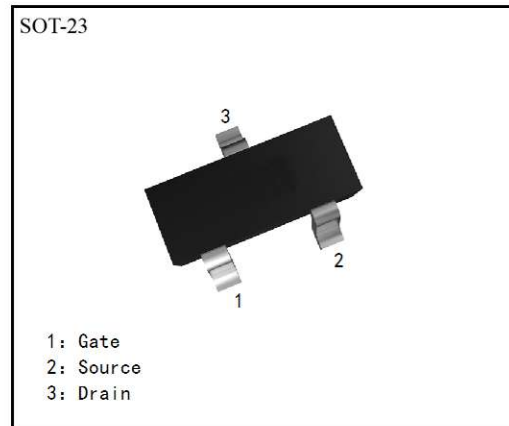


N-Channel Enhancement Mode MOSFET

● Feature

30V/3.6A, $R_{DS(ON)} = 70\text{m}\Omega(\text{MAX}) @V_{GS} = 10\text{V}$.
 $R_{DS(ON)} = 100\text{m}\Omega(\text{MAX}) @V_{GS} = 4.5\text{V}$.

Super High dense cell design for extremely low $R_{DS(ON)}$.
 Reliable and Rugged.
 SOT-23 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}	30	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current-Continuous	I_D	3.6	A

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

Parameter	Symbol	Test Conditions	Min	Typ.	Max	Units
Off Characteristics						
Drain to Source Breakdown Voltage	BVDSS	$V_{GS}=0\text{V}, I_D=250\mu\text{A}$	30	-	-	V
Zero-Gate Voltage Drain Current	IDSS	$V_{DS}=30\text{V}, V_{GS}=0\text{V}$	-	-	1	μA
Gate Body Leakage Current, Forward	IGSSF	$V_{GS}=20\text{V}, V_{DS}=0\text{V}$	-	-	100	nA
Gate Body Leakage Current, Reverse	IGSSR	$V_{GS}=-20\text{V}, V_{DS}=0\text{V}$	-	-	-100	nA
On Characteristics						
Gate Threshold Voltage	$V_{GS(th)}$	$V_{GS}=V_{DS}, I_D=250\mu\text{A}$	1.1	-	2.2	V
Static Drain-source On-Resistance	$R_{DS(ON)}$	$V_{GS}=10\text{V}, I_D=3.6\text{A}$	-	50	70	$\text{m}\Omega$
		$V_{GS}=4.5\text{V}, I_D=3.1\text{A}$	-	80	100	$\text{m}\Omega$
Drain-Source Diode Characteristics and Maximum Ratings						
Drain-Source Diode Forward Voltage	VSD	$V_{GS}=0\text{V}, I_S=1.0\text{A}$			1.2	V



Dynamic					
Q_g	Total Gate Charge	$V_{ds}=15V, V_{gs}=10V, I_d=2A$	8.5	12	nC
Q_{gs}	Gate-Source Charge		1.1		
Q_{gd}	Gate-Drain Charge		1.8		
t_{on}	Turn-on Time	$V_{DD}=15V, I_d=2A, V_{gs}=10V, R_G=6\Omega$		40	ns
$t_d(ON)$	Turn-on Delay time		11		
t_r	Turn-on Rise Time		17		
$T_d(off)$	Turn-off Delay Time		37		
t_f	Turn-off Fall Time		20		
t_{off}	Turn-off Time			60	

