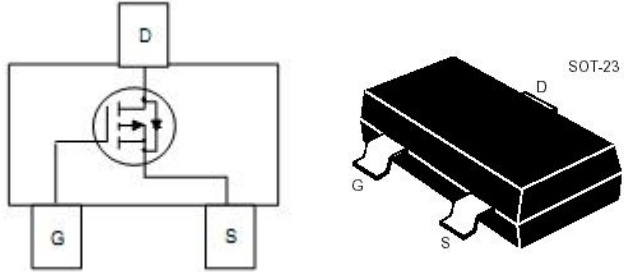




GM1029

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



P-Channel Enhancement-Mode MOS FETs

P 溝道增強型 MOS 場效應管

MAXIMUM RATINGS 最大額定值

Characteristic 特性參數	Symbol 符號	Rate 額定值	Unit 單位
Drain-Source Voltage 漏極-源極電壓	BV_{DSS}	-100	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	-1.5	A
Drain Current (pulsed) 漏極電流-脈沖	I_{DM}	-5	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

GM1029=1029

GM1029

■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}	-95	—	—	V
Gate Threshold Voltage 柵極開啓電壓($I_D = -250\mu\text{A}, V_{GS}=V_{DS}$)	$V_{GS(th)}$	-1	—	-3	V
Diode Forward Voltage Drop 內附二極管正向壓降($I_S = -1.5\text{A}, V_{GS}=0\text{V}$)	V_{SD}	—	—	-1.2	V
Zero Gate Voltage Drain Current 零柵壓漏極電流($V_{GS}=0\text{V}, V_{DS}=-80\text{V}$)	I_{DSS}	—	—	-1	μA
Gate Body Leakage 柵極漏電流($V_{GS}=\pm 20\text{V}, V_{DS}=0\text{V}$)	I_{GSS}	—	—	± 100	nA
Static Drain-Source On-State Resistance 靜態漏源導通電阻($I_D = -2\text{A}, V_{GS} = -10\text{V}$)	$R_{DS(ON)}$	—	290	300	$\text{m}\Omega$
Static Drain-Source On-State Resistance 靜態漏源導通電阻($I_D = -1.8\text{A}, V_{GS} = -4.5\text{V}$)	$R_{DS(ON)}$	—	300	330	$\text{m}\Omega$
Input Capacitance 輸入電容 ($V_{GS}=0\text{V}, V_{DS} = -15\text{V}, f=1\text{MHz}$)	C_{ISS}	—	900	—	pF
Output Capacitance 輸出電容 ($V_{GS}=0\text{V}, V_{DS} = -15\text{V}, f=1\text{MHz}$)	C_{OSS}	—	100	—	pF
Turn-On Delay Time 開啓延遲時間 ($V_{DS}=-30\text{V}, I_D=-1\text{A}, R_{GEN}=3\Omega, V_{GS}=-10\text{V}$)	$t_{d(on)}$	—	38	—	ns
Turn-On Rise Time 開啓上升時間 ($V_{DS}=-30\text{V}, I_D=-1\text{A}, R_{GEN}=3\Omega, V_{GS}=-10\text{V}$)	t_r	—	18	—	ns
Turn-Off Delay Time 關斷延遲時間 ($V_{DS}=-30\text{V}, I_D=-1\text{A}, R_{GEN}=3\Omega, V_{GS}=-10\text{V}$)	$t_{d(off)}$	—	51	—	ns
Turn-On Fall Time 開啓下降時間 ($V_{DS}=-30\text{V}, I_D=-1\text{A}, R_{GEN}=3\Omega, V_{GS}=-10\text{V}$)	t_f	—	6	—	ns

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