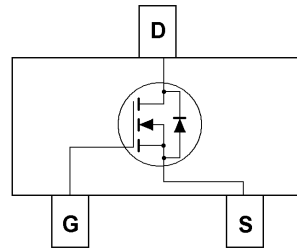


N-Channel Enhancement Mode MOSFET

Feature

- 16V/3.6A, $R_{DS(ON)} = 100m\Omega(MAX) @V_{GS} = 4.5V$.
 $R_{DS(ON)} = 140m\Omega(MAX) @V_{GS} = 2.5V$.
- 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 $T_A=25^{\circ}C$ 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	3.6	A

Electrical Characteristics $T_A=25^{\circ}C$ Unless Otherwise noted

Parameter	Symbol	Test Conditions	Min	Typ.	Max	Units
Off Characteristics						
Drain to Source Breakdown Voltage	BVDSS	$V_{GS}=0V, I_D=250\mu A$	16	-	-	V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS}=12V, V_{GS}=0V$	-	-	1	μA
Gate Body Leakage Current, Forward	I_{GSSF}	$V_{GS}=8V, V_{DS}=0V$	-	-	100	nA
Gate Body Leakage Current, Reverse	I_{GSSR}	$V_{GS}=-8V, V_{DS}=0V$	-	-	-100	nA
On Characteristics						
Gate Threshold Voltage	$V_{GS(th)}$	$V_{GS}=V_{DS}, I_D=250\mu A$	0.4	-	1.3	V
Static Drain-source	$R_{DS(ON)}$	$V_{GS}=4.5V, I_D=3.6A$	-	70	100	$m\Omega$
On-Resistance		$V_{GS}=2.5V, I_D=3.1A$	-	75	140	$m\Omega$
Drain-Source Diode Characteristics and Maximum Ratings						
Drain-Source Diode Forward Voltage	VSD	$V_{GS}=0V, I_S=0.94A$			1.2	V

