

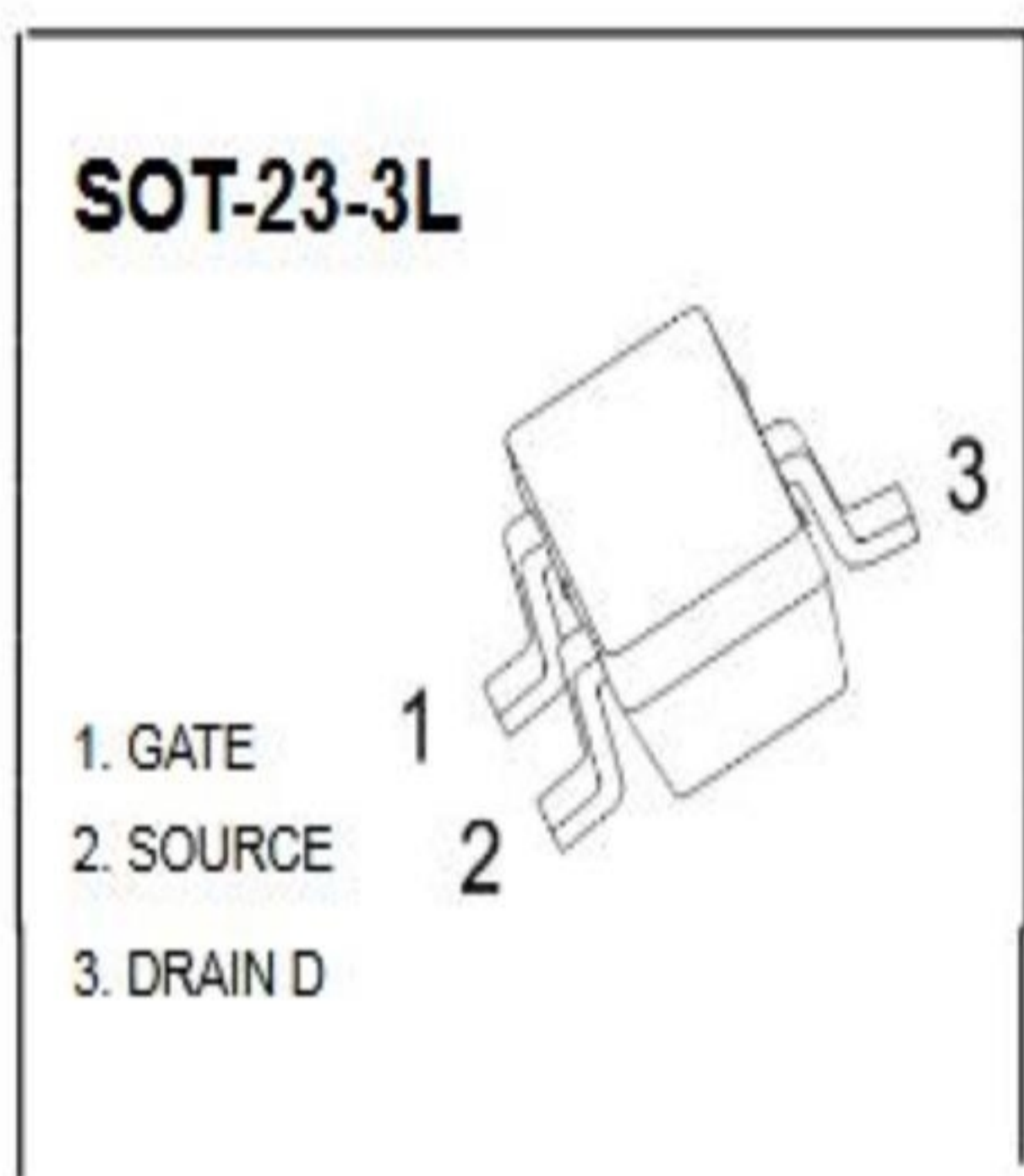
**Product Summary**

- 30V,5.8A  
 $R_{DS(ON)} < 26m\Omega @ V_{GS} = 10V$   
 $R_{DS(ON)} < 32m\Omega @ V_{GS} = 4.5V$   
 $R_{DS(ON)} < 50m\Omega @ V_{GS} = 2.5V$
- Advanced Trench Technology
- Excellent  $R_{DS(ON)}$  and Low Gate Charge
- Lead free product is acquired

