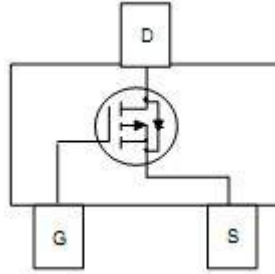


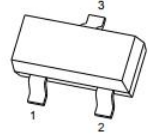
FS2301

SOT-23-3L 場效應晶體管(SOT-23 -3LField Effect Transistors)



SOT-23 -3L

- 1. GATE
- 2. SOURCE
- 3. DRAIN



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}	± 10	V
Drain Current (continuous) 漏極電流-連續	I_D	-3.5	A
Drain Current (pulsed) 漏極電流-脈沖	I_{DM}	-16	A
Total Device Dissipation 總耗散功率 $T_A=25^{\circ}C$ 環境溫度為 $25^{\circ}C$	P_D	1000	mW
Junction 結溫	T_J	150	$^{\circ}C$
Storage Temperature 儲存溫度	T_{stg}	-55to+150	$^{\circ}C$

■ DEVICE MARKING 打標

FS2301=A1



FS2301

■ ELECTRICAL CHARACTERISTICS 電特性

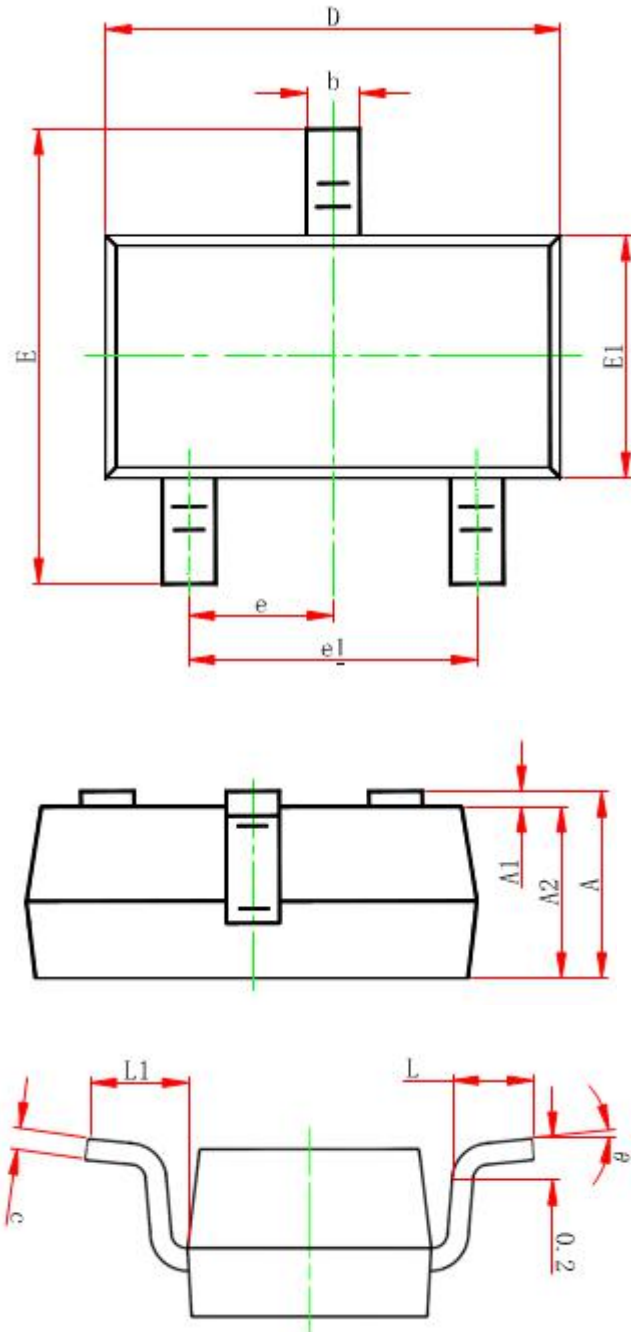
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如無特殊說明，溫度為 25°C)

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($I_D = -250\mu\text{A}, V_{GS}=0\text{V}$)	BV_{DSS}	-20	-22	—	V
Gate Threshold Voltage 柵極開啓電壓($I_D = -250\mu\text{A}, V_{GS} = V_{DS}$)	$V_{GS(th)}$	-0.5	-0.75	-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	μA
Gate Body Leakage 柵極漏電流($V_{GS}=\pm 10\text{V}, V_{DS}=0\text{V}$)	I_{GSS}	—	—	± 100	nA
Static Drain-Source On-State Resistance 靜態漏源導通電阻($I_D = -3\text{A}, V_{GS} = -4.5\text{V}$)	$R_{DS(ON)}$	—	70	80	$m\Omega$
Static Drain-Source On-State Resistance 靜態漏源導通電阻($I_D = -2\text{A}, V_{GS} = -2.5\text{V}$)	$R_{DS(ON)}$	—	90	100	$m\Omega$
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 開啓時間 ($V_{DS} = -10\text{V}, I_D = -3\text{A}, R_{GEN}=6\Omega$)	$t_{(on)}$	—	8	—	ns
Turn-OFF Time 關斷時間($V_{DS} = -10\text{V}, I_D = -3\text{A}, R_{GEN}=6\Omega$)	$t_{(off)}$	—	60	—	ns

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

FS2301

■ **DIMENSION** 外形封裝尺寸
單位(UNIT): mm



代碼	范围(单位: mm)
A	1.050~1.250
A1	0.000~0.100
A2	1.050~1.150
b	0.300~0.500
c	0.100~0.200
D	2.820~3.020
E1	1.500~1.700
E	2.650~2.950
e	0.950(BSC)
e 1	1.800~2.00
L	0.300~0.600
L1	0.600REF.
θ	0°~8°