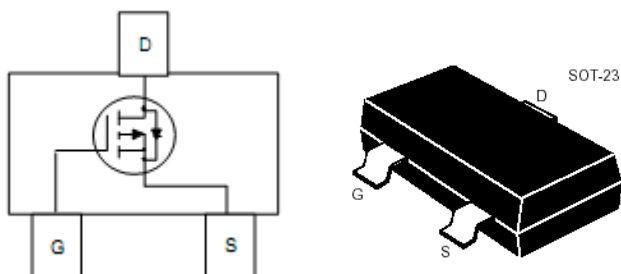


GM2309L

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	$V_{GS}$	$\pm 20$	V
Drain Current (continuous) 漏極電流-連續	$I_D$	-3.7	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 $25^{\circ}C$	$P_D$	1380	mW
Junction 結溫	$T_J$	150	$^{\circ}C$
Storage Temperature 儲存溫度	$T_{stg}$	-55to+150	$^{\circ}C$

**■DEVICE MARKING 打標**
**GM2309L=B7**

GM2309L

**ELECTRICAL CHARACTERISTICS 電特性**

 (T<sub>A</sub>=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 <sub>D</sub> = -250uA, V <sub>GS</sub> =0V)	BV <sub>DSS</sub>	-30	—	—	V
Gate Threshold Voltage 柵極開啓電壓(I <sub>D</sub> = -250uA, V <sub>GS</sub> = V <sub>DS</sub> )	V <sub>GS(th)</sub>	-1	—	-3	V
Diode Forward Voltage Drop 內附二極管正向壓降(I <sub>S</sub> = -1.2A, V <sub>GS</sub> =0V)	V <sub>SD</sub>	—	—	-1.2	V
Zero Gate Voltage Drain Current 零柵壓漏極電流(V <sub>GS</sub> =0V, V <sub>DS</sub> = -30V) (V <sub>GS</sub> =0V, V <sub>DS</sub> = -24V, T <sub>A</sub> =55°C)	I <sub>DSS</sub>	—	—	-1 -25	uA
Gate Body Leakage 柵極漏電流(V <sub>GS</sub> =±20V, V <sub>DS</sub> =0V)	I <sub>GSS</sub>	—	—	±100	nA
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I <sub>D</sub> = -3A, V <sub>GS</sub> = -10V)	R <sub>DS(ON)</sub>	—	—	70	mΩ
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I <sub>D</sub> = -2.6A, V <sub>GS</sub> = -4.5V)	R <sub>DS(ON)</sub>	—	—	100	mΩ
Input Capacitance 輸入電容 (V <sub>GS</sub> =0V, V <sub>DS</sub> = -15V, f=1MHz)	C <sub>ISS</sub>	—	410	—	pF
Output Capacitance 輸出電容 (V <sub>GS</sub> =0V, V <sub>DS</sub> = -15V, f=1MHz)	C <sub>OSS</sub>	—	90	—	pF
Turn-ON Time 開啓時間 (V <sub>DS</sub> = -15V, V <sub>GS</sub> = -10V, R <sub>GEN</sub> =6Ω)	t <sub>(on)</sub>	—	8	—	ns
Turn-OFF Time 關斷時間 (V <sub>DS</sub> = -15V, V <sub>GS</sub> = -10V, R <sub>GEN</sub> =6Ω)	t <sub>(off)</sub>	—	20	—	ns

Pulse Width ≤ 300 μs; Duty Cycle ≤ 2.0%