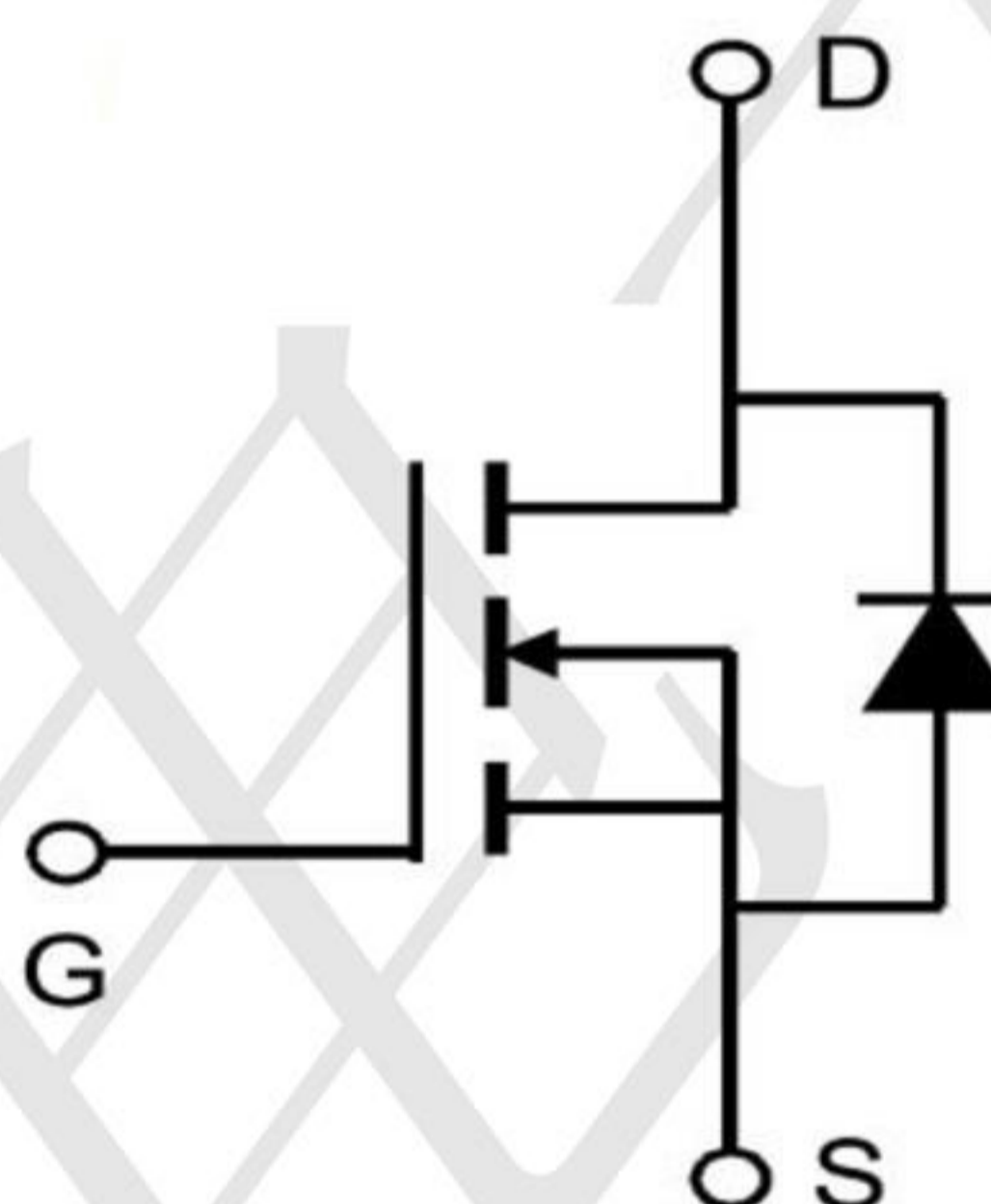
**Application**

- PWM Applications
- Load Switch
- Power Management

**Package and Pin Configuration**



Circuit diagram



**Absolute Maximum Ratings ( $T_A=25^\circ C$  unless otherwise noted)**

Symbol	Parameter	Max.	Units
$V_{DSS}$	Drain-Source Voltage	30	V
$V_{GSS}$	Gate-Source Voltage	$\pm 12$	V
$I_D$	Continuous Drain Current	$T_A = 25^\circ C$	5.8
		$T_A = 100^\circ C$	3.8
$I_{DM}$	Pulsed Drain Current <sup>note1</sup>	23.2	A
$P_D$	Power Dissipation	$T_A = 25^\circ C$	1.36
$R_{\theta JA}$	Thermal Resistance, Junction to Case	92	$^\circ C/W$
$T_J, T_{STG}$	Operating and Storage Temperature Range	-55 to +150	$^\circ C$

