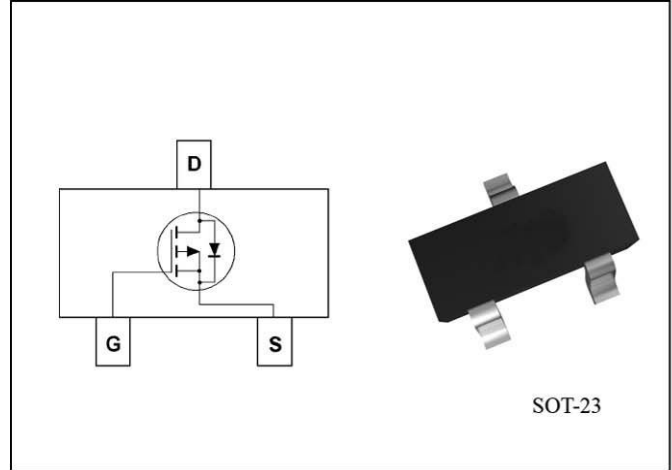


● Feature

- 20V/-3A, $R_{DS(ON)} = 120m\Omega(MAX)$ @ $V_{GS} = -4.5V$.
 $R_{DS(ON)} = 150m\Omega(MAX)$ @ $V_{GS} = -2.5V$.
- Super High dense cell design for extremely low $R_{DS(ON)}$
- Reliable and Rugged
- SOT-23 for Surface Mount Package



● Applications

- Power Management
- Portable Equipment and Battery Powered Systems.

● Absolute Maximum Ratings TA=25°C Unless Otherwise noted

Parameter	Symbol	Limit	Units
Drain-Source Voltage	V_{DS}	-20	V
Gate-Source Voltage	V_{GS}	±10	V
Drain Current-Continuous	I_D	-3	A
Drain Current -Pulsed (Note 1)	I_{DM}	-9	A
Maximum Power Dissipation	P_D	1	W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 To 150	°C

● Electrical Characteristics TA=25°C Unless Otherwise noted

Parameter	Symbol	Test Conditions	Min	Typ.	Max	Units
Off Characteristics						
Drain to Source Breakdown Voltage	BVDSS	VGS=0V, ID=-250μA	-20	-	-	V
Zero-Gate Voltage Drain Current	IDSS	VDS=-20V, VGS=0V	-	-	-1	μA
Gate Body Leakage Current, Forward	IGSSF	VGS=10V, VDS=0V	-	-	100	nA
Gate Body Leakage Current, Reverse	IGSSR	VGS=-10V, VDS=0V	-	-	-100	nA
On Characteristics						
Gate Threshold Voltage	VGS(th)	VGS= VDS, ID=-250μA	-0.4	-	-1.0	V
Static Drain-source	RDS(ON)	VGS =-4.5V, ID =-3.0A	-	--	120	mΩ
On-Resistance		VGS =-2.5V, ID =-2.0A	-	--	150	mΩ
Drain-Source Diode Characteristics and Maximum Ratings						
Drain-Source Diode Forward Voltage	VSD	VGS =0V, IS=-1.25A			-1.2	V

