FDN338P
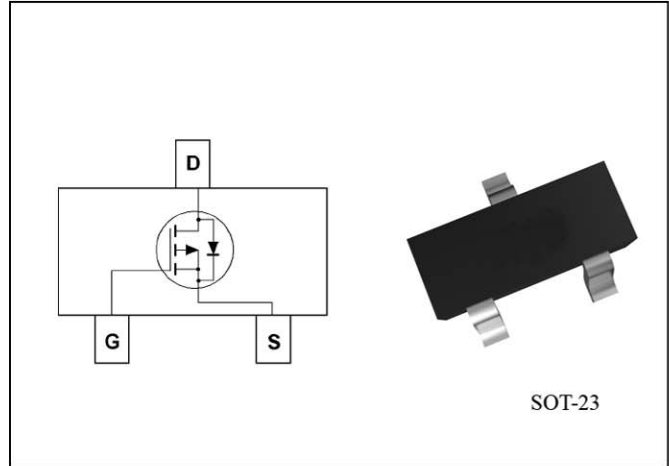
● Feature

-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

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}	-20	V
Gate-Source Voltage	V_{GS}	±10	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	-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
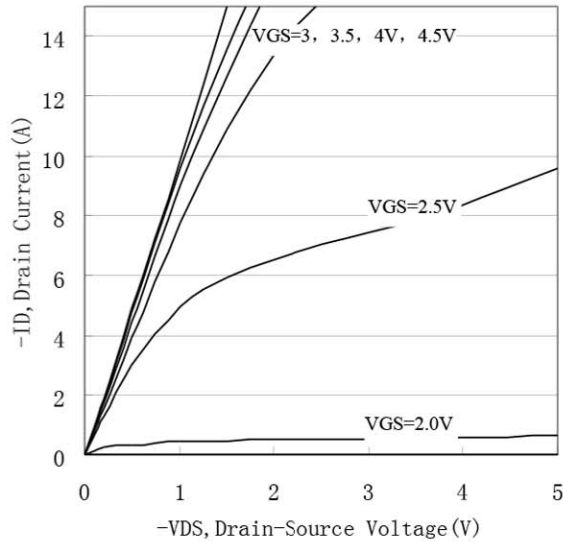
Figure 1．Output Characteristics
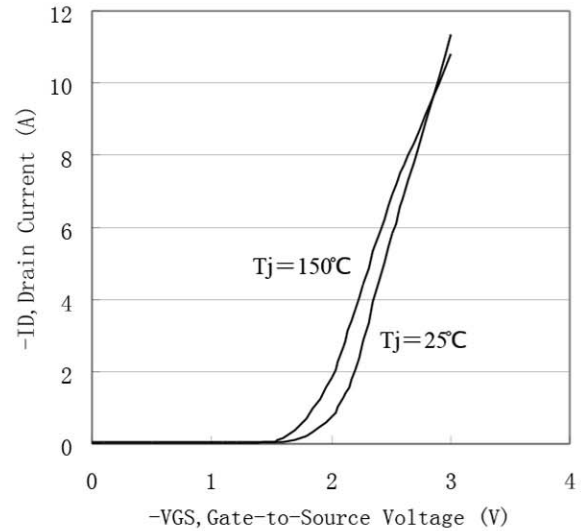
Figure 2．Transfer Characteristics
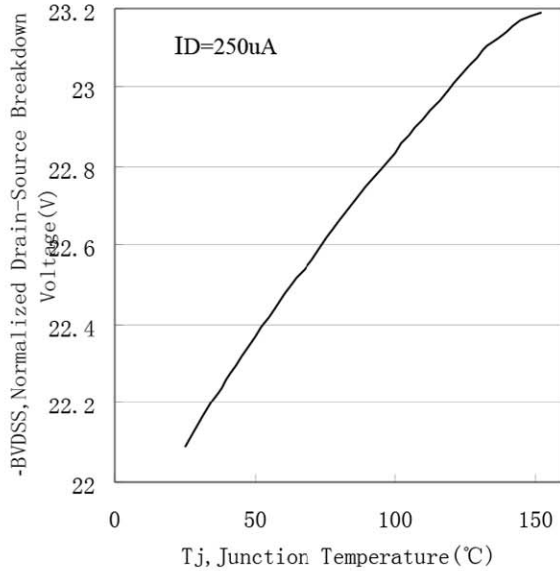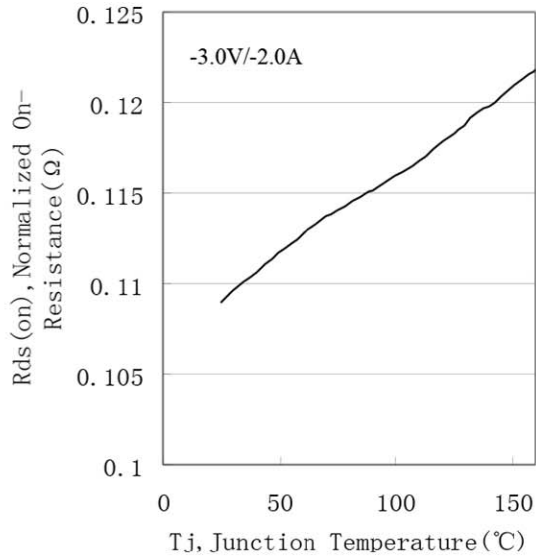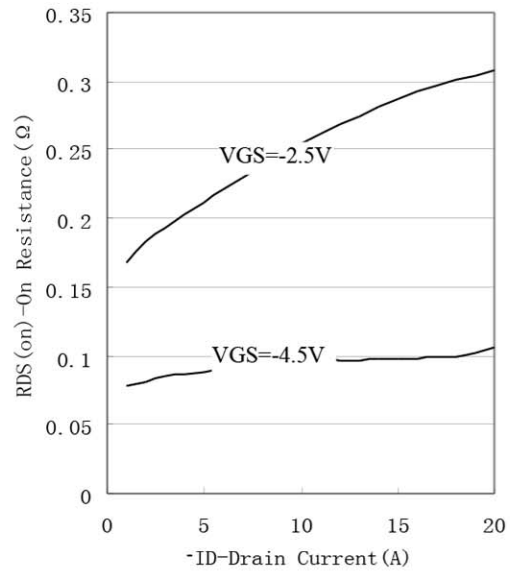

