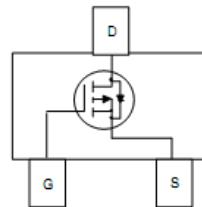
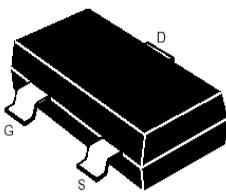


SOT-23**Features**

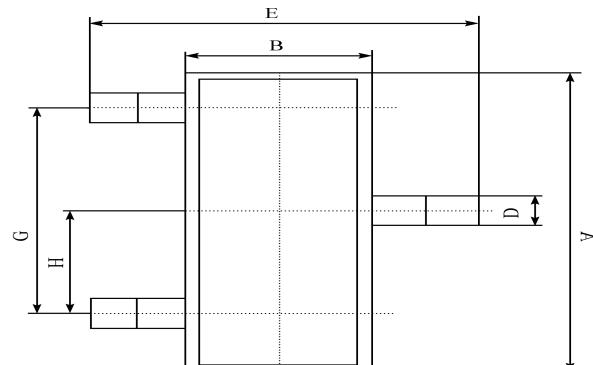
- Advanced trench process technology
- High Density Cell Design For Ultra Low On-Resistance

**MAXIMUM RANTINGS**

Characteristic	Symbol	Max	Unit
Drain-Source Voltage	$BV_{DSS}$	-20	V
Gate- Source Voltage	$V_{GS}$	$\pm 12$	V
Drain Current (continuous)	$I_D$	-3.7	A
Drain Current (pulsed)	$I_{DM}$	-15	A
Total Device Dissipation $T_A=25^\circ C$	$P_D$	1100	mW
Junction	$T_J$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ C$

**Electrical Characteristics**

Characteristic	Symbol	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage ( $I_D = -250\mu A$ , $V_{GS}=0V$ )	$BV_{DSS}$	-20	—	—	V
Gate Threshold Voltage ( $I_D = -250\mu A$ , $V_{GS}=V_{DS}$ )	$V_{GS(th)}$	-0.4	—	-1.2	V
Diode Forward Voltage Drop ( $I_S=-1A$ , $V_{GS}=0V$ )	$V_{SD}$	—	—	-1.2	V
Zero Gate Voltage Drain Current ( $V_{GS}=0V$ , $V_{DS}= -20V$ ) ( $V_{GS}=0V$ , $V_{DS}= -20V$ , $T_A=70^\circ C$ )	$I_{DSS}$	—	—	-1 -25	$\mu A$
Gate Body Leakage ( $V_{GS}=\pm 12V$ , $V_{DS}=0V$ )	$I_{GSS}$	—	—	$\pm 100$	nA
Static Drain-Source On-State Resistance ( $I_D= -3.7A$ , $V_{GS}= -4.5V$ )	$R_{DS(ON)}$	—	50	65	$m\Omega$
Static Drain-Source On-State Resistance ( $I_D= -3.1A$ , $V_{GS}= -2.5V$ )	$R_{DS(ON)}$	—	80	135	$m\Omega$
Input Capacitance ( $V_{GS}=0V$ , $V_{DS}= -10V$ , $f=1MHz$ )	$C_{ISS}$	—	600	—	pF
Output Capacitance ( $V_{GS}=0V$ , $V_{DS}= -10V$ , $f=1MHz$ )	$C_{OSS}$	—	120	—	pF
Turn-ON Time ( $V_{DS}= -10V$ , $I_D= -3.7A$ , $R_{GEN}=6\Omega$ )	$t_{(on)}$	—	8	—	ns
Turn-OFF Time ( $V_{DS}= -10V$ , $I_D= -3.7A$ , $R_{GEN}=6\Omega$ )	$t_{(off)}$	—	60	—	ns

**SOT-23 PACKAGE OUTLINE** Plastic surface mounted package

SOT-23	
A	$2.90 \pm 0.10$
B	$1.30 \pm 0.10$
C	$1.00 \pm 0.10$
D	$0.40 \pm 0.10$
E	$2.40 \pm 0.20$
G	$1.90 \pm 0.10$
H	$0.95 \pm 0.05$
J	$0.13 \pm 0.05$
K	$0.00-0.10$
M	$\geq 0.2$
N	$0.60 \pm 0.10$
P	$7 \pm 2^\circ$

(UNIT): mm

