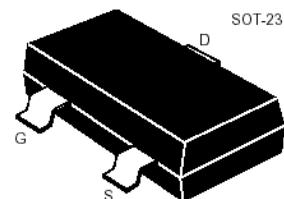


SOT-23 場效應晶體管(SOT-23 Field Effect Transistors)



### **P-Channel Enhancement-Mode MOS FETs**

### **P 沟道增强型 MOS 场效应管**

### **■MAXIMUM RATINGS 最大額定值**

Characteristic 特性參數	Symbol 符號	Max 最大值	Unit 單位
Drain-Source Voltage 漏極-源極電壓	$BV_{DSS}$	-20	V
Gate- Source Voltage 柵極-源極電壓	$V_{GS}$	$\pm 10$	V
Drain Current (continuous) 漏極電流-連續	$I_D$	-2.8	A
Drain Current (pulsed) 漏極電流-脉沖	$I_{DM}$	-10	A
Total Device Dissipation 總耗散功率 $T_A=25^\circ\text{C}$ 環境溫度為 $25^\circ\text{C}$	$P_D$	900	mW
Junction 結溫	$T_J$	150	$^\circ\text{C}$
Storage Temperature 儲存溫度	$T_{stg}$	-55 to +150	$^\circ\text{C}$

### **■DEVICE MARKING 打標**

**GM2301=A1**



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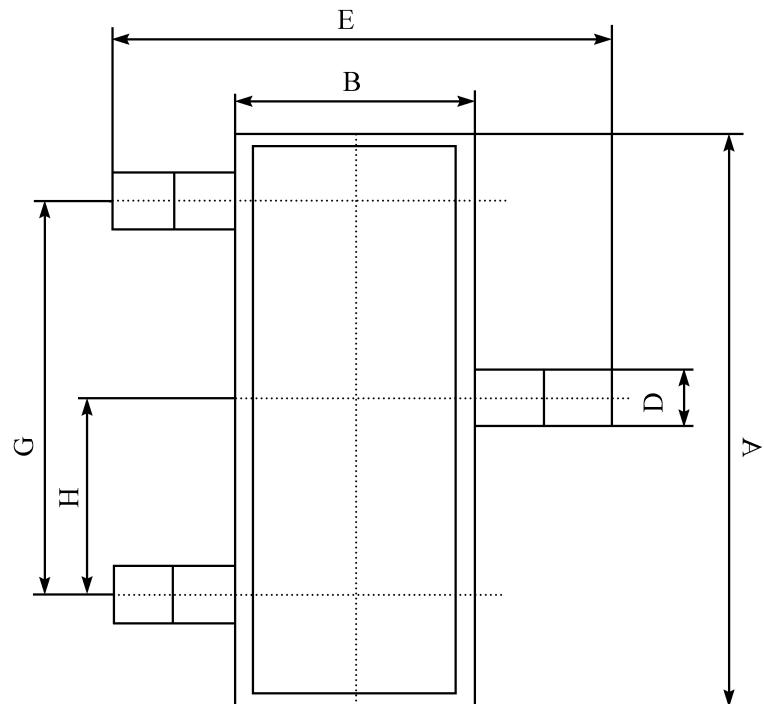
GM2301E

## ■ ELECTRICAL CHARACTERISTICS 電特性

( $T_A=25^\circ\text{C}$  unless otherwise noted 如無特殊說明，溫度為  $25^\circ\text{C}$ )

Characteristic 特性參數	Symbol 符號	Min 最小值	Typ 典型值	Max 最大值	Unit 單位
Drain-Source Breakdown Voltage 漏極-源極擊穿電壓( $I_D = -250\mu\text{A}, V_{GS}=0\text{V}$ )	$\text{BV}_{\text{DSS}}$	-20	—	—	V
Gate Threshold Voltage 柵極開啓電壓( $I_D = -250\mu\text{A}, V_{GS}=V_{DS}$ )	$V_{GS(\text{th})}$	-0.5	—	-1.5	V
Diode Forward Voltage Drop 內附二極管正向壓降( $I_S = -0.75\text{A}, V_{GS}=0\text{V}$ )	$V_{SD}$	—	—	-1.5	V
Zero Gate Voltage Drain Current 零柵壓漏極電流( $V_{GS}=0\text{V}, V_{DS}=-16\text{V}$ ) ( $V_{GS}=0\text{V}, V_{DS}=-16\text{V}, T_A=55^\circ\text{C}$ )	$I_{DSS}$	—	—	-1 -10	$\mu\text{A}$
Gate Body Leakage 柵極漏電流( $V_{GS}=\pm 10\text{V}, V_{DS}=0\text{V}$ )	$I_{GSS}$	—	—	$\pm 100$	nA
Static Drain-Source On-State Resistance 静态漏源導通電阻( $I_D = -2.8\text{A}, V_{GS} = -4.5\text{V}$ )	$R_{DS(\text{ON})}$	—	—	100	$\text{m}\Omega$
Static Drain-Source On-State Resistance 静态漏源導通電阻( $I_D = -2\text{A}, V_{GS} = -2.5\text{V}$ )	$R_{DS(\text{ON})}$	—	—	120	$\text{m}\Omega$
Input Capacitance 輸入電容 ( $V_{GS}=0\text{V}, V_{DS}=-10\text{V}, f=1\text{MHz}$ )	$C_{ISS}$	—	600	—	pF
Output Capacitance 輸出電容 ( $V_{GS}=0\text{V}, V_{DS}=-10\text{V}, f=1\text{MHz}$ )	$C_{OSS}$	—	120	—	pF
Turn-ON Time 开启時間 ( $V_{DS}=-10\text{V}, I_D = -2.8\text{A}, R_{\text{GEN}}=6\Omega$ )	$t_{(\text{on})}$	—	8	—	ns
Turn-OFF Time 关斷時間 ( $V_{DS}=-10\text{V}, I_D = -2.8\text{A}, R_{\text{GEN}}=6\Omega$ )	$t_{(\text{off})}$	—	60	—	ns

Pulse Width  $\leq 300 \mu\text{s}$ ; Duty Cycle  $\leq 2.0\%$

**DIMENSION 外形封装尺寸**


序號	數值及公差
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	$7 \pm 2^\circ$