**Electrical Characteristics (  $T_A = 25^\circ\text{C}$  unless otherwise noted )**

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
<b>Off Characteristic</b>						
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0V, I_D=250\mu A$	30	-	-	V
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=30V, V_{GS}=0V,$	-	-	1.0	$\mu A$
$I_{GSS}$	Gate to Body Leakage Current	$V_{DS}=0V, V_{GS}= \pm 12V$	-	-	$\pm 100$	nA
<b>On Characteristics</b>						
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}, I_D=250\mu A$	0.5	0.9	1.4	V
$R_{DS(on)}$	Static Drain-Source on-Resistance note2	$V_{GS}=10V, I_D=4.2A$	-	20.4	26	m $\Omega$
		$V_{GS}=4.5V, I_D=4A$	-	23	32	
		$V_{GS}=2.5V, I_D=1A$	-	30	50	
<b>Dynamic Characteristics</b>						
$C_{iss}$	Input Capacitance	$V_{DS}=15V, V_{GS}=0V,$ $f=1.0MHz$	-	702	-	pF
$C_{oss}$	Output Capacitance		-	66	-	pF
$C_{rss}$	Reverse Transfer Capacitance		-	52	-	pF
$Q_g$	Total Gate Charge	$V_{DS}=15V, I=4A,$ $V_{GS}=4.5V$	-	4.8	-	nC
$Q_{gs}$	Gate-Source Charge		-	1.2	-	nC
$Q_{gd}$	Gate-Drain("Miller") Charge		-	1.7	-	nC
<b>Switching Characteristics</b>						
$t_{d(on)}$	Turn-on Delay Time	$V_{DS}=15V,$ $I_D=4A, R_{GEN}=3\Omega,$ $V_{GS}=4.5V$	-	12	-	ns
$t_r$	Turn-on Rise Time		-	52	-	ns
$t_{d(off)}$	Turn-off Delay Time		-	17	-	ns
$t_f$	Turn-off Fall Time		-	10	-	ns
<b>Drain-Source Diode Characteristics and Maximum Ratings</b>						
$I_S$	Maximum Continuous Drain to Source Diode Forward Current		-	-	5.8	A
$I_{SM}$	Maximum Pulsed Drain to Source Diode Forward Current		-	-	23.2	A
$V_{SD}$	Drain to Source Diode Forward Voltage	$V_{GS}=0V, I_S=5.8A$	-	-	1.2	V