Typical Characteristics

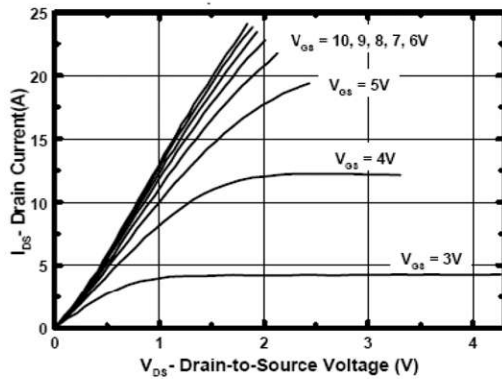


Figure 1. Output Characteristics

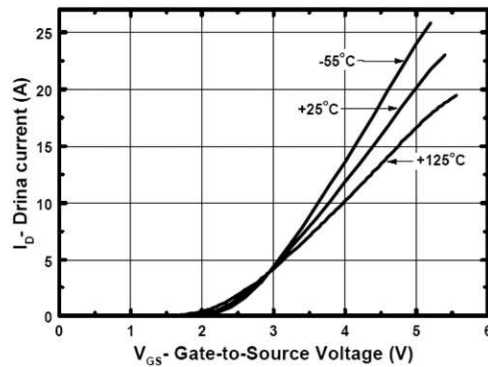


Figure 2. Transfer Characteristics

Typical Characteristics

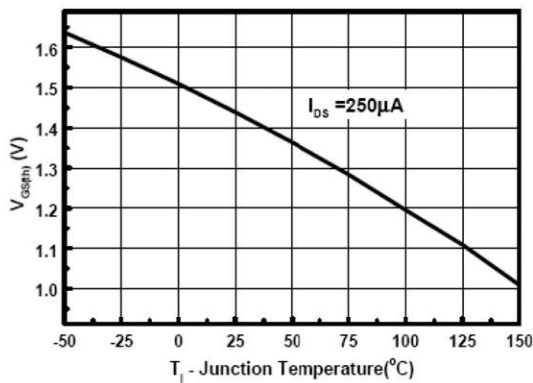


Figure 3. Gate Threshold Variation with Temperature

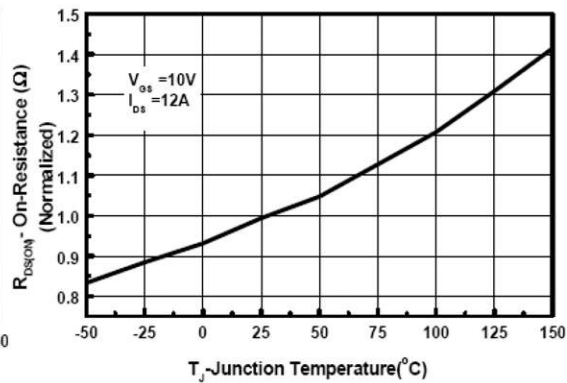


Figure 4. On-Resistance Variation with Temperature



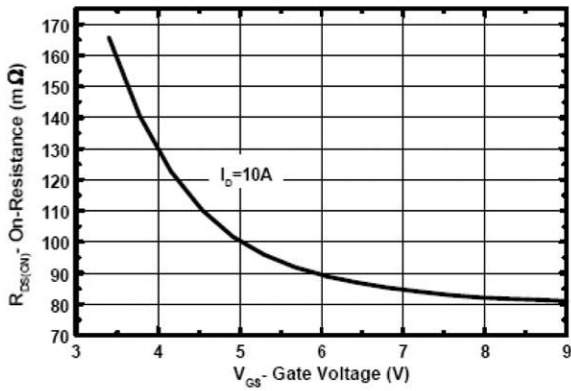


Figure 5. On-Resistance vs. Gate-to-Source Voltage

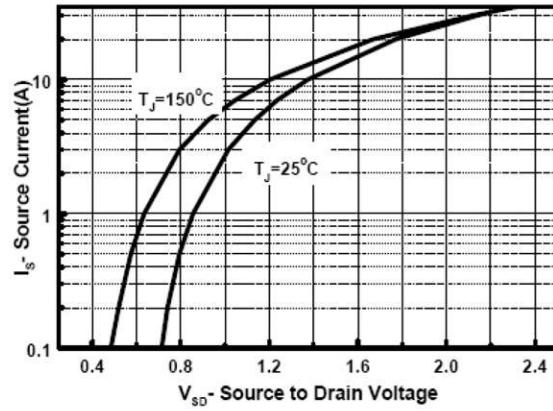
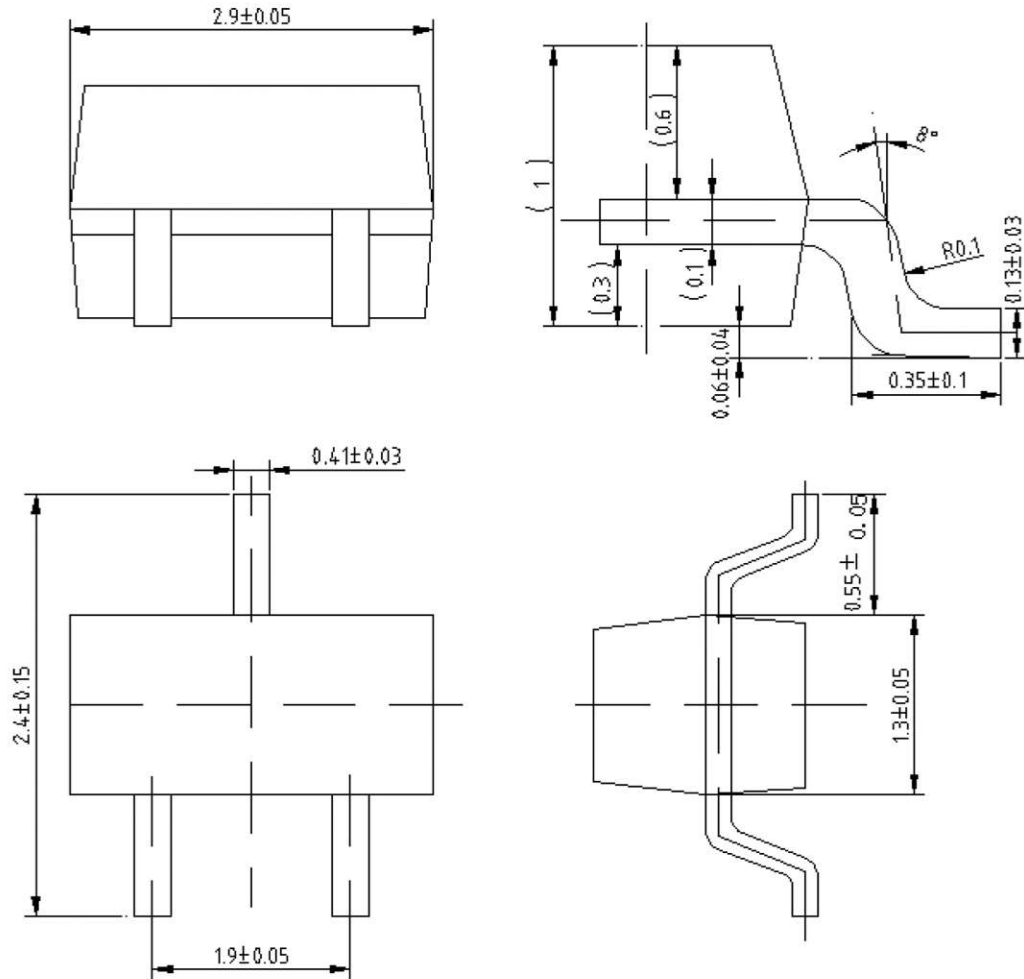


Figure 6. Source-Drain Diode Forward



Package Outline Dimensions (UNIT: mm)

SOT-23



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [Shikues](#) manufacturer:

Other Similar products are found below :

