

#### P-Channel Enhancement Mode MOSFET

#### **Feature**

• -20V/-2A,  $R_{DS(ON)} = 120 m\Omega(MAX)$  @VGS = -4.5V.

 $R_{DS(ON)} = 150 m\Omega(MAX)$  @VGS = -2.5V.

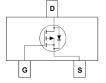
- Super High dense cell design for extremely low RDS(ON)
- Reliable and Rugged
- SC-59 for Surface Mount Package

### **Applications**

• Power Management

Portable Equipment and Battery Powered Systems.





### Absolute Maximum Ratings TA=25°C Unless Otherwise noted

Param eter	Symbol	Limit	Units	]_
Drain-Source Voltage	V <sub>DS</sub>	-20	V	]_
Gate-Source Voltage	Vos	±10	V	]_
Drain Current-Continuous	$I_D$	-2	A	]_

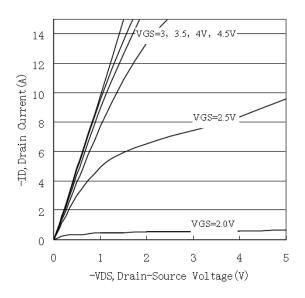
## Electrical Characteristics TA=25°C Unless Otherwise noted

Parameter	Symbol	Test Conditions	Min	Тур.	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	μА			
Gate Body Leakage Current, Forward	IGSSF	VGS=10V, VDS=0V		ı.	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 =-2.0A	-		120	mΩ			
On-Resistance		VGS =-2.5V, ID =-1.5A	-		150	mΩ			
Drain-Source Diode Characteristics and Maximum Ratings									
Drain-Source Diode Forward Voltage	VSD	VGS=0V, IS=-1.25A			-1.2	V			

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# **Typical Characteristics**



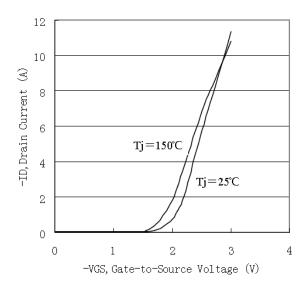
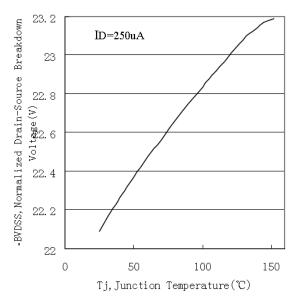
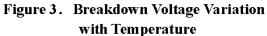


Figure 1. Output Characteristics

Figure 2. Transfer Characteristics





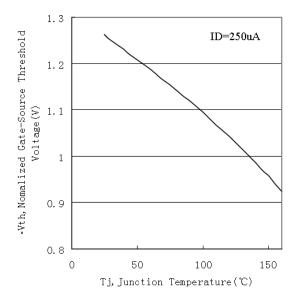
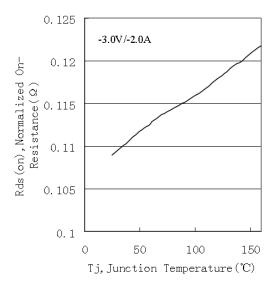


Figure 4. Gate Threshold Variation with Temperature





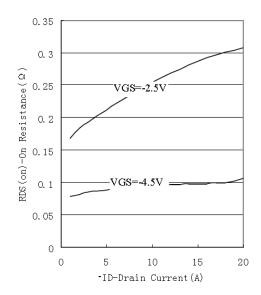


Figure 5. On-Resistance Variation with Temperature

Figure 6. On-Resistance vs. Drain Current

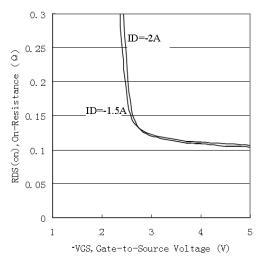


Figure 7. On-Resistance vs. Gate-to-Source Voltage Voltage

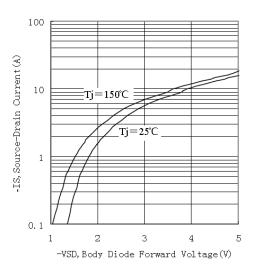


Figure 8. Source-Drain Diode Forward

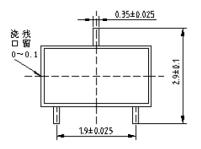
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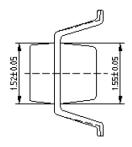


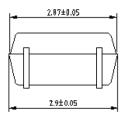


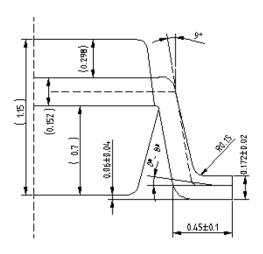
# Package Outline Dimensions (UNIT: mm)

SC-59









SHIKE MAKE CONSCIOUS PRODUCT
CONSCIOUS PRODUCTS BEGIN WITH CONSCIOUS PEOPLE

