

## **N-Channel Enhancement Mode MOSFET**

## Feature

 $\cdot 60V/0.2A$ , RDS(ON) =  $3.5\Omega(MAX)$  @VGS = 5V. Id = 0.2A

 $R_{DS(ON)} = 10\Omega(MAX)$  @VGs = 2.75V. Id = 0.2A

·Super High dense cell design for extremely low RDS(ON).

·Reliable and Rugged.

 $\cdot Low$  Threshold Voltage (  $0.5V{--}1.5V$  ) Make it Ideal for Low Voltage Applications.

 $\cdot \text{SOT-23}$  for Surface Mount Package.

### Applications

·Power Management in DC/DC Converters

Portable and Battery-powered Products.

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

Parameter	Symbol	Limit	Units
Drain-Source Voltage	$V_{\text{DS}}$	60	v
Gate-Source Voltage	$V_{\text{GS}}$	±20	v
Drain Current-Continuous	ID	0.2	А

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

Parameter	Symbol	Test Conditions	Min	Typ.	Max	Units
Off Characteristics						
Drain to Source Breakdown Voltage	BVDSS	VGS=0V, ID=250µA	60	-	-	v
Zero-Gate Voltage Drain Current III	IDSS	VDS=50V, VGS=0V		5	0.5	μA
	1055	VDS=25V, VGS=0V	-	-	0.1	
Gate Body Leakage Current, Forward	IGSSF	VGS=20V, VDS=0V	2	12	100	nA
Gate Body Leakage Current, Reverse	IGSSR	VGS=-20V, VDS=0V	-	-	-100	nA
On Characteristics						
Gate Threshold Voltage	VGS(th)	VGS=VDS, ID=1.0 mA	0.5	-	1.5	v
Static Drain-source	RDS(ON)	VGS =5.0V, ID =0.2A	-	12	3.5	Ω
On-Resistance	KDS(ON)	VGS =2.75V, ID =0.2A	-	-	10	Ω
Drain-Source Diode Characteristi	cs and Maxin	num Ratings				
Drain-Source Diode Forward Voltage	VSD	VGS =0V, IS=0.2A			2.5	V

## SOT-23



1: Gate 2: Source 3: Drain



## **Typical Characteristics**

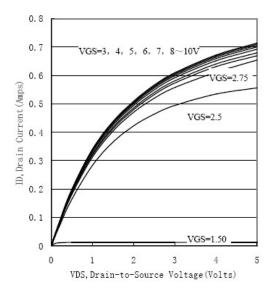


Figure 1. Output Characteristics

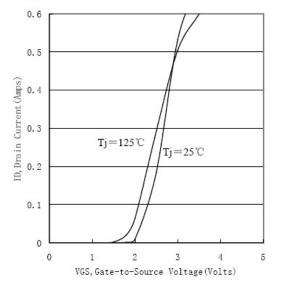


Figure 2. Transfer Characteristics

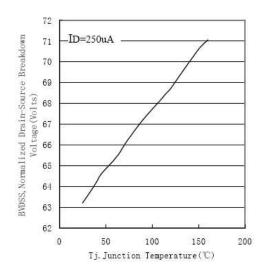


Figure 3. Breakdown Voltage Variation with Temperature

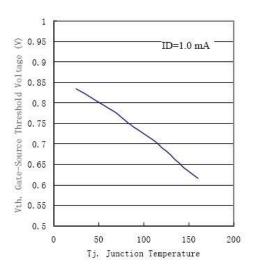
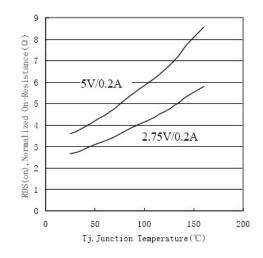
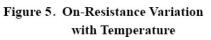


Figure 4. Gate Threshold Variation with Temperature



## **Typical Characteristics**





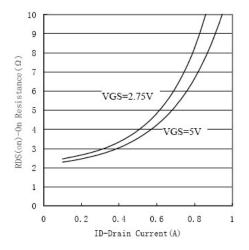


Figure 6. On-Resistance vs. Drain Current

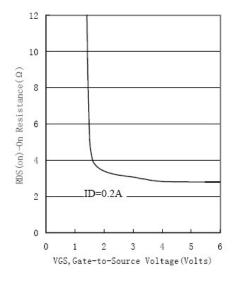


Figure 7. On-Resistance vs. Gate-to-Source Voltage

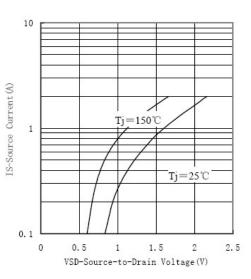
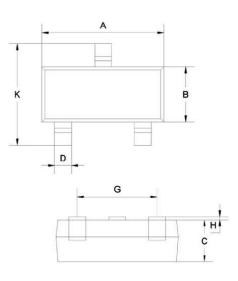


Figure 8. Source-Drain Diode Forward Voltage

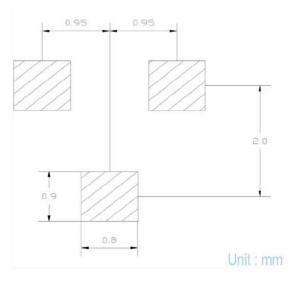


### SOT-23 Package Outline Dimensions (UNIT: mm)



	SOT-23				
Dim	Min	Max			
A	2.85	2.95			
В	1.25	1.35			
С	1.0Typical				
D	0.37	0.43			
E	0.35	0.48			
G	1.85	1.95			
н	0.02	0.1			
J	0.1Typical				
к	2.35	2.45			
All D	imensions i	n mm			

## **Soldering Footprint**



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单击下面可查看定价,库存,交付和生命周期等信息

>>SHIKUES(时科)