Typical Characteristics

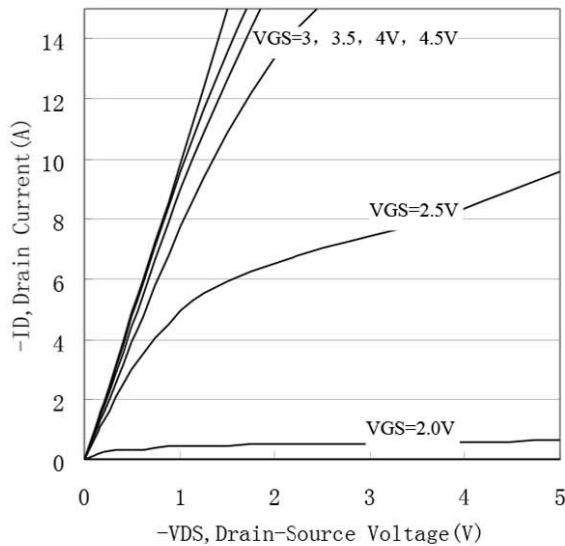


Figure 1. Output Characteristics

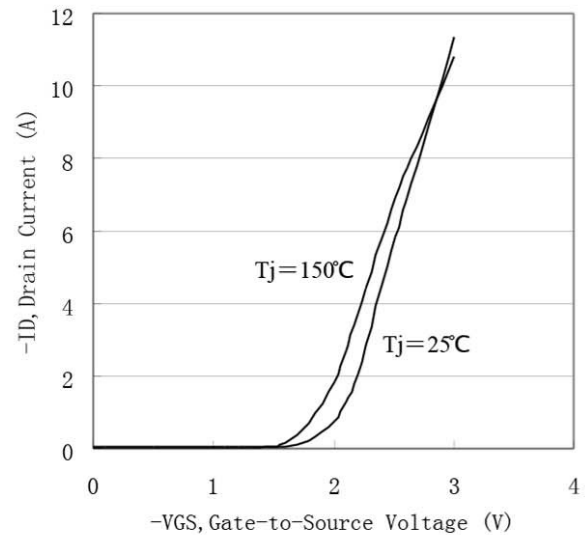


Figure 2. Transfer Characteristics

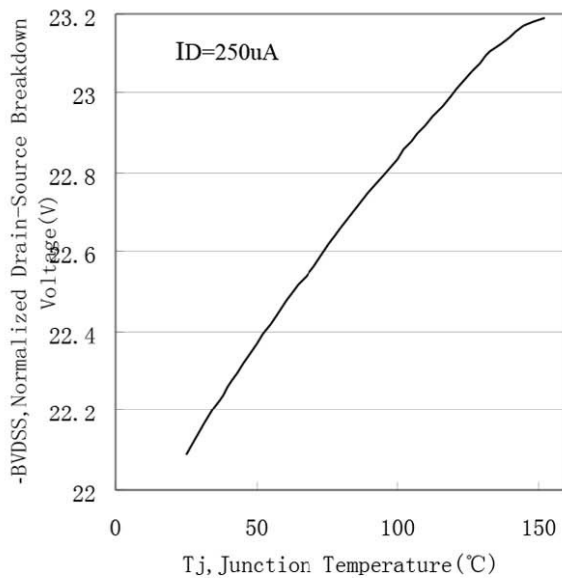


Figure 3. Breakdown Voltage Variation with Temperature

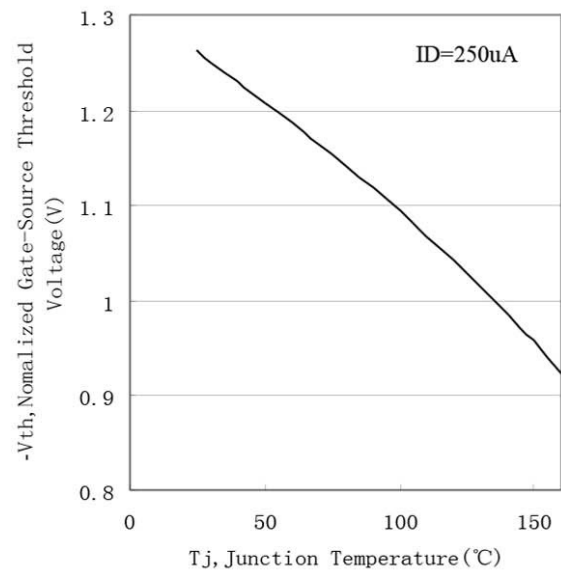


Figure 4. Gate Threshold Variation with Temperature

Typical Characteristics

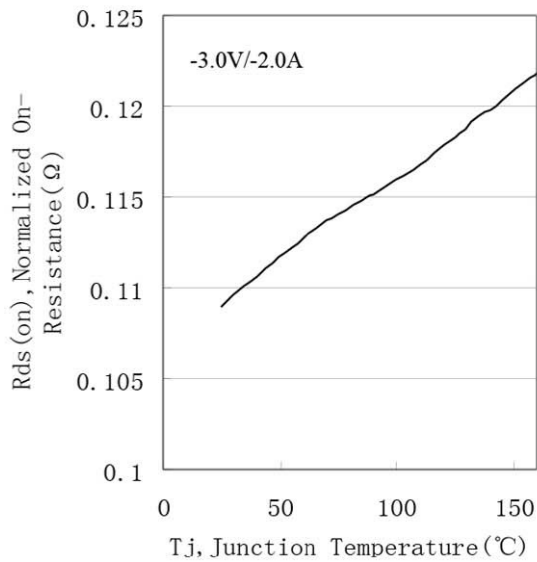


