

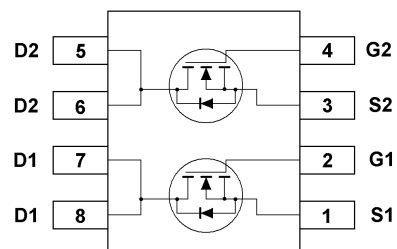
Dual N-Channel Enhancement Mode MOSFET

Feature

- 20V/6A, $R_{DS(ON)} = 33m\Omega(MAX)$ @ $V_{GS} = 4.5V$.
 $R_{DS(ON)} = 50m\Omega(MAX)$ @ $V_{GS} = 2.5V$.
- Super High dense cell design for extremely low $R_{DS(ON)}$.
- Reliable and Rugged.
- SOP-8 for Surface Mount Package.



SOP-8



Applications

- LI-ION Protection Circuit

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}	±12	V
Drain Current-Continuous	I_D	6	A

Electrical Characteristics TA=25°C Unless Otherwise noted

Parameter	Symbol	Test Conditions	Min	Typ.	Max	Units
Off Characteristics						
Drain to Source Breakdown Voltage	BVDSS	$V_{GS}=0V, I_D=250\mu A$	20	-	-	V
Zero-Gate Voltage Drain Current	IDSS	$V_{DS}=20V, V_{GS}=0V$	-	-	1	μA
Gate Body Leakage Current, Forward	IGSSF	$V_{GS}=10V, V_{DS}=0V$	-	-	100	nA
Gate Body Leakage Current, Reverse	IGSSR	$V_{GS}=-10V, V_{DS}=0V$	-	-	-100	nA
On Characteristics						
Gate Threshold Voltage	$V_{GS(th)}$	$V_{GS}=V_{DS}, I_D=250\mu A$	0.5	-	1.2	V
Static Drain-source On-Resistance	$R_{DS(ON)}$	$V_{GS}=4.5V, I_D=6.0A$	-	24	33	$m\Omega$
		$V_{GS}=2.5V, I_D=5.2A$	-	32	50	$m\Omega$
Drain-Source Diode Characteristics and Maximum Ratings						
Drain-Source Diode Forward Voltage	VSD	$V_{GS}=0V, I_S=1.5A$			1.2	V