Typical Characteristics

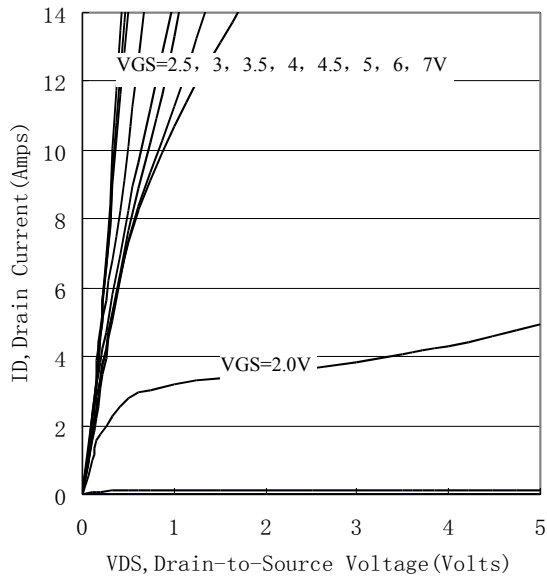


Figure 1. Output Characteristics

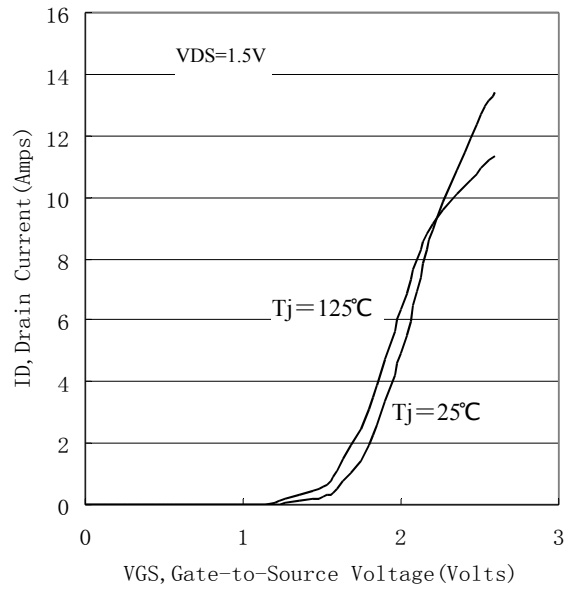


Figure 2. Transfer Characteristics

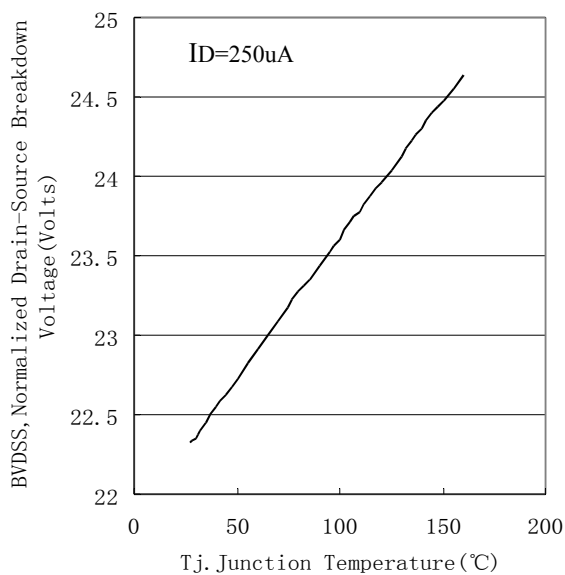


Figure 3. Breakdown Voltage Variation with Temperature

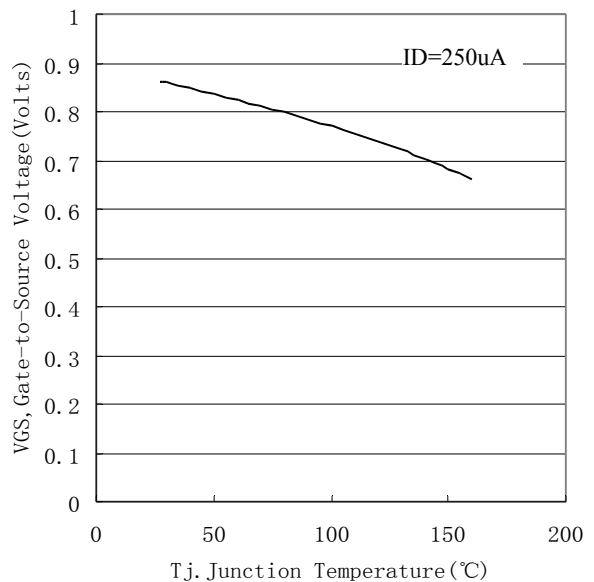


Figure 4. Gate Threshold Variation with Temperature

