



DESCRIPTION

The AM2313 is available in SOT-23S package.

ORDERING INFORMATION

Package Type	Part Number	
SOT-23S SPQ: 3,000pcs/Reel	E3S	AM2313E3SR
		AM2313E3SVR
Note	V: Halogen free Package R: Tape & Reel	
AiT provides all RoHS products		

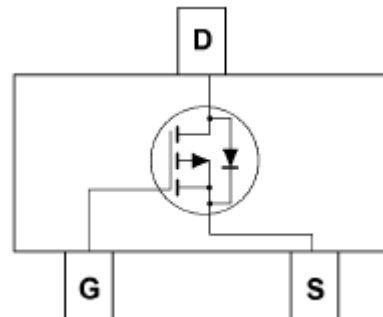
FEATURES

- -18V/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.
- Available in SOT-23S Package

APPLICATION

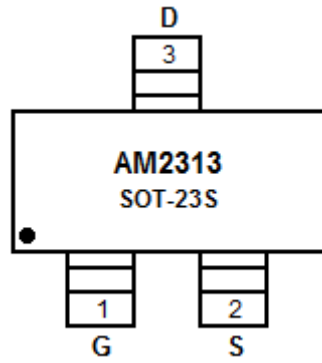
- Power Management
- Portable Equipment and Battery Powered Systems.

TYPICAL APPLICATION





PIN DESCRIPTION



Top View

Pin #	Symbol	Function
1	G	Gate
2	S	Source
3	D	Drain



ABSOLUTE MAXIMUM RATINGS

T_A=25°C, unless otherwise noted

V _{DS} , Drain-Source Voltage	-18V
V _{GS} , Gate-Source Voltage	±10V
I _D , Drain Current-Continuous	-3A

Stress beyond above listed "Absolute Maximum Ratings" may lead permanent damage to the device. These are stress ratings only and operations of the device at these or any other conditions beyond those indicated in the operational sections of the specifications are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

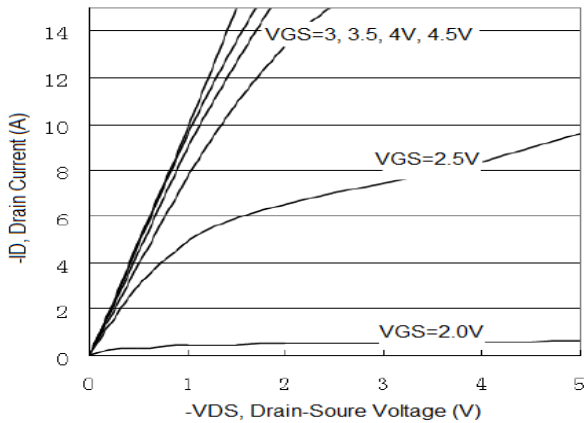
T_A=25°C, unless otherwise noted

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Off Characteristics						
Drain to Source Breakdown Voltage	BV _{DSS}	V _{GS} =0V, I _D =-250μA	-18	-	-	V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =-20V, V _{GS} =0V	-	-	-1	μA
Gate Body Leakage Current, Forward	I _{GSSF}	V _{GS} =10V, V _{DS} =0V	-	-	100	nA
Gate Body Leakage Current, Reverse	I _{GSSR}	V _{GS} =-10V, V _{DS} =0V	-	-	-100	nA
On Characteristics						
Gate Threshold Voltage	V _{GS(th)}	V _{GS} =V _{DS} , I _D =-250μA	-0.4	-	-1.0	V
Static Drain-Source On-Resistance	R _{DS(ON)}	V _{GS} =-4.5V, I _D =-3.0A	-	-	120	mΩ
		V _{GS} =-2.5V, I _D =-2.0A	-	-	150	mΩ
Drain-Source Diode Characteristics and Maximum Ratings						
Drain-Source Diode Forward Voltage	V _{SD}	V _{GS} =0V, I _S =-1.25A	-	-	-1.2	V

