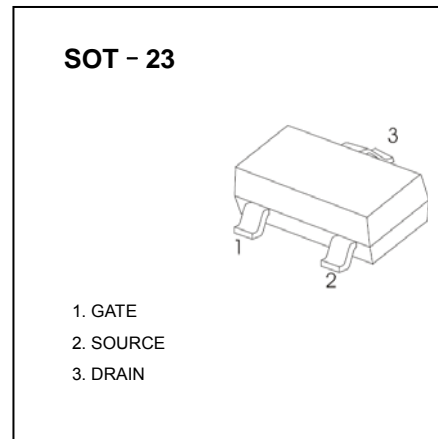


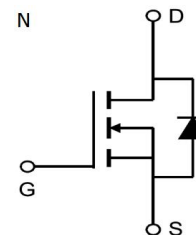
FEATURE:

- Rugged and Reliable
- High density cell design for extremely low RDS(on)
- Surface Mount Package
- Voltage Controlled Small Signal Switch
- V_{DS(V)}=100V
- I_D = 0.17A (V_{GS}=10V)
- R_{DS(ON)} < 6Ω (V_{GS} =10V)
- R_{DS(ON)} < 10Ω (V_{GS} =4.5V)



APPLICATION:

- Small Servo Motor Controls
- Power MOSFET Gate Drivers
- Switching Application



Mosfet Maximum ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V _{DS}	100	V
Gate-Source Voltage	V _{GS}	±20	
Continuous Drain Current	I _D	0.17	A
Pulsed Drain Current (tp=10us)	I _{DM}	0.68	A
Continuous Source-Drain Current(Diode Conduction)	I _S	0.17	A
Power Dissipation	PD	0.35	W
Thermal Resistance from Junction to Ambient	RθJA	357	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~+150	°C
Lead Temperature for Soldering Purposes(1/8 from case for	TL	260	°C

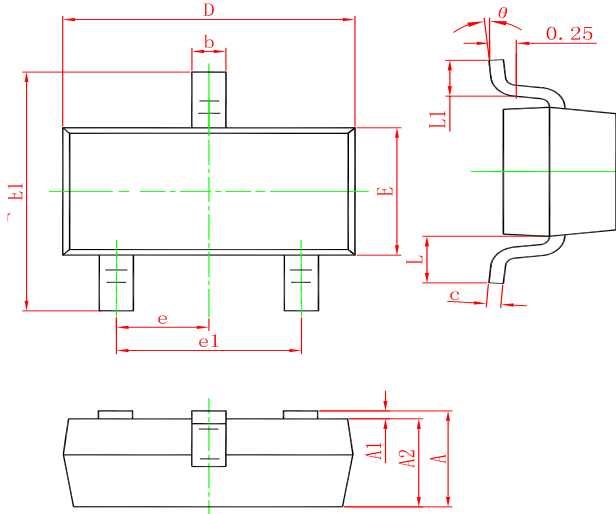
MOSFET ELECTRICAL CHARACTERISTICS
unless otherwise specified Ta = 25 °C

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static Characteristics						
Drain-source breakdown voltage	V(BR)DSS	VGS = 0V, ID = 250μA	100			V
Gate-threshold voltage	VGS(th)	VDS = VGS, ID = 250μA	1		2.8	V
Gate-body leakage	IGSS	VDS = 0V, VGS = ±20V			±50	nA
Zero gate voltage drain current	IDSS	VDS = 100V, VGS = 0V			1	μA
Drain-source on-resistancea	RDS(on)	VGS = 10V, ID = 0.17A		3.8	6	Ω
		VGS = 4.5V, ID = 0.17A		3.5	10	Ω
Forward transconductancea	gfs	VDS = 10V, ID = 170mA	80			mS
Diode forward voltage	VSD	IS = 340mA, VGS = 0V		0.8	1.3	V
Dynamic Characteristics						
Input capacitance	Ciss	VDS = 25V, VGS = 0V, f = 1MHz		29		pF
Output capacitance	Coss			10		pF
Reverse transfer capacitanceb	Crss			2		pF
Switching Characteristics						
Turn-on delay time	td(on)	VGS = 10V, VDD = 30V ID = 0.28A, RGEN = 50 Ω			8	ns
Rise time	tr				8	ns
Turn-off delay time	td(off)				13	ns
Fall time	tf				16	ns
Total Gate Charge	Qg	VDS = 10V, ID = 0.22A, VGS = 10V			2	nC
Gate-Source Charge	Qgs				0.25	nC
Gate-Drain Charge	Qgd				0.4	nC

Note :

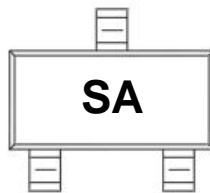
1. Surface mounted on FR4 board using the minimum recommended pad size.
2. Pulse Test ; Pulse Width = 300μs, Duty Cycle ≤ 2%.
3. Switching characteristics are independent of operating junction temperature.
4. Guaranteed by design, not subject to producing.

SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Marking



Ordering information

Order code	Package	Baseqty	Deliverymode
UMW BSS123	SOT-23	3000	Tape and reel

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

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

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

Other Similar products are found below :

[IRFD120](#) [JANTX2N5237](#) [2SK2267\(Q\)](#) [BUK455-60A/B](#) [TK100A10N1,S4X\(S](#) [MIC4420CM-TR](#) [VN1206L](#) [NDP4060](#) [SI4482DY](#)
[IRS2092STRPBF-EL](#) [IPS70R2K0CEAKMA1](#) [TK31J60W5,S1VQ\(O](#) [TK31J60W,S1VQ\(O](#) [TK16J60W,S1VQ\(O](#) [2SK2614\(TE16L1,Q\)](#)
[DMN1017UCP3-7](#) [EFC2J004NUZTDG](#) [P85W28HP2F-7071](#) [DMN1053UCP4-7](#) [NTE2384](#) [DMC2700UDMQ-7](#) [DMN2080UCB4-7](#)
[DMN61D9UWQ-13](#) [US6M2GTR](#) [DMN31D5UDJ-7](#) [DMP22D4UFO-7B](#) [IPS60R3K4CEAKMA1](#) [DMN1006UCA6-7](#) [DMN16M9UCA6-7](#)
[STF5N65M6](#) [IRF40H233XTMA1](#) [STU5N65M6](#) [DMN6022SSD-13](#) [DMN13M9UCA6-7](#) [DMTH10H4M6SPS-13](#) [IPS60R360PFD7SAKMA1](#)
[DMN2990UFB-7B](#) [SSM3K35CT,L3F](#) [IPLK60R1K0PFD7ATMA1](#) [2N7002W-G](#) [MCAC30N06Y-TP](#) [IPWS65R035CFD7AXKSA1](#)
[MCQ7328-TP](#) [SSM3J143TU,LXHF](#) [DMN12M3UCA6-7](#) [PJMF280N65E1_T0_00201](#) [PJMF380N65E1_T0_00201](#)
[PJMF280N60E1_T0_00201](#) [PJMF600N65E1_T0_00201](#) [PJMF900N65E1_T0_00201](#)