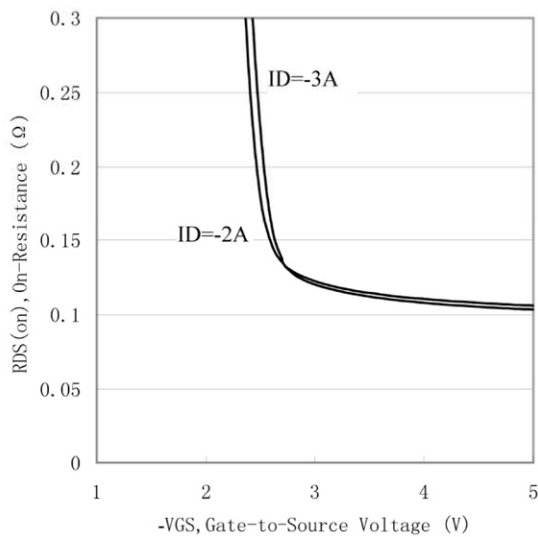**Figure 6. On-Resistance vs. Drain Current**
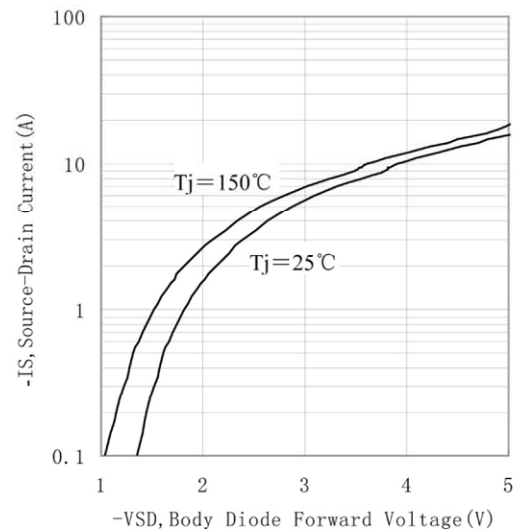

Figure 7. On-Resistance vs. Gate-to-Source Voltage

Figure 8. Source-Drain Diode Forward Voltage