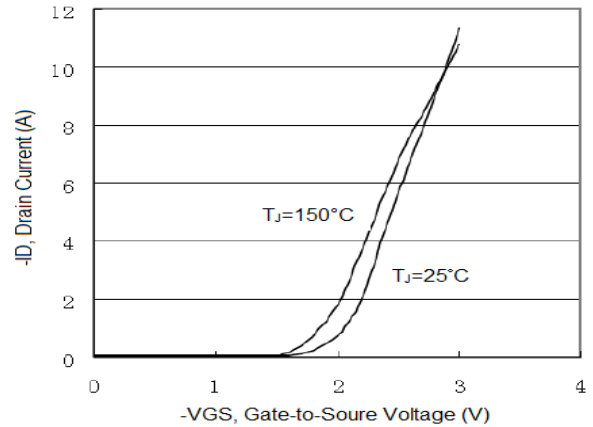


TYPICAL PERFORMANCE CHARACTERISTICS

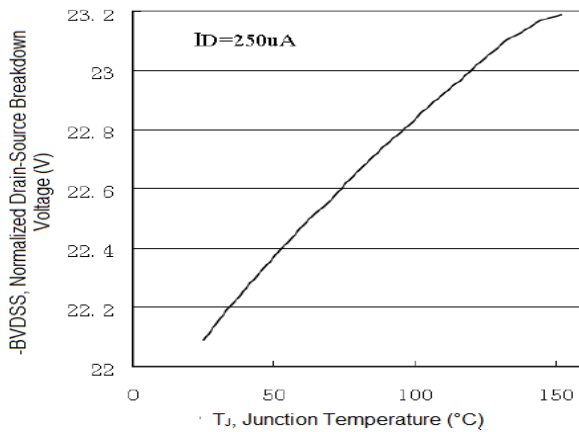
1. Output Characteristics



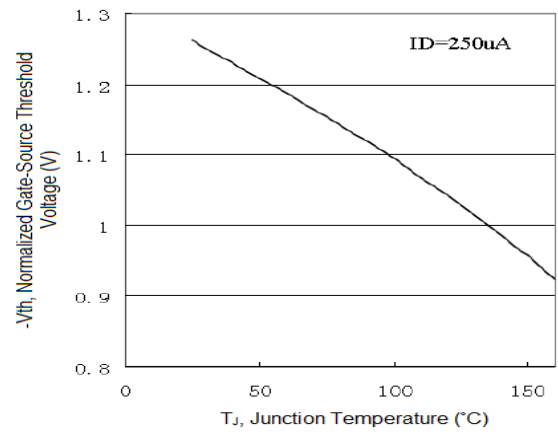
2. Transfer Characteristics



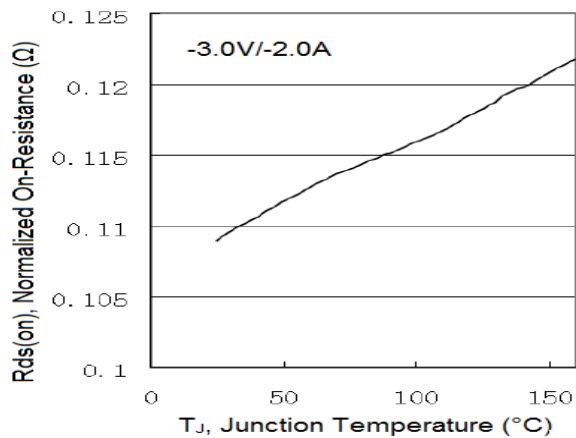
3. Breakdown Voltage Variation with Temperature



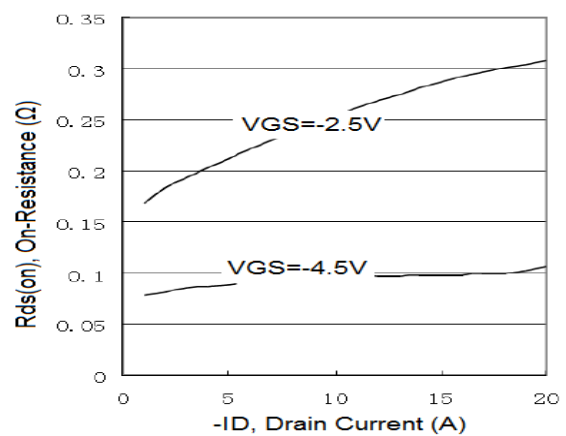
4. Gate Threshold Variation with Temperature



