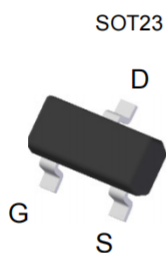## Product Summary

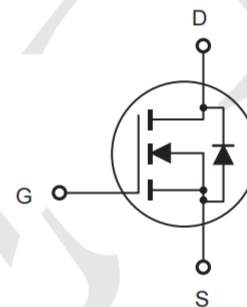|	
BV_{DSS}	20V
$R_{DS(ON)}$	250mΩ
I_D	1.2A

Application

* Load/Power switch
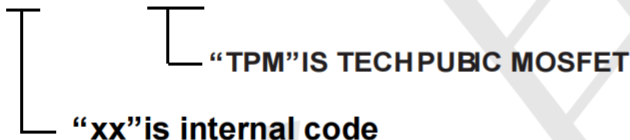* Interfacing, logic switching
* Battery management for ultra protable electronics

Package and Pin Configuration

SOT23

G S D

Circuit diagram

Marking: A4xx Or AETPM

— "TPM" IS TECH PUBIC MOSFET

— "xx" is internal code

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Max.	Unit
Drain-Source Voltage	V_{DS}	20	V
Gate-Source Voltage	V_{GS}	±12	V
Drain Current-Continuous	I_D	1.2	A
Drain Current-Pulsed[1]	I_{DM}	5	A
Maximum Power Dissipation	P_D	540	mW
Thermal Resistance, Junction-to-Ambient[2]	$R_{\theta JA}$	150	°C/W
Storage Temperature Range	T_{STG}	-55 To +150	°C
Operating Junction Temperature Range	T_J	-55 To +150	°C

Electrical Characteristics (T_A =25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Off Characteristics						
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V, I_D=250µA	20		-	V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=20V , V_{GS}=0V	-	-	1	µA
Gate-Body Leakage Current	I_{GSS}	V_{GS}=±12V, V_{DS}=0V	-	-	±100	nA
On Characteristics[3]						
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}, I_D=250µA	0.7			V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=4.5V, I_D=1.2A	-		250	mΩ
		V_{GS}=2.5V, I_D=1A	-		360	
Forward Transconductance	g_{FS}	V_{DS}=5V, I_D=2.9A	-	8	-	S
Dynamic Characteristics[4]						
Input Capacitance	C_{Iss}	V_{DS}=10V, V_{GS}=0V, F=1MHz	-	-	300	pF
Output Capacitance	C_{oss}		-	-	90	
Reverse Transfer Capacitance	C_{rss}		-	-	80	
Switching Characteristics[4]						
Turn-On Delay Time	$t_{d(on)}$	V_{DD}=10V, V_{GS}=4.5V, I_D=2.9A, R_{GEN}=6Ω	-	-	15	nS
Turn-On Rise Time	t_r		-	-	85	
Turn-Off Delay Time	$t_{d(off)}$		-	-	45	
Turn-Off Fall Time	t_f		-	-	20	
Total Gate Charge	Q_g	V_{DS}=10V, I_D=2.9A, V_{GS}=4.5V	-	4	10	nC
Gate-Source Charge	Q_{gs}		-	0.65	-	
Gate-Drain Charge	Q_{gd}		-	1.2	-	
Drain-Source Diode Characteristics						
Diode Forward Voltage[3]	V_{SD}	V_{GS}=0V, I_S=2.9A	-	0.75	1.2	V
Continuous Source Current[2]	I_S		-	-	1.2	A

Package Outline Dimensions (SOT-23)
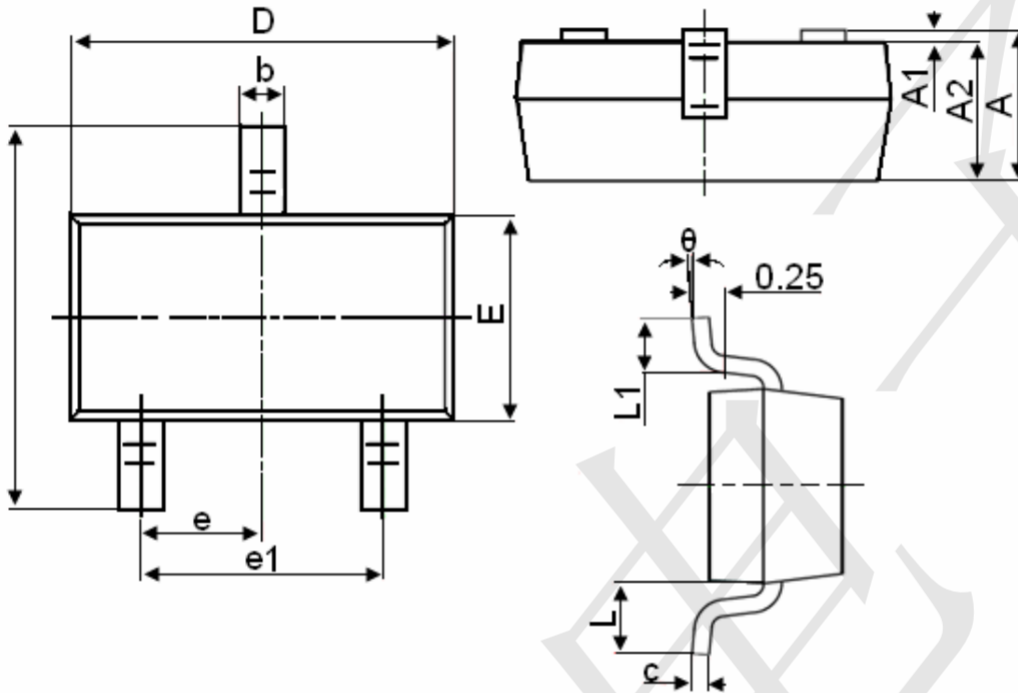
Symbol	Dimensions in Millimeters	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Notes

1. All dimensions are in millimeters.

2.Tolerance ±0.10mm (4 mil) unless otherwise specified

3.Package body sizes exclude mold flash and gate burrs. Mold flash at the non-lead sides should be less than 5 mils.

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 :

MCH3443-TL-E MCH6422-TL-E FDPF9N50NZ NTNS3A92PZT5G IRFD120 JANTX2N5237 2N7000 2SK2464-TL-E AOD464 2SJ277-DL-E 2SK2267(Q) 2SK2545(Q,T) 405094E 423220D MIC4420CM-TR VN1206L 614234A 715780A SSM6J414TU,LF(T 751625C IRS2092STRPBF-EL IPS70R2K0CEAKMA1 BSF024N03LT3 G PSMN4R2-30MLD TK31J60W5,S1VQ(O 2SK2614(TE16L1,Q) DMN1017UCP3-7 EFC2J004NUZTDG P85W28HP2F-7071 DMN1053UCP4-7 NTE2384 NTE2969 NTE6400A DMC2700UDMQ-7 DMN2080UCB4-7 DMN61D9UWQ-13 US6M2GTR DMN31D5UDJ-7 SSM6P54TU,LF DMP22D4UFO-7B IPS60R3K4CEAKMA1 DMN1006UCA6-7 DMN16M9UCA6-7 STF5N65M6 IRF40H233XTMA1 IPSA70R950CEAKMA1 IPSA70R2K0CEAKMA1 STU5N65M6 C3M0021120D DMN6022SSD-13