TECH PUBLIC

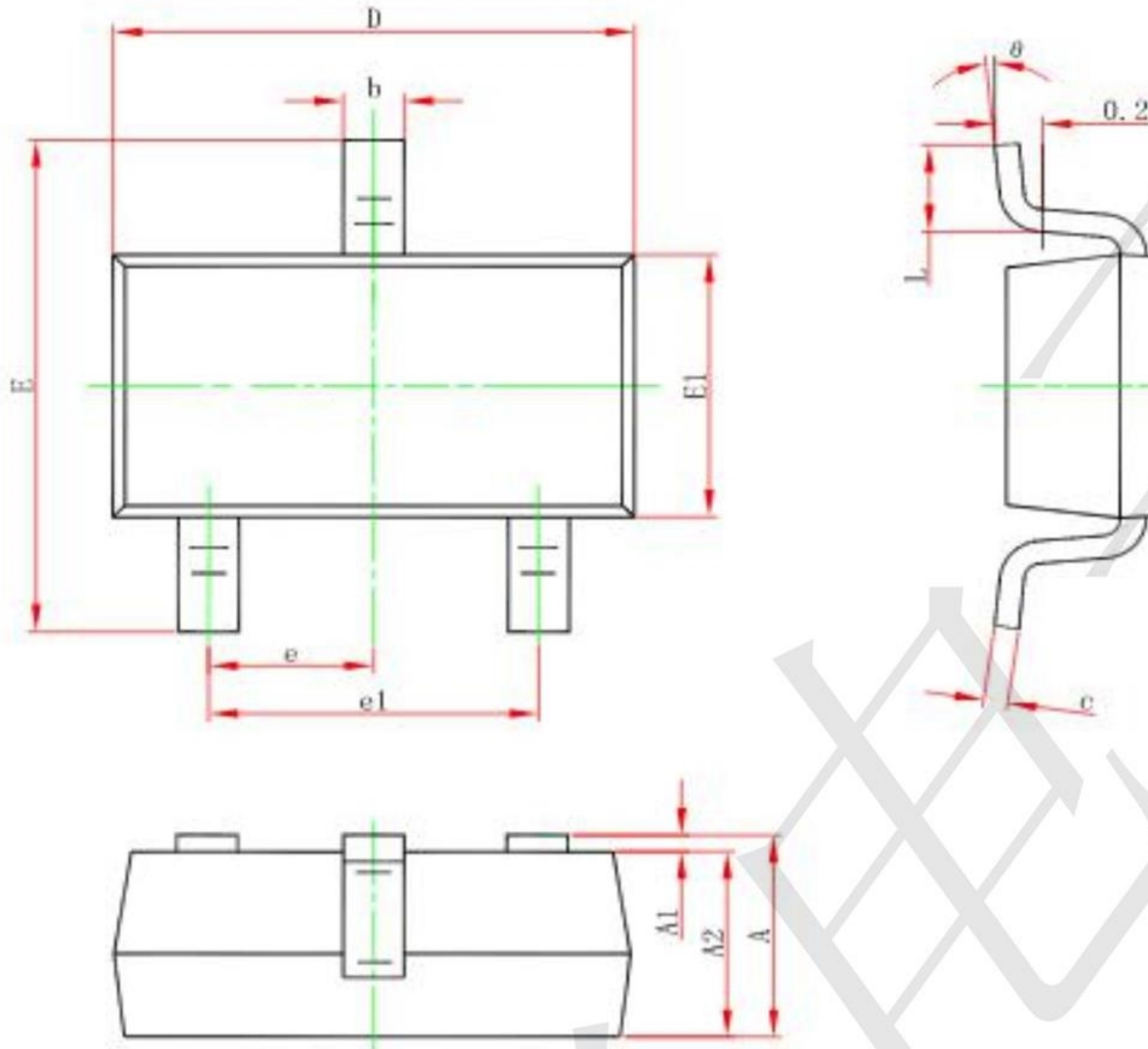
—台舟电子—

AO3400

N-channel Enhancement Mode Power MOSFET

[www.sot23.com.tw](http://www.sot23.com.tw)

SOT-23-3L PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E1	1.500	1.700	0.059	0.067
E	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
$\theta$	0°	8°	0°	8°

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

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

*Click to view products by [TECH PUBLIC](#) manufacturer:*

Other Similar products are found below :

[614233C](#) [648584F](#) [NTNS3A92PZT5G](#) [IRFD120](#) [IRFF430](#) [JANTX2N5237](#) [2N7000](#) [2SK2464-TL-E](#) [FCA20N60\\_F109](#) [FDZ595PZ](#) [AOD464](#)  
[2SK2267\(Q\)](#) [2SK2545\(Q,T\)](#) [405094E](#) [423220D](#) [MIC4420CM-TR](#) [VN1206L](#) [614234A](#) [715780A](#) [SSM6J414TU,LF\(T](#) [751625C](#)  
[IPP60R600P6XKSA1](#) [RJK60S5DPK-M0#T0](#) [BSC884N03MS G](#) [BSF024N03LT3 G](#) [PSMN4R2-30MLD](#) [TK31J60W5,S1VQ\(O](#)  
[2SK2614\(TE16L1,Q\)](#) [DMN1017UCP3-7](#) [EFC2J004NUZTDG](#) [FCAB21350L1](#) [P85W28HP2F-7071](#) [DMN1053UCP4-7](#) [NTE2384](#) [NTE2969](#)  
[NTE6400A](#) [DMN2080UCB4-7](#) [DMN61D9UWQ-13](#) [US6M2GTR](#) [DMN31D5UDJ-7](#) [SSM6P54TU,LF](#) [DMP22D4UFO-7B](#)  
[IPS60R3K4CEAKMA1](#) [DMN1006UCA6-7](#) [DMN16M9UCA6-7](#) [STF5N65M6](#) [STU5N65M6](#) [C3M0021120D](#) [DMN13M9UCA6-7](#)  
[BSS340NWH6327XTSA1](#)