Typical Characteristics

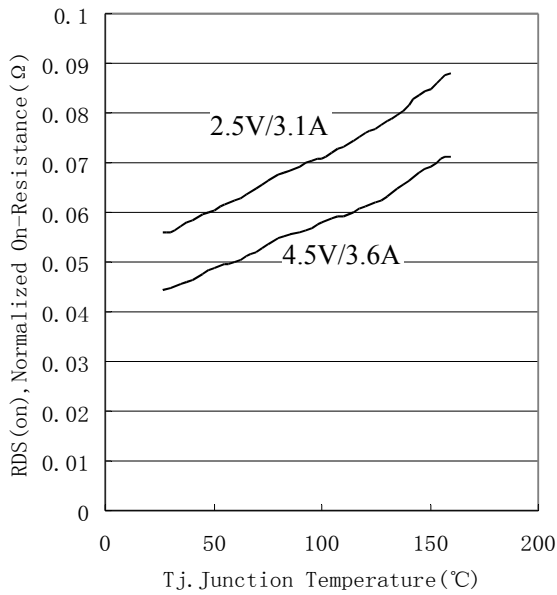


Figure 5. On-Resistance Variation with Temperature

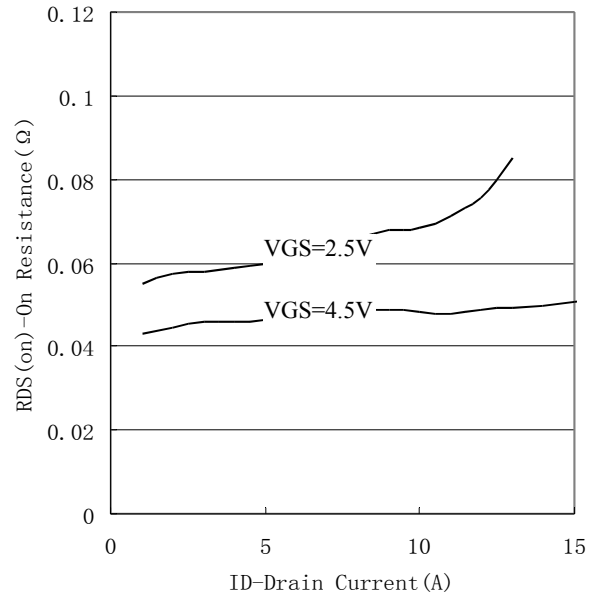


Figure 6. On-Resistance vs. Drain Current

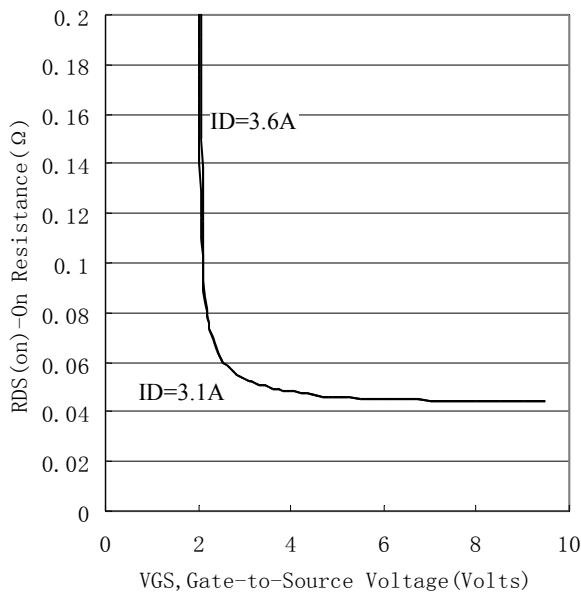


Figure 7. On-Resistance vs. Gate-to-Source Voltage

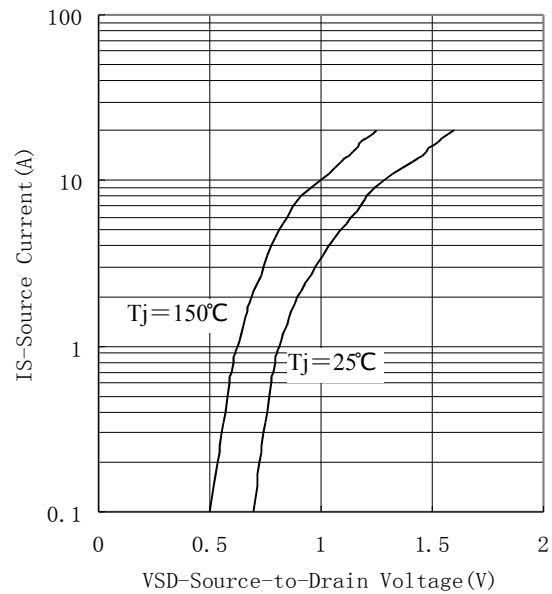
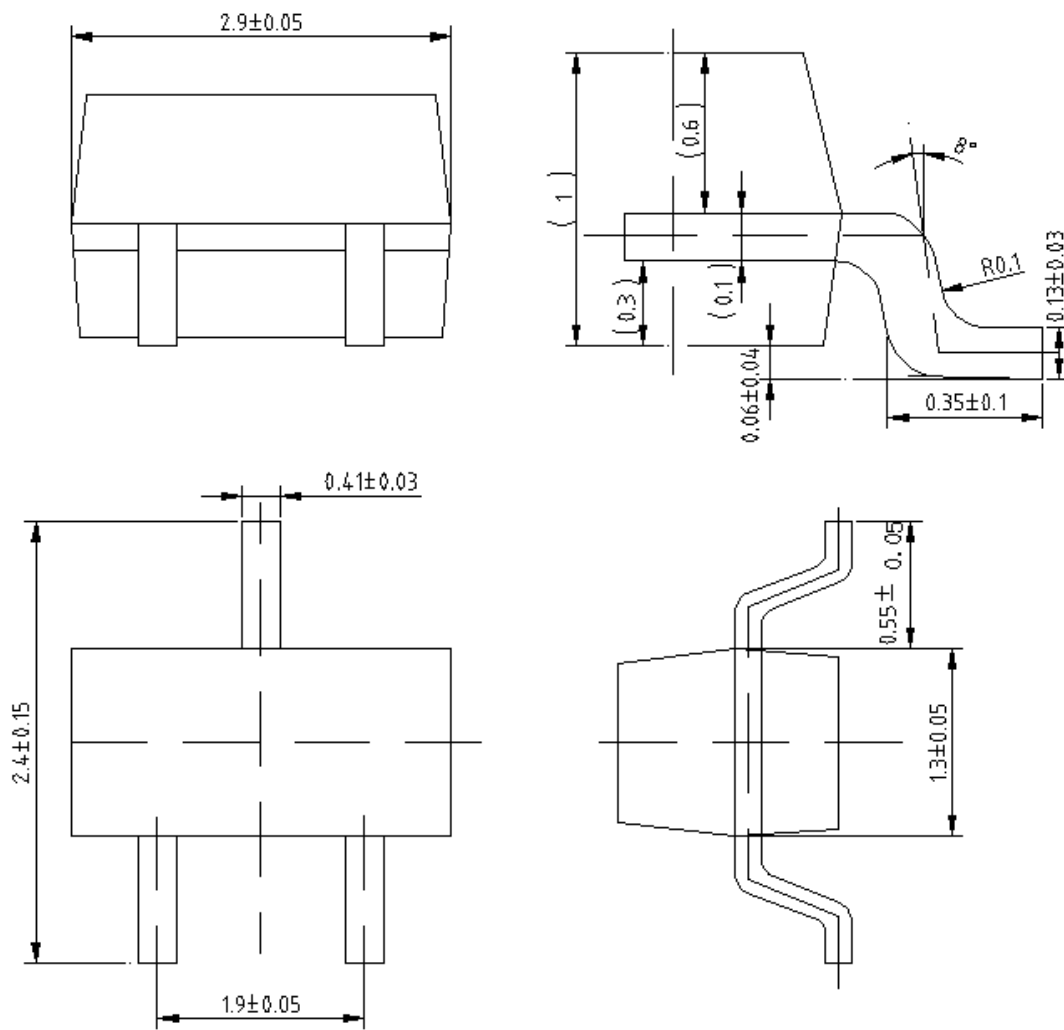


