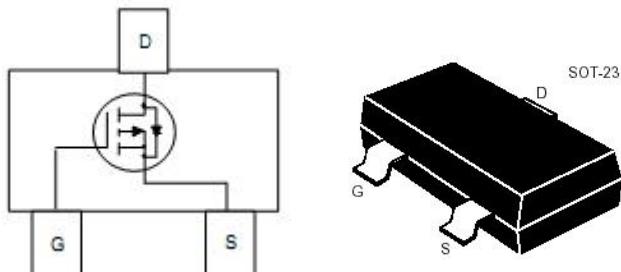


SOT-23 場效應晶體管(SOT-23 Field Effect Transistors)



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	Rat 額定值	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	A
Drain Current (pulsed) 漏極電流-脉冲	I_{DM}	-15	A
Total Device Dissipation 總耗散功率	P_D	1200	mW
TA=25°C 環境溫度為 25°C			
Junction 結溫	T_J	150	°C
Storage Temperature 儲存溫度	T_{stg}	-55 to +150	°C

■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($I_D = -250\mu\text{A}, V_{GS}= V_{DS}$)	$V_{GS(\text{th})}$	-1	—	-3	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($V_{GS}=0\text{V}, V_{DS} = -24\text{V}$)	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($I_D = -2\text{A}, V_{GS} = -10\text{V}$)	$R_{DS(\text{ON})}$	—	60	80	$\text{m}\Omega$
Static Drain-Source On-State Resistance 靜態漏源導通電阻($I_D = -1.5\text{A}, V_{GS} = -4.5\text{V}$)	$R_{DS(\text{ON})}$	—	95	125	$\text{m}\Omega$
Input Capacitance 輸入電容 ($V_{GS}=0\text{V}, V_{DS} = -15\text{V}, f=1\text{MHz}$)	C_{ISS}	—	420	—	pF
Output Capacitance 輸出電容 ($V_{GS}=0\text{V}, V_{DS} = -15\text{V}, f=1\text{MHz}$)	C_{OSS}	—	140	—	pF
Turn-ON Time 开启時間 ($V_{DS} = -15\text{V}, V_{GS} = -10\text{V}, R_{GEN}=6\Omega$)	$t_{(\text{on})}$	—	10	—	ns
Turn-OFF Time 短斷時間 ($V_{DS} = -15\text{V}, V_{GS} = -10\text{V}, R_{GEN}=6\Omega$)	$t_{(\text{off})}$	—	20	—	ns

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