Figure 5. On-Resistance Variation with Temperature

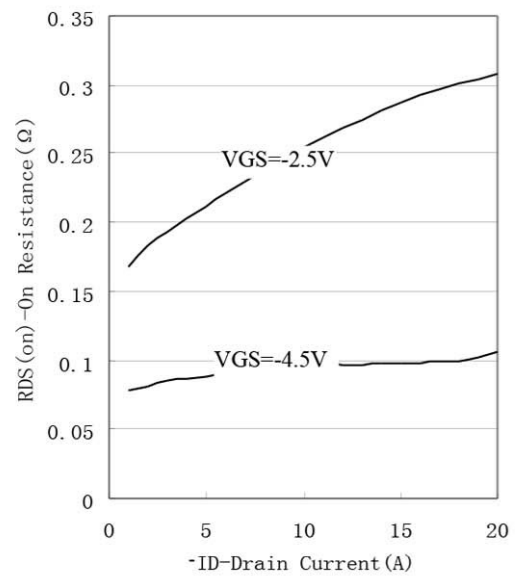


Figure 6. On-Resistance vs. Drain Current

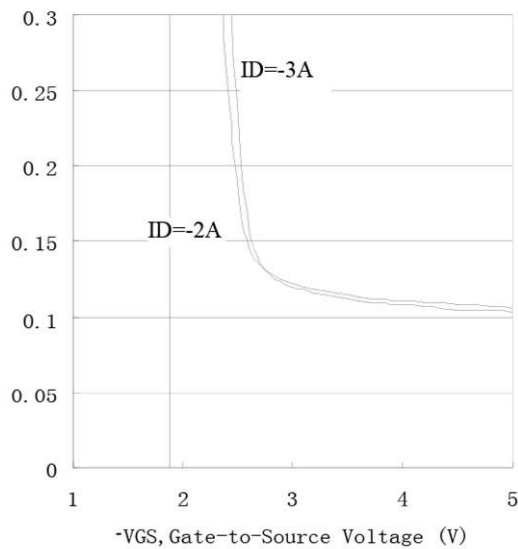


Figure 7. On-Resistance vs. Gate-to-Source Voltage

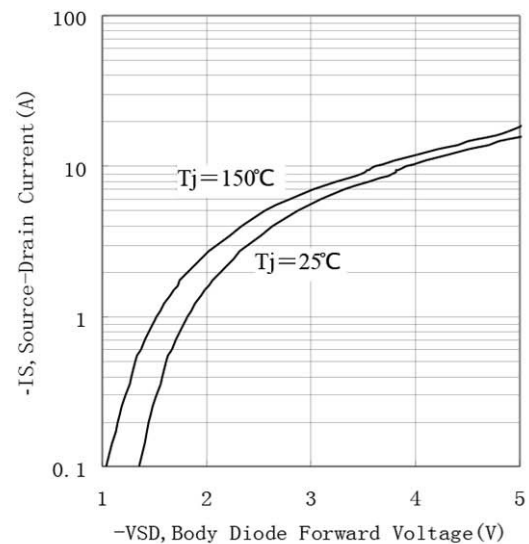
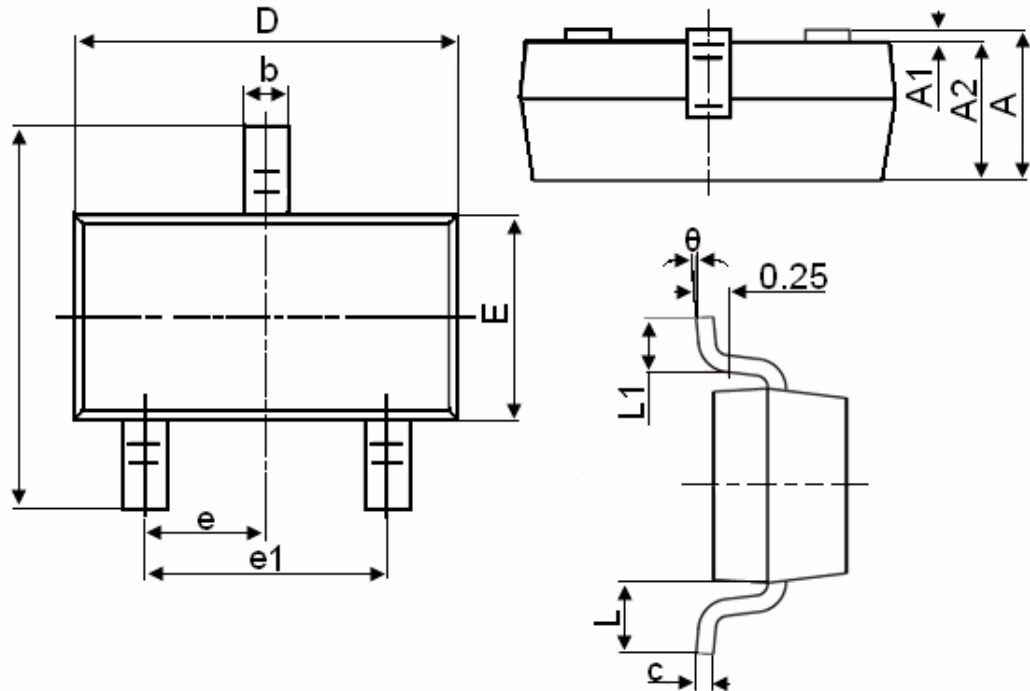


Figure 8. Source-Drain Diode Forward

SOT-23 Package Information



Symbol	Dimensions in Millimeters	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°