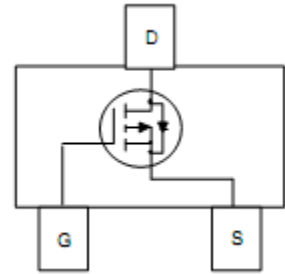




AO3401

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}	-30	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	-3.8	A
Drain Current (pulsed) 漏極電流 - 脉冲	I_{DM}	-15	A
Total Device Dissipation 總耗散功率 $T_A=25^{\circ}\text{C}$ 環境溫度為 25°C	P_D	1250	mW
Junction 結溫	T_J	150	$^{\circ}\text{C}$
Solder Temperature/Solder Time 焊接溫度/焊接時間	T/t	260/10	$^{\circ}\text{C}/\text{S}$
Storage Temperature 儲存溫度	T_{stg}	-55to+150	$^{\circ}\text{C}$

■DEVICE MARKING 打標

GM3401=B1



AO3401

■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)

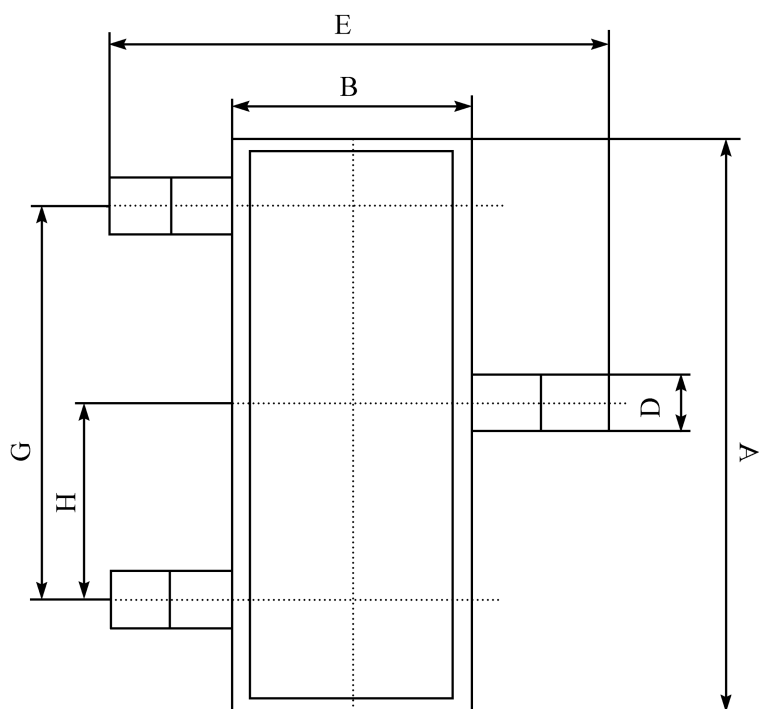
Characteristic 特性參數	Symbol 符號	Min 最小值	Typ 典型值	Max 最大值	Unit 單位
Drain-Source Breakdown Voltage 漏極-源極擊穿電壓($I_D = -250\mu\text{A}, V_{GS}=0\text{V}$)	BV_{DSS}	-30	—	—	V
Gate Threshold Voltage 柵極開啓電壓($I_D = -250\mu\text{A}, V_{GS} = V_{DS}$)	$V_{GS(th)}$	-0.6	—	-2	V
Diode Forward Voltage Drop 內附二極管正向壓降($I_S = -1\text{A}, V_{GS}=0\text{V}$)	V_{SD}	—	—	-1	V
Zero Gate Voltage Drain Current 零柵壓漏極電流($V_{GS}=0\text{V}, V_{DS} = -24\text{V}$) ($V_{GS}=0\text{V}, V_{DS} = -24\text{V}, T_A=55^{\circ}\text{C}$)	I_{DSS}	—	—	-1 -5	μA
Gate Body Leakage 柵極漏電流($V_{GS}=\pm 12\text{V}, V_{DS}=0\text{V}$)	I_{GSS}	—	—	± 100	nA
Static Drain-Source On-State Resistance 靜態漏源導通電阻($I_D = -3.8\text{A}, V_{GS} = -10\text{V}$)	$R_{DS(ON)}$	—	50	60	$\text{m}\Omega$
Static Drain-Source On-State Resistance 靜態漏源導通電阻($I_D = -2\text{A}, V_{GS} = -4.5\text{V}$)	$R_{DS(ON)}$	—	60	80	$\text{m}\Omega$
Static Drain-Source On-State Resistance 靜態漏源導通電阻($I_D = -1\text{A}, V_{GS} = -2.5\text{V}$)	$R_{DS(ON)}$	—	75	100	$\text{m}\Omega$
Input Capacitance 輸入電容 ($V_{GS}=0\text{V}, V_{DS} = -15\text{V}, f=1\text{MHz}$)	C_{ISS}	—	954	—	pF
Output Capacitance 輸出電容 ($V_{GS}=0\text{V}, V_{DS} = -15\text{V}, f=1\text{MHz}$)	C_{OSS}	—	115	—	pF
Turn-ON Time 開啓時間 ($V_{DS} = -15\text{V}, V_{GS} = -10\text{V}, R_{GEN}=6\Omega$)	$t_{(on)}$	—	6.3	—	ns
Turn-OFF Time 關斷時間 ($V_{DS} = -15\text{V}, V_{GS} = -10\text{V}, R_{GEN}=6\Omega$)	$t_{(off)}$	—	38.2	—	ns

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

AO3401

■DIMENSION 外形封装尺寸

單位(UNIT): mm



序號	數值及公差
A	2.90 ± 0.10
B	1.30 ± 0.10
C	1.00 ± 0.10
D	0.40 ± 0.10
E	2.40 ± 0.20
G	1.90 ± 0.10
H	0.95 ± 0.05
J	0.13 ± 0.05
K	$0.00-0.10$
M	≥ 0.2
N	0.60 ± 0.10
P	$7 \pm 2^\circ$