Typical Characteristics

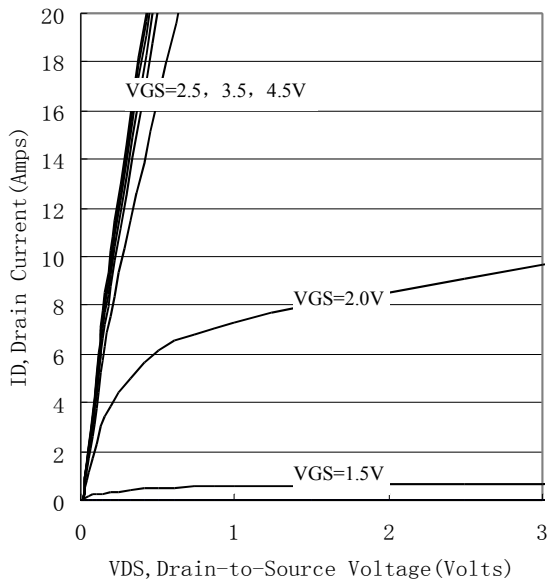


Figure 1. Output Characteristics

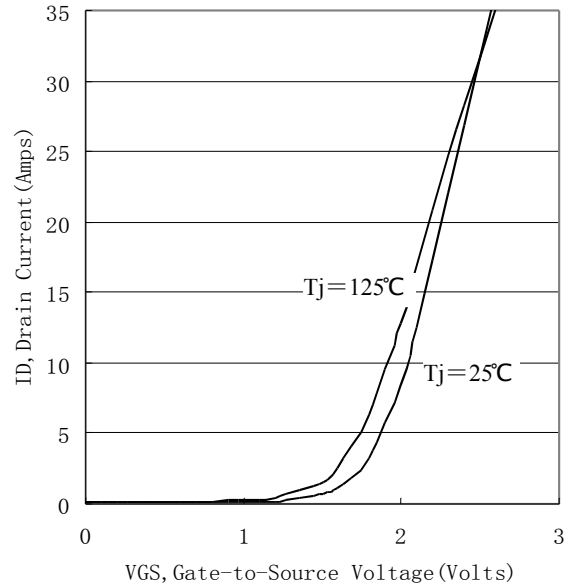


Figure 2. Transfer Characteristics

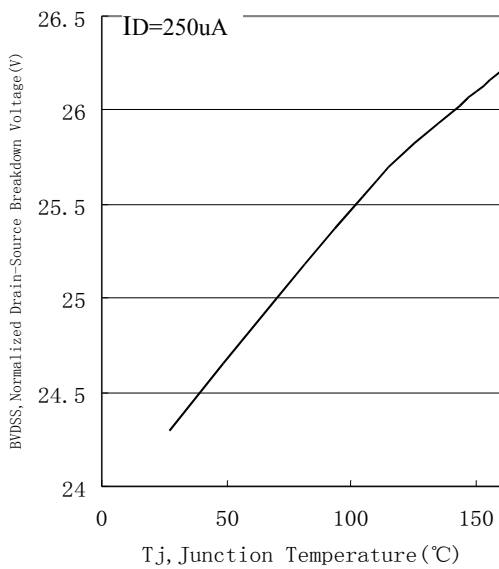


Figure 3. Breakdown Voltage Variation with Temperature

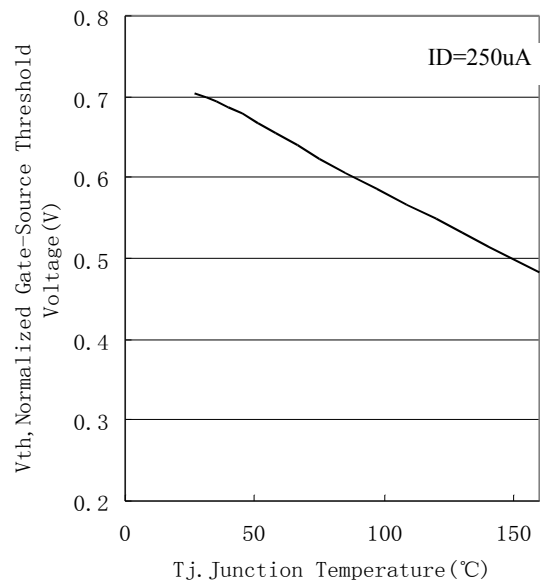


Figure 4. Gate Threshold Variation with Temperature

Typical Characteristics

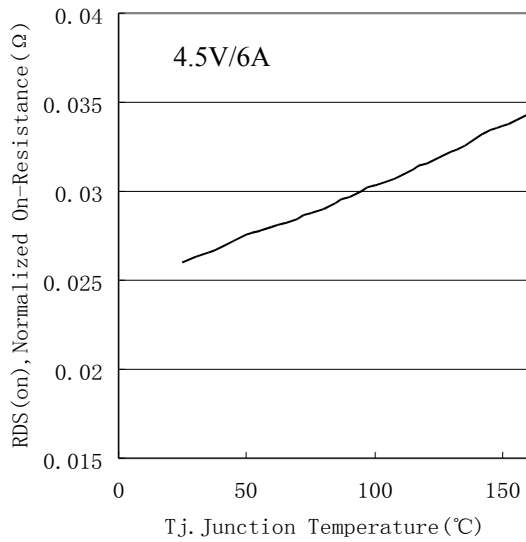


Figure 5. On-Resistance Variation with Temperature

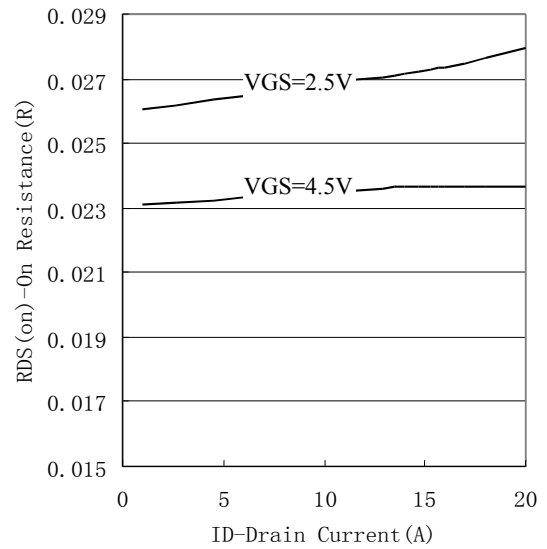


Figure 6. On-Resistance vs. Drain Current

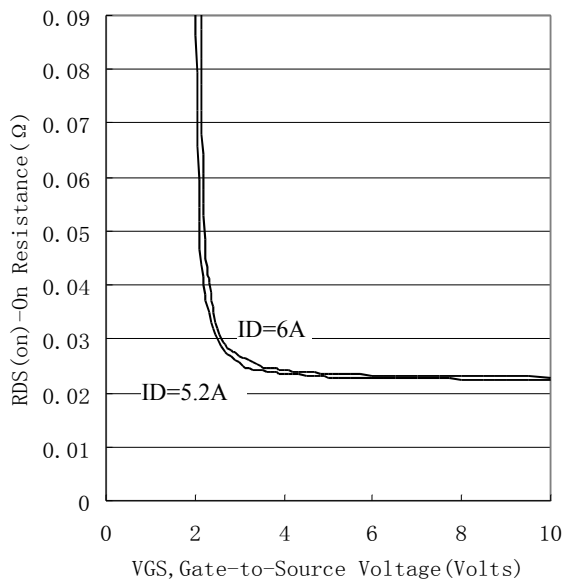


Figure 7. On-Resistance vs. Gate-to-Source Voltage

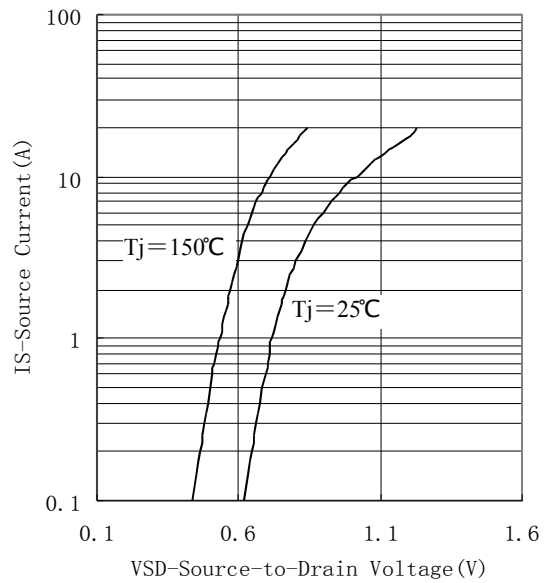


Figure 8. Source-Drain Diode Forward

Package Outline Dimensions (UNIT: mm)

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