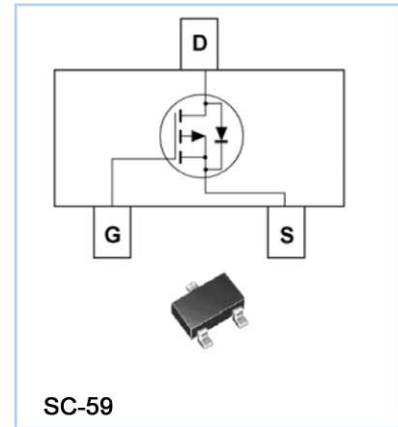


## P-Channel Enhancement Mode MOSFET

### Feature

- -16V/-4A,  $R_{DS(ON)} = 90\text{m}\Omega$  (MAX) @ $V_{GS} = -4.5\text{V}$ .  
 $R_{DS(ON)} = 130\text{m}\Omega$  (MAX) @ $V_{GS} = -2.5\text{V}$ .
- Super High dense cell design for extremely low  $R_{DS(ON)}$
- Reliable and Rugged
- SC-59 for Surface Mount Package



### Applications

- Power Management  
Portable Equipment and Battery Powered Systems.

### Absolute Maximum Ratings

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

Parameter	Symbol	Limit	Units
Drain-Source Voltage	$V_{DS}$	-16	V
Gate-Source Voltage	$V_{GS}$	$\pm 8$	V
Drain Current-Continuous	$I_D$	-4	A

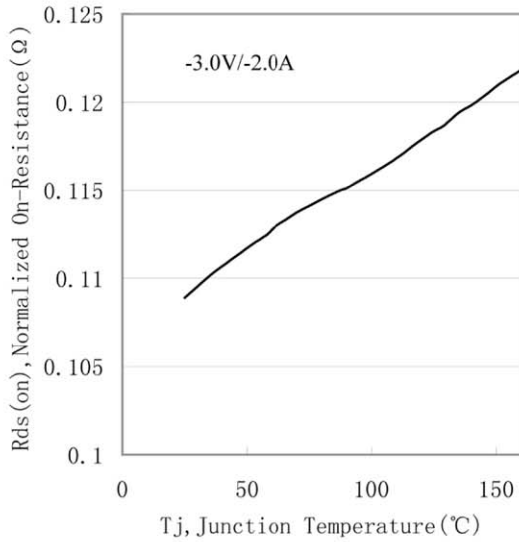
### Electrical Characteristics

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

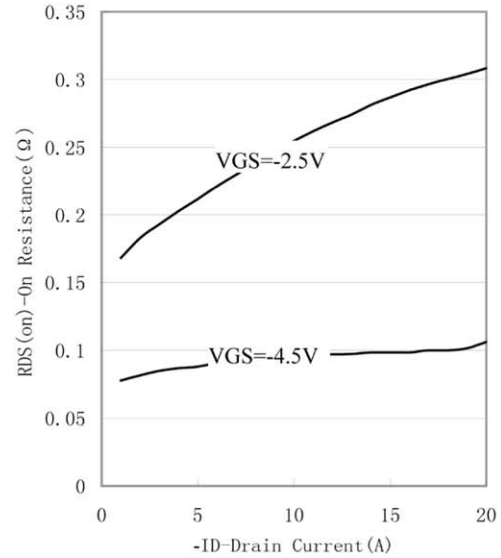
Parameter	Symbol	Test Conditions	Min	Typ.	Max	Units
<b>Off Characteristics</b>						
Drain to Source Breakdown Voltage	BVDSS	$V_{GS}=0\text{V}, I_D=-250\mu\text{A}$	-16	-	-	V
Zero-Gate Voltage Drain Current	IDSS	$V_{DS}=-12\text{V}, V_{GS}=0\text{V}$	-	-	-1	$\mu\text{A}$
Gate Body Leakage Current, Forward	IGSSF	$V_{GS}=8\text{V}, V_{DS}=0\text{V}$	-	-	100	nA
Gate Body Leakage Current, Reverse	IGSSR	$V_{GS}=-8\text{V}, V_{DS}=0\text{V}$	-	-	-100	nA
<b>On Characteristics</b>						
Gate Threshold Voltage	$V_{GS(th)}$	$V_{GS}=V_{DS}, I_D=-250\mu\text{A}$	-0.5	-	-1.5	V
Static Drain-source On-Resistance	$R_{DS(ON)}$	$V_{GS}=-4.5\text{V}, I_D=-4.0\text{A}$	-	-	90	$\text{m}\Omega$
		$V_{GS}=-2.5\text{V}, I_D=-2.0\text{A}$	-	-	130	$\text{m}\Omega$
<b>Drain-Source Diode Characteristics and Maximum Ratings</b>						
Drain-Source Diode Forward Voltage	VSD	$V_{GS}=0\text{V}, I_S=-1.25\text{A}$			-1.2	V



