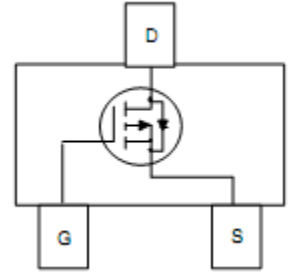




GM3409

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} | ± 20 | V |
| Drain Current (continuous) 漏極電流-連續 | I_D | -2.2 | A |
| Drain Current (pulsed) 漏極電流-脉冲 | 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 | $^{\circ}C$ |



GM3409

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($I_D = -250\mu\text{A}, V_{GS}=V_{DS}$) | $V_{GS(th)}$ | -1.4 | — | -2.4 | 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 | 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($I_D = -2.2\text{A}, V_{GS} = -10\text{V}$) | $R_{DS(ON)}$ | — | — | 130 | $\text{m}\Omega$ |
| Static Drain-Source On-State Resistance 靜態漏源導通電阻($I_D = -2\text{A}, V_{GS} = -4.5\text{V}$) | $R_{DS(ON)}$ | — | — | 200 | $\text{m}\Omega$ |
| 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 $\leq 2.0\%$