[614233C](#) [648584F](#) [FDPF9N50NZ](#) [IRFD120](#) [IRFF430](#) [JANTX2N5237](#) [2N7000](#) [FCA20N60_F109](#) [FDZ595PZ](#) [2SK2267\(Q\)](#) [2SK2545\(Q,T\)](#)
[405094E](#) [423220D](#) [MIC4420CM-TR](#) [VN1206L](#) [614234A](#) [715780A](#) [SSM6J414TU,LF\(T](#) [751625C](#) [PSMN4R2-30MLD](#)
[TK31J60W5,S1VQ\(O](#) [2SK2614\(TE16L1,Q\)](#) [DMN1017UCP3-7](#) [EFC2J004NUZTDG](#) [FCAB21350L1](#) [P85W28HP2F-7071](#) [DMN1053UCP4-7](#)
[NTE2384](#) [NTE2969](#) [NTE6400A](#) [DMN61D9UWQ-13](#) [US6M2GTR](#) [DMN31D5UDJ-7](#) [SSM6P54TU,LF](#) [DMP22D4UFO-7B](#)
[IPS60R3K4CEAKMA1](#) [DMN1006UCA6-7](#) [DMN16M9UCA6-7](#) [STF5N65M6](#) [STU5N65M6](#) [C3M0021120D](#) [DMN13M9UCA6-7](#)
[BSS340NWH6327XTSA1](#) [MCM3400A-TP](#) [DMTH10H4M6SPS-13](#) [IPS60R1K0PFD7SAKMA1](#) [IPS60R360PFD7SAKMA1](#)
[IPS60R600PFD7SAKMA1](#) [IPS60R210PFD7SAKMA1](#) [DMN2990UFB-7B](#)