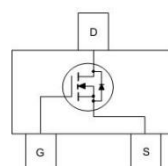


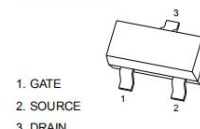


## FS3404

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



SOT-23 -3L



### N-Channel Enhancement-Mode MOS FETs

### N 沟道增强型 MOS 场效应管

#### ■ MAXIMUM RATINGS 最大額定值

| Characteristic<br>特性參數                                                                   | Symbol<br>符號 | Max<br>最大值 | Unit<br>單位         |
|------------------------------------------------------------------------------------------|--------------|------------|--------------------|
| Drain-Source Voltage<br>漏極-源極電壓                                                          | $BV_{DSS}$   | 30         | V                  |
| Gate- Source Voltage<br>柵極-源極電壓                                                          | $V_{GS}$     | $\pm 20$   | V                  |
| Drain Current (continuous)<br>漏極電流-連續                                                    | $I_D$        | 5.8        | A                  |
| Drain Current (pulsed)<br>漏極電流-脈沖                                                        | $I_{DM}$     | 20         | A                  |
| Total Device Dissipation<br>總耗散功率<br>$T_A=25^{\circ}\text{C}$ 環境溫度為 $25^{\circ}\text{C}$ | $P_D$        | 1500       | mW                 |
| Junction<br>結溫                                                                           | $T_J$        | 150        | $^{\circ}\text{C}$ |
| Storage Temperature<br>儲存溫度                                                              | $T_{stg}$    | -55to+150  | $^{\circ}\text{C}$ |

#### ■ DEVICE MARKING 打標

FS3404=A4LA



## FS3404

### ■ ELECTRICAL CHARACTERISTICS 電特性

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

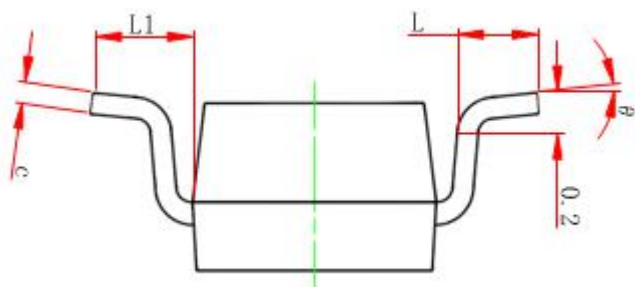
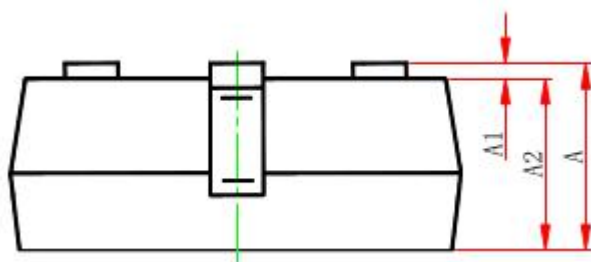
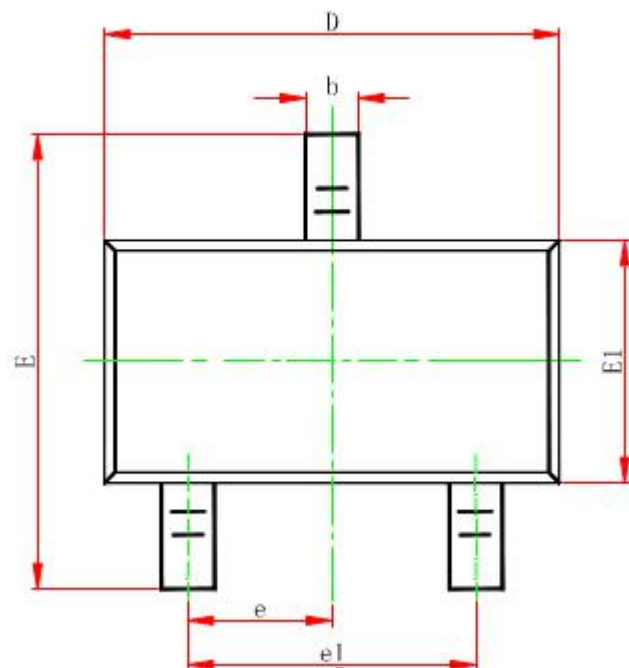
| Characteristic<br>特性參數                                                                        | Symbol<br>符號 | Min<br>最小值 | Typ<br>典型值 | Max<br>最大值 | Unit<br>單位       |
|-----------------------------------------------------------------------------------------------|--------------|------------|------------|------------|------------------|
| Drain-Source Breakdown Voltage<br>漏極-源極擊穿電壓( $I_D=250\mu\text{A}$ , $V_{GS}=0\text{V}$ )      | $BV_{DSS}$   | 30         | 32         | —          | V                |
| Gate Threshold Voltage<br>柵極開啟電壓( $I_D=250\mu\text{A}$ , $V_{GS}=V_{DS}$ )                    | $V_{GS(th)}$ | 1          | —          | 3          | V                |
| Diode Forward Voltage Drop<br>內附二極管正向壓降( $I_S=1\text{A}$ , $V_{GS}=0\text{V}$ )               | $V_{SD}$     | —          | 0.7        | 1          | V                |
| Zero Gate Voltage Drain Current<br>零柵壓漏極電流( $V_{GS}=0\text{V}$ , $V_{DS}=30\text{V}$ )        | $I_{DSS}$    | —          | —          | 1          | $\mu\text{A}$    |
| Gate Body Leakage<br>柵極漏電流( $V_{GS}=\pm 20\text{V}$ , $V_{DS}=0\text{V}$ )                    | $I_{GSS}$    | —          | —          | $\pm 100$  | nA               |
| Static Drain-Source On-State Resistance<br>靜態漏源導通電阻( $I_D=5\text{A}$ , $V_{GS}=10\text{V}$ )  | $R_{DS(on)}$ | —          | 24         | 28         | $\text{m}\Omega$ |
| Static Drain-Source On-State Resistance<br>靜態漏源導通電阻( $I_D=3\text{A}$ , $V_{GS}=4.5\text{V}$ ) | $R_{DS(on)}$ | —          | 38         | 45         | $\text{m}\Omega$ |
| Input Capacitance 輸入電容<br>( $V_{GS}=0\text{V}$ , $V_{DS}=15\text{V}$ , $f=1\text{MHz}$ )      | $C_{ISS}$    | —          | 540        | —          | pF               |
| Output Capacitance 輸出電容<br>( $V_{GS}=0\text{V}$ , $V_{DS}=15\text{V}$ , $f=1\text{MHz}$ )     | $C_{OSS}$    | —          | 60         | —          | pF               |
| Turn-ON Time 開啟時間<br>( $V_{DS}=15\text{V}$ , $V_{GS}=10\text{V}$ , $R_{GEN}=6\Omega$ )        | $t_{(on)}$   | —          | 9.5        | —          | ns               |
| Turn-OFF Time 關斷時間<br>( $V_{DS}=15\text{V}$ , $V_{GS}=10\text{V}$ , $R_{GEN}=6\Omega$ )       | $t_{(off)}$  | —          | 36         | —          | ns               |

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

## FS3404M

### ■ DIMENSION 外形封裝尺寸

單位(UNIT): mm



| 代码  | 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°       |