5. On-Resistance Variation with Temperature

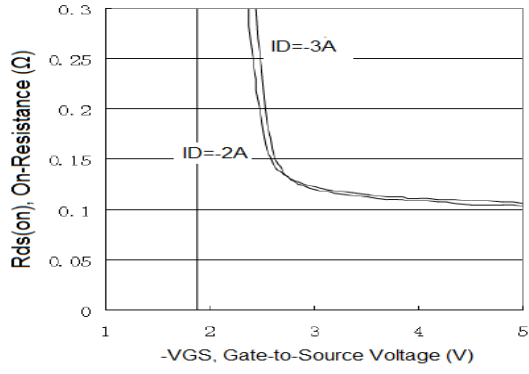


6. On-Resistance vs. Drain Current

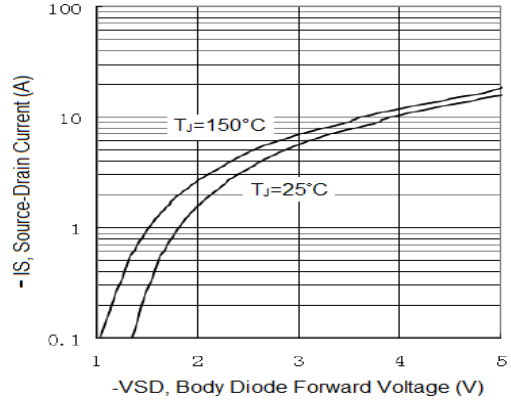




7. On-Resistance vs. Gate-to-Source Voltage



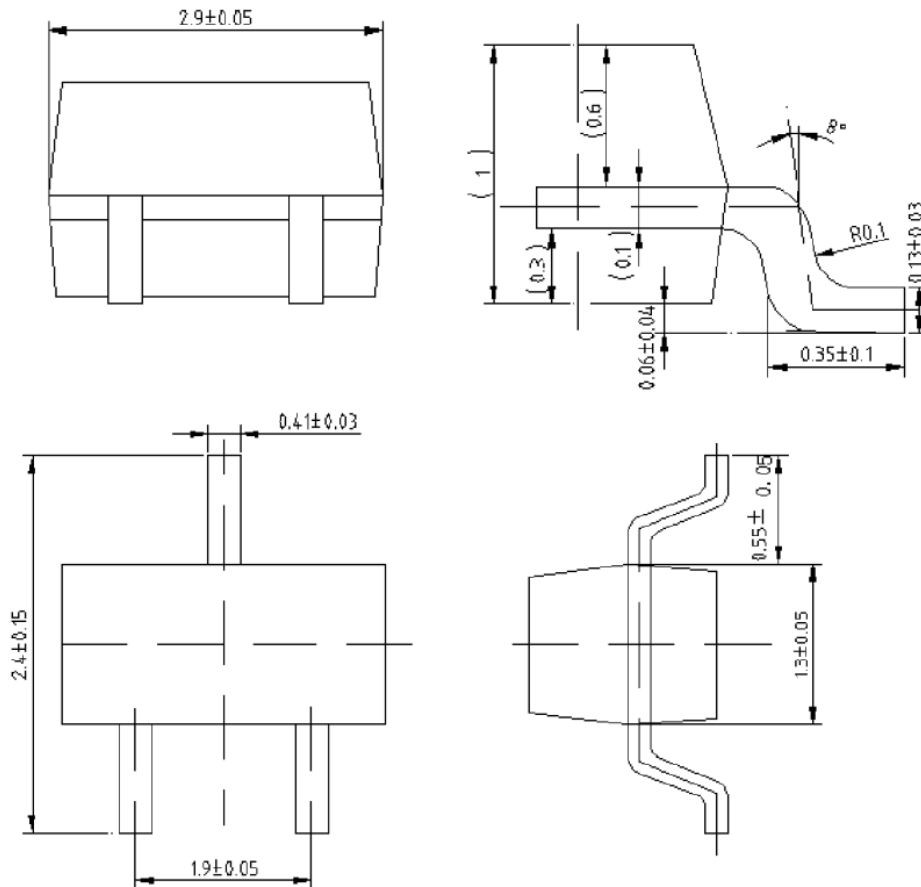
8. Source-Drain Diode Forward Voltage





PACKAGE INFORMATION

Dimension in SOT-23S (Unit: mm)





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