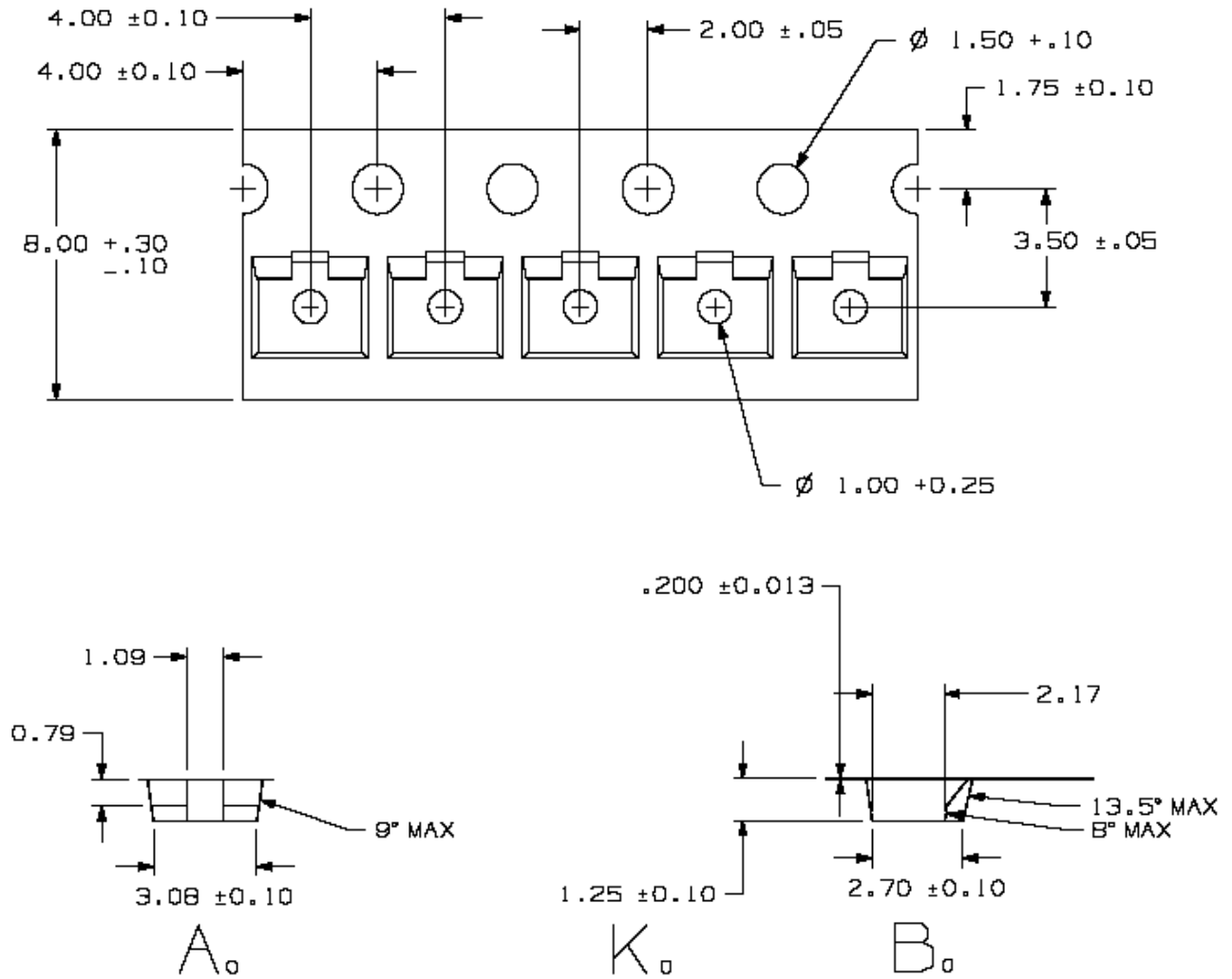
Figure 8. Source-Drain Diode Forward Voltage

Package Outline Dimensions (UNIT: mm)

SOT-23



SOT-23 Carrier Tape



SOT-23 Carrier Reel

