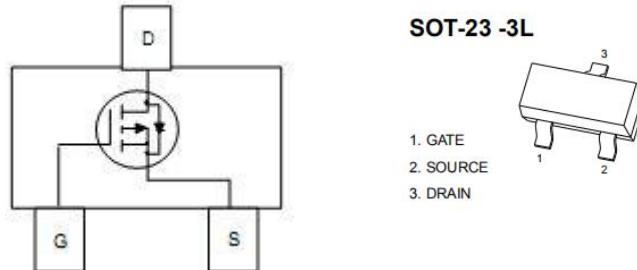


FS2305

SOT-23-3L 場效應晶體管(SOT-23-3L 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}	± 12	V
Drain Current (continuous) 漏極電流-連續	I_D	-5	A
Drain Current (pulsed) 漏極電流-脈沖	I_{DM}	-16	A
Total Device Dissipation 總耗散功率 $TA=25^{\circ}\text{C}$ 環境溫度為 25°C	P_D	1400	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

FS2305=A5

FS2305

■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)

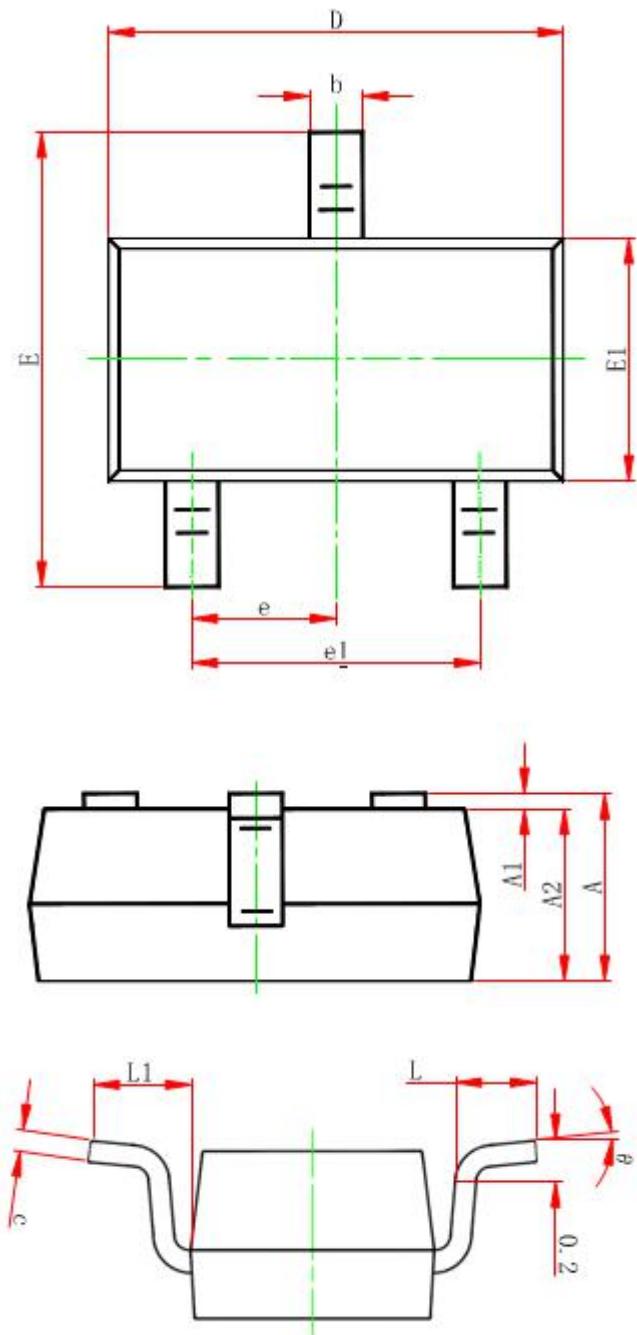
Characteristic 特性參數	Symbol 符號	Min 最小值	Typ 典型值	Max 最大值	Unit 單位
Drain-Source Breakdown Voltage 漏極-源極擊穿電壓($I_D = -250\mu\text{A}, V_{GS} = 0\text{V}$)	BV_{DSS}	-20	-22	—	V
Gate Threshold Voltage 柵極開啓電壓($I_D = -250\mu\text{A}, V_{GS} = V_{DS}$)	$V_{GS(\text{th})}$	-0.5	—	-1.5	V
Diode Forward Voltage Drop 內附二極管正向壓降($I_S = -3.3\text{A}, V_{GS} = 0\text{V}$)	V_{SD}	—	—	-1.2	V
Zero Gate Voltage Drain Current 零柵壓漏極電流($V_{GS} = 0\text{V}, V_{DS} = -8\text{V}$)	I_{DSS}	—	—	-1	μA
Gate Body Leakage 柵極漏電流($V_{GS} = \pm 8\text{V}, V_{DS} = 0\text{V}$)	I_{GSS}	—	—	± 100	nA
Static Drain-Source On-State Resistance 静态漏源導通電阻($I_D = -4.5\text{A}, V_{GS} = -4.5\text{V}$)	$R_{DS(\text{ON})}$	—	30	35	$\text{m}\Omega$
Static Drain-Source On-State Resistance 静态漏源導通電阻($I_D = -3\text{A}, V_{GS} = -2.5\text{V}$)	$R_{DS(\text{ON})}$	—	35	42	$\text{m}\Omega$
Static Drain-Source On-State Resistance 静态漏源導通電阻($I_D = -2\text{A}, V_{GS} = -1.8\text{V}$)	$R_{DS(\text{ON})}$	—	47	56	$\text{m}\Omega$
Input Capacitance 輸入電容 ($V_{GS} = 0\text{V}, V_{DS} = -4\text{V}, f = 1\text{MHz}$)	C_{ISS}	—	740	—	pF
Output Capacitance 輸出電容 ($V_{GS} = 0\text{V}, V_{DS} = -4\text{V}, f = 1\text{MHz}$)	C_{OSS}	—	290	—	pF
Turn-ON Time 开启時間 ($V_{DS} = -4\text{V}, I_D = -3.3\text{A}, R_{GEN} = 1\Omega$)	$t_{(\text{on})}$	—	13	—	ns
Turn-OFF Time 关斷時間 ($V_{DS} = -4\text{V}, I_D = -3.3\text{A}, R_{GEN} = 1\Omega$)	$t_{(\text{off})}$	—	32	—	ns

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

FS2305

■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°