



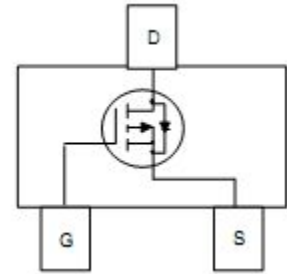
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YSMICRO

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GMS3401A

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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	$V_{GS}$	$\pm 12$	V
Drain Current (continuous) 漏極電流-連續	$I_D$	-3.8	A
Drain Current (pulsed) 漏極電流-脉冲	$I_{DM}$	-12	A
Total Device Dissipation 總耗散功率 $T_A=25^{\circ}C$ 環境溫度為 $25^{\circ}C$	$P_D$	1200	mW
Junction 結溫	$T_J$	150	$^{\circ}C$
Solder Temperature/Solder Time 焊接溫度/焊接時間	T/t	260/10	$^{\circ}C/S$
Storage Temperature 儲存溫度	$T_{stg}$	-55to+150	$^{\circ}C$

**■DEVICE MARKING 打標**

**GMS3401A=SX1**



GMS3401A

■ 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( $I_D = -250\mu\text{A}, V_{GS}=0\text{V}$ )	$BV_{DSS}$	-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	—	-1.4	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	$\mu\text{A}$
Gate Body Leakage 柵極漏電流( $V_{GS}=\pm 12\text{V}, V_{DS}=0\text{V}$ )	$I_{GSS}$	—	—	$\pm 100$	nA
Static Drain-Source On-State Resistance 靜態漏源導通電阻( $I_D = -3\text{A}, V_{GS} = -10\text{V}$ )	$R_{DS(ON)}$	—	83	95	$\text{m}\Omega$
Static Drain-Source On-State Resistance 靜態漏源導通電阻( $I_D = -2\text{A}, V_{GS} = -4.5\text{V}$ )	$R_{DS(ON)}$	—	110	130	$\text{m}\Omega$
Static Drain-Source On-State Resistance 靜態漏源導通電阻( $I_D = -1\text{A}, V_{GS} = -2.5\text{V}$ )	$R_{DS(ON)}$	—	200	220	$\text{m}\Omega$
Input Capacitance 輸入電容 ( $V_{GS}=0\text{V}, V_{DS} = -15\text{V}, f=1\text{MHz}$ )	$C_{ISS}$	—	300	—	pF
Output Capacitance 輸出電容 ( $V_{GS}=0\text{V}, V_{DS} = -15\text{V}, f=1\text{MHz}$ )	$C_{OSS}$	—	60	—	pF
Turn-ON Time 開啓時間 ( $V_{DS} = -15\text{V}, V_{GS} = -10\text{V}, R_{GEN}=6\Omega$ )	$t_{(on)}$	—	5	—	ns
Turn-OFF Time 關斷時間 ( $V_{DS} = -15\text{V}, V_{GS} = -10\text{V}, R_{GEN}=6\Omega$ )	$t_{(off)}$	—	35	—	ns

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