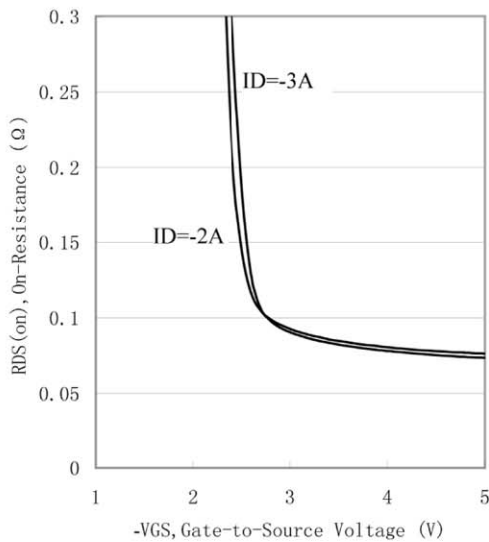
## Typical Characteristics



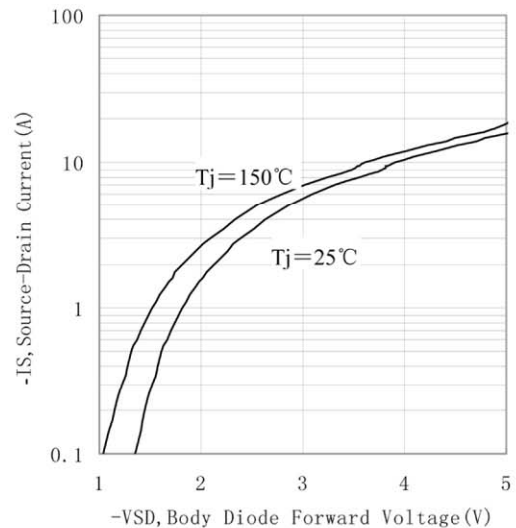
**Figure 5. On-Resistance Variation with Temperature**



**Figure 6. On-Resistance vs. Drain Current**

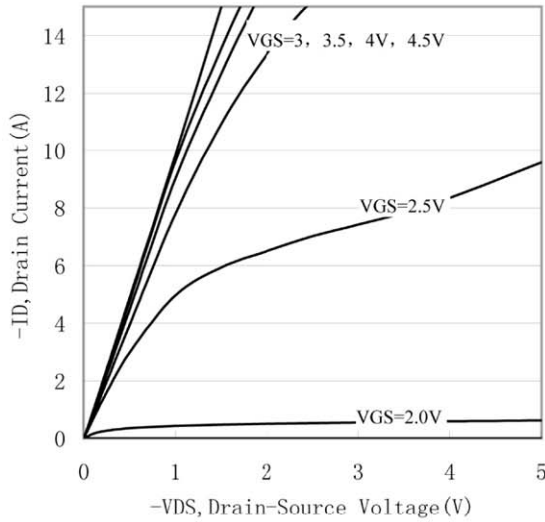


**Figure 7. On-Resistance vs. Gate-to-Source Voltage**

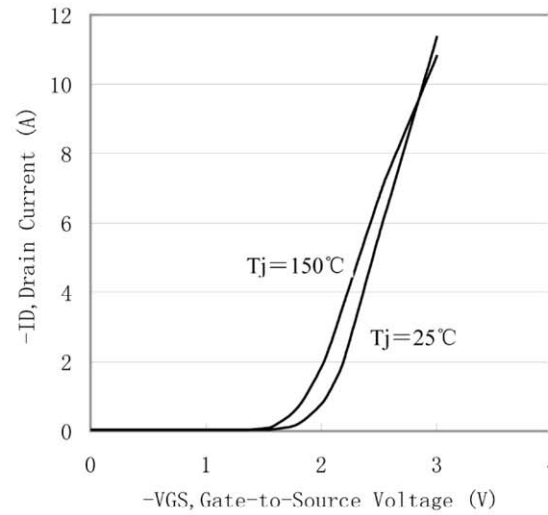


**Figure 8. Source-Drain Diode Forward Voltage**

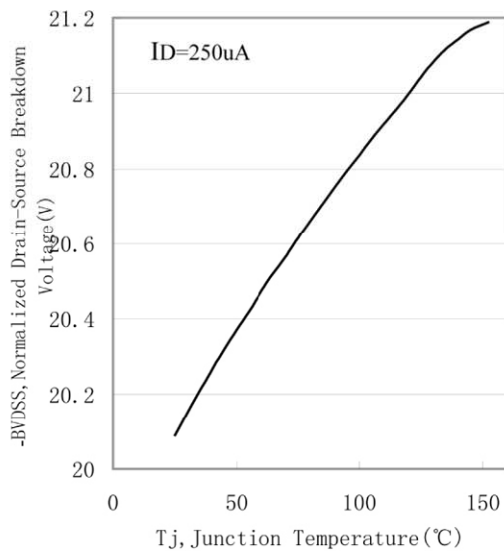
## Typical Characteristics



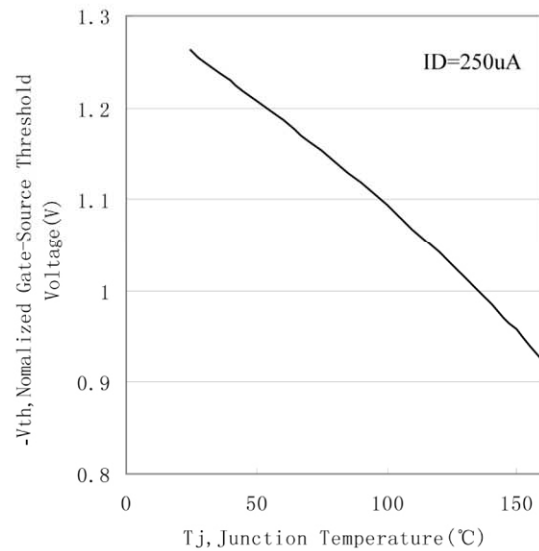
**Figure 1. Output Characteristics**



**Figure 2. Transfer Characteristics**



**Figure 3. Breakdown Voltage Variation with Temperature**



**Figure 4. Gate Threshold Variation with Temperature**