Figure 3．Breakdown Voltage Variation with Temperature
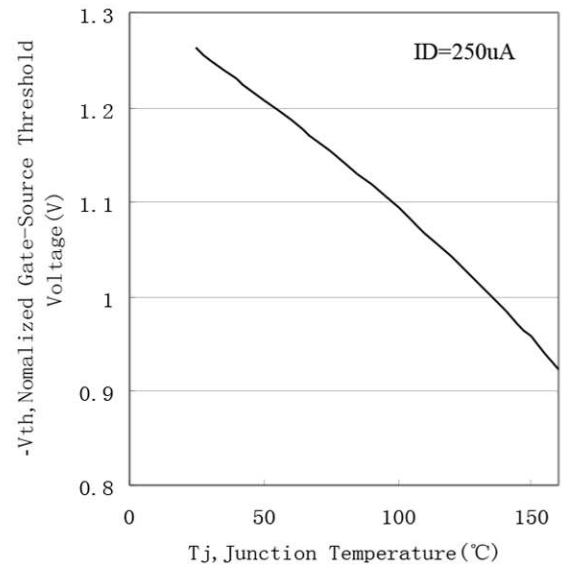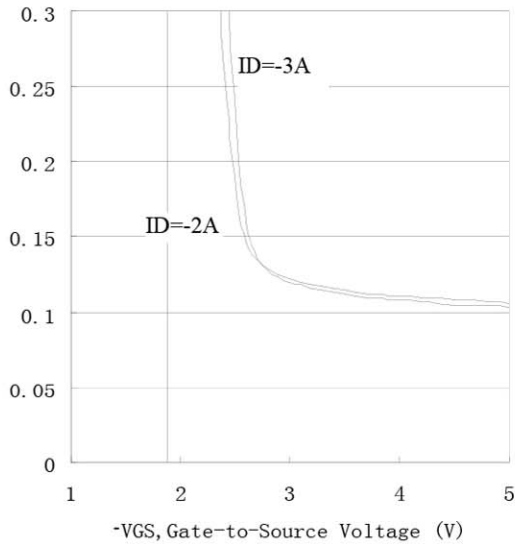

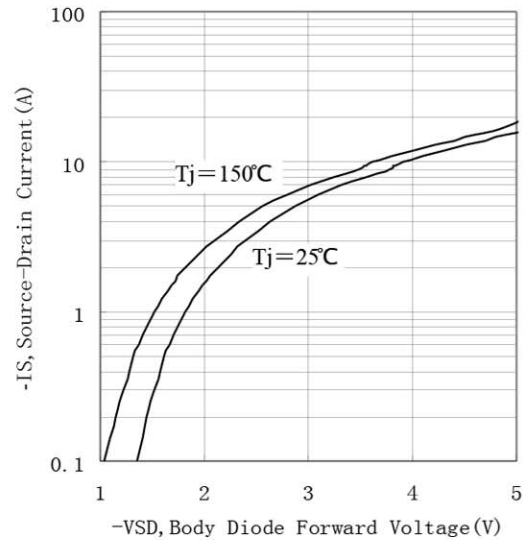Figure 4．Gate Threshold Variation with Temperature

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
Voltage

Package Outline Dimensions   (UNIT: mm)

SOT-23