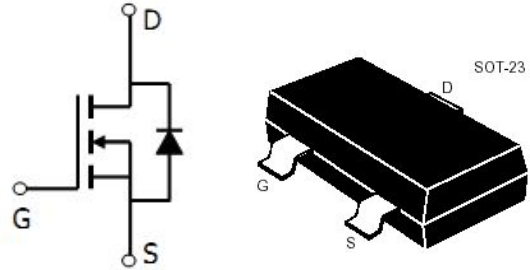


GM2312

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


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 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} | ± 8 | V |
| Drain Current (continuous) 漏極電流-連續 | I_D | 5 | A |
| Drain Current (pulsed) 漏極電流-脉冲 | I_{DM} | 18 | 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 | $^\circ\text{C}$ |
| Storage Temperature 儲存溫度 | T_{stg} | -55to+150 | $^\circ\text{C}$ |

DEVICE MARKING 打標
GM2312=A12

GM2312

■ ELECTRICAL CHARACTERISTICS 電特性

 (T_A=25°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 = 250uA, V _{GS} =0V) | BV _{DSS} | 20 | — | — | V |
| Gate Threshold Voltage 柵極開啓電壓(I _D =250uA, V _{GS} = V _{DS}) | V _{GS(th)} | 0.45 | — | 1.2 | V |
| Diode Forward Voltage Drop 內附二極管正向壓降(I _S =0.75A, V _{GS} =0V) | V _{SD} | — | — | 1.5 | V |
| Zero Gate Voltage Drain Current 零柵壓漏極電流(V _{GS} =0V, V _{DS} = 16V) (V _{GS} =0V, V _{DS} = 16V, T _A =55°C) | I _{DSS} | — | — | 1 10 | uA |
| Gate Body Leakage 柵極漏電流(V _{GS} =±8V, V _{DS} =0V) | I _{GSS} | — | — | ±100 | nA |
| Static Drain-Source On-State Resistance 靜態漏源導通電阻(I _D = 5A, V _{GS} = 4.5V) | R _{DS(ON)} | — | 23 | 25 | mΩ |
| Static Drain-Source On-State Resistance 靜態漏源導通電阻(I _D = 2A, V _{GS} = 2.5V) | R _{DS(ON)} | — | 32 | 35 | mΩ |
| Static Drain-Source On-State Resistance 靜態漏源導通電阻(I _D = 1A, V _{GS} = 1.8V) | R _{DS(ON)} | — | 45 | 50 | mΩ |
| Input Capacitance 輸入電容 (V _{GS} =0V, V _{DS} = 10V, f=1MHz) | C _{ISS} | — | 650 | — | pF |
| Output Capacitance 輸出電容 (V _{GS} =0V, V _{DS} = 10V, f=1MHz) | C _{OSS} | — | 120 | — | pF |
| Turn-ON Time 開啓時間 (V _{DS} = 10V, I _D = 3A, R _{GEN} =6Ω) | t _(on) | — | 20 | — | ns |
| Turn-OFF Time 關斷時間 (V _{DS} = 10V, I _D = 3A, R _{GEN} =6Ω) | t _(off) | — | 60 | — | ns |

Pulse Width≤300 μs; Duty Cycle≤2.0%